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Developing-countries in the age of globalisation: Regional trends and economic policy recommendations

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Developing Countries in the Age of Globalisation: Regional Trends and Economic Policy Recommendations

by

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A. Definition of Terms

(1) Globalisation is a frequently used buzzword which many people associate with a fear of unemployment, rising inequality and social decline. In various instances, globalisation is even used as a scapegoat for every perceptible wrong turn; memories of the dependency debate of the seventies and eighties are reawakened. Others see globalisation as the greatest opportunity which has arisen in the few past years to transport the progress of Man to the remotest corners of the world, for the benefit of all. This evaluation of globalisation, ranging as it does over the entire conceivable spectrum between demonising and glorifying, is the reason for the attempt which has been undertaken here to take stock of the present empirical "globalisation" phenomenon, and to specifically examine its effect on developing countries (including the newly industrialising countries and countries in transition).

(2) In order to achieve this, it is necessary first of all to define the term globalisation. One might gather, in following the present controversial debate, that the actual definition of the term globalisation was completely unclear. In the popular academic discussion, the term rather covers a variety of political, sociological, ecological and economic trends which are subsumed under the buzz word "globalisation" and discussed in the media almost daily. There is, however, no one definition which is accepted by the different academic fields.

(3) Globalisation indisputably covers all areas of the economy and of society. Today there is hardly an area of human life which is not in some way effected by globalisation - from tourism through present fashion trends to a widespread knowledge of what is happening in the cultural, social and political area in other parts of the world. This contribution is, however, to concentrate on economic aspects. If one defines an "economic reasoning" as an attempt to satisfy as well as possible the extant needs with the available resources, globalisation can apply both to the needs and the resources available to satisfy them. Those are goods (also including services) which can be produced and provided with the aid of the available resources. Accordingly, it is possible to differentiate within globalisation between the production side and the consumption side. On the production side, globalisation means an ever stronger worldwide division of labour which finds its expression in the splitting of the multi-tier production process between various locations. This primarily expresses itself in a rapidly-growing international trade in goods, in the technology transfer, and in the integration of the capital markets, which is leading to increasing mutual dependence between markets and to production being carried out in various countries [*Nunnenkamp et al.,* 1994, p. 3]. On the consumption side, on the other hand, globalisation means increasing the adjustment of national and local demand and consumption patterns in line

with international models. At the same time, traditional consumption habits and local traditions are chased out; societies become detraditionalised and culturally standardised.

B. Causes of Globalisation

What, therefore, is the cause of the present process of globalisation? Various causes are discussed in the references, three of which are to be presented here. These factors are certainly not the only conceivable explanations, but they do appear to be the most significant within the framework of an economic analysis.

1. Reductions in Trade Barriers and Foreign Exchange Control

(1) The customs tariff barriers between the major industrialised nations were considerably reduced after the end of the Second World War under the 1947 GATT Regime. Additionally, several regional integration areas have arisen, or are still arising, which are of considerable economic significance: the European Union, the North American Free Trade Agreement (NAFTA)[1] and the planned Asian Free Trade Agreement (AFTA)[2] although their contributions to the world-wide trade-creation effect is subject to dispute.[3] Once the wave of protectionism which took place during the world economic crisis and the Second World War had passed, during which the customs tariffs on industrial products shot up to 32 per cent, the tariffs levied on the trade in goods fell continually. At the end of the Uruguay Round (in 2004), the average customs tariffs of the major industrialised countries will lie between 2.9 and 4 per cent, 43 per cent of all merchandise will be subject to a customs tariff of zero, and 96 per cent of the customs tariffs applied world-wide will be regulated, which means that they will be subject to the provisions of GATT 1994 [*Hasse,* 1996, p. 292]. Additionally, various agreements concerning the international trade in services (GATS) have been included in the new world trade order, as has the reintegration of the trade in agricultural and textile products and the protection of intellectual property rights (TRIPS). This is highly significant because the trade in services constitutes an ever larger part of world trade and continues to demonstrate an upward trend.[4] An

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1 The member countries are the USA, Canada and Mexico.

2 Its members are the seven members of ASEAN: Brunei, Indonesia, Malaysia, the Philippines, Singapore, Thailand and Viet Nam.

3 Accession to a regional integration area definitely leads to an increase in the prosperity of the participating countries. From a global point of view, however, the effects may even reduce prosperity if the trade diversion effects prejudicing the previous trading partners outweigh the trade creation effects in favour of the members of the integrating bodies.

4 In 1992 the value of the international trade in services was USD 960 billion, i.e. more than 20 per cent of the volume of world trade.

attempt has also been made, especially in the developing countries, to convert the rather high non-tariff barriers to trade into customs tariffs ("tariffication"). These are to be noticeably reduced over the next few years. In addition to the successful attempts at achieving integration on the goods and services markets, it was also attempted within the framework of GATT 1994 to relax the regulations relating to transnational investment. By concluding the TRIMs Agreement *("trade-related investment measures")* it was possible to reduce direct investment requirements which distorted trade (such as so-called *local content* regulations) [*Senti,* 1994, p. 332]. The clear increase in foreign direct investment in 1994/95, after a period of somewhat stagnating development at the beginning of the nineties, may have been caused by this.

(2) A further important incentive towards globalisation is the increasing abolition of foreign exchange control in many countries. The world-wide trend towards payment transactions not being subject to state regulation, as well as the gradual liberalisation and safeguarding of the convertibility of currencies which has occurred since the Second World War, have added the dimension of international payments to the international barter trade. The reduction in transaction costs brought about by these liberalisation measures is an essential incentive for the extension of the international division of labour [*Hasse,* 1996, p. 294].

2. The Increase in World-wide Production Capacities

Another reason for globalisation is the continuing industrialisation which is happening in large parts of the world. Since the end of the Second World War a number of developing countries have ceased to be suppliers of raw materials and purchasers of simple finished products, and have gained the status of industrialised nations (hence their designation as NIC's = *newly industrialised countries*). For instance, the highly successful economies of South East Asia were able to increase their share of the global gross national product (= GNP) between 1965 and 1988 from five to 20 per cent, and their share of industrial output from ten to 23 per cent [*Harris,* 1993, p. 765]. This process of catching-up has considerably increased the number of suppliers on the world market. Global production capacities have increased, and competition has become much fiercer on many markets. This process will accelerate further if China (which is still not a member of the *World Trade Organization*, a major element of GATT 1994), India and Eastern Europe - together these countries make up roughly half of the world's population - are fully integrated into global competition. Thus, hardly any of the restrictions are left, which were caused by markets being too small, previously standing in the way of a globalisation strategy for many firms.

3. Technical Progress as a Contribution towards Reducing the Cost of Transport and Communications

(1) A fundamental prerequisite for the creation of a globally networked world economy was and remains the development of technologies enabling humans to overcome the limits of their mobility imposed by time and space. Primary examples here are transport and communications technologies. Whilst certainly neither of these technologies can as such be regarded as the cause of the globalisation of the world economy, they do, however, make such developments possible in the first place. The complex world economic system could not function without the accompanying technology.

(2) After the tremendous initial leap which it took in its development in the last century (rail and steamships), modern transport technology has reached new levels of quality in the decades which have passed since the Second World War. Particular significance attached here to the introduction of regular intercontinental flights, both for passenger and cargo transportation, the development of giant bulk transport ships ("supertankers") and the spread of container technology, considerably simplifying the transhipment of goods from one means of transport (such as a ship) to another (such as rail). This dynamic development substantially cut the cost of transport, and hence much increased the level of mobility of most factors of production (cf. table 1).[5]

Table 1: Development of the costs of mobility

year	maritime transport		aviation		telecommunications	
	in US Dollars 1990	index 1930=100	in US Dollars 1990	index 1930=100	in US Dollars 1990	index 1930=100
1920	95	158.3	n.a.	n.a.	n.a.	n.a.
1930	60	100.0	0.68	100.0	244.65	100.0
1940	63	105.0	0.46	67.7	188.51	77.1
1950	34	56.7	0.30	44.1	53.20	21.8
1960	27	45.0	0.24	35.3	45.86	18.8
1970	27	45.0	0.16	23.5	31.58	12.9
1980	24	40.0	0.10	14.7	4.80	2.0
1990	29	48.3	0.11	16.2	3.32	1.4

n.a. = not available

Source: *Straubhaar, 1996, p. 222*

There is no doubt that the tremendous increase in passenger air traffic should be particularly stressed among the aspects which have been mentioned. It is therefore probably no coincidence

[5] The falling transportation costs can be demonstrated very clearly by taking the sinking significance of transport costs as a proportion of an economy's overall expenditure on imports. For the USA this figure sank from 8.2 per cent in 1965 to 4.4 per cent in 1987 [*Hasse,* 1996, p. 294].

that both the start of the growth of transnational firms and the dynamic development of international flight in the fifties had a common cause [*Dicken,* 1992, p. 105].

(3) The progress in the area of communication technology over the past few decades has also been dramatic, and was needed in order to set the stage in technical and organisational terms for the globalisation of the economy. The microelectronic revolution, in other words the tremendous leap taken by technology in the areas of telecommunications and data processing, led to a clear decrease in the cost of transactions and communications. Particular emphasis should be placed here on the use of permanent satellites for commercial telecommunications (since 1965). They contributed to substantial cost reductions. This is impressively demonstrated by the reduction in the price of a three-minute telephone call between London and New York. In 1930 this would have cost almost 250 Dollars, as against less than four Dollars in 1990, a reduction of about 98.5 per cent [*Straubhaar,* 1996, p. 222].

(4) On the other hand, one should be cautious with the argument that technical progress generally constitutes a step towards globalisation. The increasing automation in production, and the associated substitution of simple labour by capital, have the opposite effect, at least if the exploitation of comparative cost advantages is primary to moving production to a developing country, and not the aspect of gaining access to markets. The demand for simple labour, which is relatively readily accessible in the developing countries, decreases as a consequence of the increased use of capital in the industrialised countries, and makes it superfluous to move production to low-wage countries. The necessity to integrate high- and low-wage countries therefore becomes less urgent.

(5) One may nevertheless observe that the technological progress which has been made in the areas of transport and communications reduces the cost of transportation and increases the level of mobility for most factors of production; one is less bound to a certain location. Technical developments also improve the supply of information regarding alternative locations, and therefore reduce uncertainty. From the point of view of globalisation, this trend means that more and more competitors compete in a manner which is becoming ever more rapid for factors of production which are becoming more mobile. The relative attractiveness of a location therefore becomes more significant in a time of sinking transportation costs. Mobile factors of production can react more rapidly to negative location-related developments and move their economic operations to places which best suit their specific requirements. For instance, semi-finished products are bought where they are cheapest, and are then processed as cheaply as possible and sold where it is most profitable. The cheaper it is, therefore, to move semi-finished products or

factors of production over large distances, the greater is the competition between economic locations which are far apart in geographical terms [*Straubhaar*, 1996, p. 223].

C. Manifestations of Globalisation: The Empirical Findings

The manifestations of globalisation resting on such a basis are manifold. Political and sociological phenomena are included, as are ecological ones (global warming and the ozone problem). Four characteristics are to be emphasised from an economic point of view which make the trend towards a globalised world economy particularly clear: the growth in world trade, the growth in direct investment and joint ventures, the growth in the international movement of capital, and the international adjustment of consumption patterns.

1. The Growth in World Trade

(1) The world-wide trade in goods has been expanding since the fifties at an annual average of 6 per cent, and hence in the long term more rapidly than the real gross domestic product. This speed increased even further in the period between 1985 and 1995, as the growth rate increased to 10 per cent p.a., compared to an increase of only almost 7 per cent in world production. As a consequence of this development, economies became increasingly open, and they became ever more closely integrated into the international division of labour. The number of participants in world trade also became larger. Especially the export successes of the newly industrialised countries in South East and East Asia demonstrate that the industrialised countries are faced with competitors who should be taken seriously. The lion's share of globalisation still falls to the trade in goods, taking up 90 per cent of world-wide international payment transactions [*Beyfuß et al.,* 1997, p. 5]. These figures are, however, strongly placed into perspective if one regards the first globalisation boom, which took place between 1850 and 1914: In this phase, the world-wide trade in goods even grew at the extraordinary rate of 25 % p.a. [*Harris,* 1993, p. 756]. In fact, because of revolutionary inventions in the area of transport technology (rail and steam ships) and by means of successful attempts to successively reduce the considerable customs tariff barriers between North America and Europe, as early as in the mid-19th Century (*Cobden Treaty*, 1860), an increased opening up took place on the national goods markets. Especially the market for standardised homogeneous products (such as wheat and wool) demonstrated a high degree of integration, so that they could already be called quite global, even then. The drop in the prices of a series of tradable industrial and agricultural products which followed this development was even greater than the reductions in customs tariffs and prices caused by the GATT Agreements signed in our century, which contributed to the globalisation boom which has taken place over

the last twenty years [*Williamson,* 1997, p. 123].[6] The global exchange of data and information had also reached a much higher level than one would presume today: The first transatlantic telegraph cable was laid in 1858, and as early as in 1900 trouble-free and rapid communication was possible between the major economic centres of the world [*Krugman,* 1995, p. 330].

(2) Critics therefore provocatively ask what is so new about globalisation. It already existed decades, if not centuries ago. This objection is certainly justified to a certain extent since the growth of the world economy in the late 19th and early 20th Centuries, and the acknowledgement of free trade, can certainly be compared with some of the global economic trends in the second half of the 20th Century. However, the word globalisation is more than modern packaging for a well-known phenomenon. The new term derives its justification from the fact that the speed, manifestations and participants of the international division of labour have changed over the past two decades [*Beyfuß et al.,* 1997, p. 5]. If the first globalisation boom largely restricted itself to the countries of Western Europe and North America (the term globalisation therefore appears to be somewhat exaggerated in this case) and to only a small number of branches of industry (agriculture and heavy industry), today almost the whole world has become a location for multinational corporations. These no longer deal only in goods, but increasingly also offer services and financial products. It is also possible to identify a series of entirely new trends in world trade which clearly distinguish the present phase of globalisation from earlier eras. Worthy of mention here is primarily the growth of intra-industry[7] and intra-firm trade, the increasing splitting of the chain of value-added activities to geographically distant locations, and the increase in the significance of the developing countries as exporters of industrial products [*Krugman*, 1995, p. 332 et seq.].

(3) The developing countries do, however, show a heterogeneous picture. On the whole, as is shown in table 2, they were able to increase their share of world trade by almost half between 1970 and 1995 (from 24.6 % to 33.1 %). However, there are considerable differences between the individual regions of developing countries. The developing countries in Asia have managed to triple their share of world trade over the past 25 years, especially because of the export boom in the South East and East Asian developing countries. In contrast, the share of world trade taken by Africa and Latin America has fallen.

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[6] Thus, for instance, because of the liberalisation which took place on the agricultural products market, the price of wheat fell by 55 per cent in England between 1870 and 1912.

[7] *Krugman* uses as an example the development of British foreign trade between 1913 and 1992. At the beginning of the 20th Century, Great Britain mainly exported industrial products (75.5 % of all goods exported) and in turn imported largely raw materials. By 1992 the picture had transformed such that both exports and imports largely consisted of industrial products (81.9 % of exports and 78.4 % of imports were from industrial manufacture). In addition, Great Britain's major trading partners are now the Member States of the European Union, i.e. countries which are equipped with similar resources.

Table 2: Developing countries' share of world trade (in %)

	1970	1980	1990	1995
All developing countries	24.6	31.3	26.0	33.1
Asian developing countries	6.4	8.9	13.6	19.0
of which: South East and East Asia	4.2	6.3	11.3	16.2
Africa	4.2	4.6	2.5	2.6
Latin America and the Caribbean	5.6	5.7	3.4	4.1

Source: Nunnenkamp, 1996, p. 18.

(4) Taking all developing countries as a whole, exports have risen more rapidly than GNP in the past decade (1985-95). There are, however, distinct regional differences. As shown in table 3, the exports/GNP quota in the developing countries of Asia has undergone considerable growth. In South America and Eastern Europe, on the other hand, the growth of exports was slower than that of GNP, so that the export/GNP quota has fallen.

Table 3: Indicators of the globalisation of regions of developing countries (in %)

	exports/GNP		influx of FDI (net)/exports	
	1985	1995	1985	1995
All developing countries	19.4	25.1	2.0	6.6
South East and East Asia	21.4	34.8	2.6	9.5
South Asia	9.3	15.8	0.6	3.0
Sub-Saharan-Africa	24.1	27.5	3.1	2.6
Eastern Europe and Central Asia	19.7	13.7	0.0	7.4
Latin America and the Caribbean	19.6	15.6	3.5	7.5

Source: Nunnenkamp, 1996, p. 18.

(5) The high and still rising exports/GNP quota in Sub-Saharan-Africa must be received with caution in this context since its increase is a result of entirely different economic trends than the increase in the Asian exports/GNP quota. The rise in the African exports/GNP quota rather reflects the fact that African exports show a large share of primary goods, in respect of which there were temporary price increases at the beginning of the nineties. It is not, however, possible to derive a long-term export success from this. Most countries in Sub-Saharan-Africa have typical characteristics of dualistic economic structures with a primary goods area which in most cases is not integrated into the rest of the economy. The ensuing complementary foreign trade (primary goods for industrial goods) contributes to a much lesser degree to long-term economic growth than the substitutive foreign trade in industrial products, which is considerably more significant for the other regions. GNP has even fallen during the period in question in many

countries of Sub-Saharan-Africa. The fact that Sub-Saharan-Africa is a particularly problematic case here is also made clear if one takes a look at table 2: the African share of world trade has noticeably fallen. The simultaneous increase in the exports/GNP quota then proves that this process was accompanied by downward trends in GNP.

2. Growth in Direct Investment and Joint Ventures

(1) The rapid growth in foreign direct investment (FDI) which has been occurring since the mid-eighties is frequently referred to as the actual characteristic and at the same time the driving force of globalisation. At an annual average in 1985/95 of 17 per cent, the flows of FDI increased almost twice as rapidly as the trade in goods and services, and almost three times as rapidly as world production [*Beyfuß et al.,* 1997, p. 6].[8] Until then, the trade in goods and FDI had developed almost in parallel (average growth rate 1970/85: 7 per cent p.a.). This parallel nature demonstrates that the FDI of that period was largely made up of activities which accompanied exports (such as services and repairs). FDI has, however, now become a separate factor in the international division of labour. This development contributes to the intensification of both competition for locations (which would like to attract as much FDI as possible) and of international trade within individual companies (intra-firm trade). At each stage of production, investors now select the location which is the most cost-effective for them. As a consequence, it is no longer the case that (only) sales are internationalised - as in the traditional international division of labour - but (also) production.

(2) In parallel to the rise in FDI, the number of companies operating internationally also underwent a dramatic increase. In 1993, according to estimates made by the *Economist*, there were roughly 35,000 of these multinational companies. The German Economic Institute estimated that there were as many as 44,000 transnational corporations at the beginning of 1998 with almost 280,000 branch offices abroad. World-wide, almost 275 billion Dollars were spent in 1996 on mergers and take-overs - twice as much as ten years before [*German Economic Institute,* 1998, p. 6]. These transnational corporations also spurred globalisation onwards on paths which involved no or only small foreign holdings. Examples of this are grants of licences and strategic joint ventures (particularly in the area of Research and Development [R&D]) [*Gundlach et al.,* 1996, p. 9]. Furthermore, they increasingly replace market transactions with hierarchical intra-firm transactions which are subject to far fewer economic influences than market transactions. It

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[8] One major reason for the increase in foreign investment in the second half of the eighties was the preparations for the start of the EU Common Market in 1992. The influx of FDI into the EU increased much more rapidly between 1985 and 1990 than elsewhere in the world.

is particularly the transnational corporations which exert a great deal of influence on the structural reforms of the world economy [*Hauchler et al.,* 1997, p. 142]:

- they transfer technologies, management abilities and financial capital;
- they influence the international division of labour by virtue of their production, product, marketing and procurement strategies;
- they contribute with their decisions on locations to restructuring national economies;
- they hold more than 80 % of private world-wide technological capacities;
- in view of the increasing competition between the countries for flows of direct investment, they hold a great deal of negotiating power to promote their interests in respect of many states' national governments (especially the economically weaker ones).

(3) The world-wide stock of international direct investment increased between 1980 and 1995 from around 500 billion US Dollars to 2,700 billion. The average annual growth rate of the influx of direct investment increased from almost 1 % in the first half of the eighties to 34 % between 1985 and 1990. The growth rates were 12.7 % between 1990 and 1994, and as high as 40 % in 1995, so that an overall volume of 315 billion US Dollars was achieved in 1995 [*Hauchler et al.*. 1997, p. 142]. Between 1993 and 1995, the developing countries as a group attracted more than one-third of the world-wide flows of FDI. This share even increased in 1996 to reach 40 per cent, which was twice the average values in the period from 1980 to 1990 [*Nunnenkamp,* 1996, p. 18]. As is shown by table 3, the expansion in the influx of FDI into this region is clearly higher than the growth in exports. This result is, however, not surprising in view of the greater binding of the developing countries into the large groups' globalisation strategies.

Table 4 also contradicts the frequently expressed view that only a few newly industrialised countries in Asia are participating in globalisation. If one takes account of the FDI/export ratio for South America, one can see that this location is once more gaining in attractiveness for international investors after the "lost" eighties (because of the debt crisis), and this is due not lastly to the implementation of extensive economic reforms in some countries in the region (especially Chile and Mexico). At the same time, the former socialist countries in transition in Eastern Europe have been added as a new competitor for FDI. Both groups of countries have considerably better prospects for the expected growth in export/GNP over the next few years than Sub-Saharan-Africa. This is the only region in which the influx of FDI rose more slowly between 1985 and 1995 than exports. The lower FDI/export ratio thus leads one to presume that Sub-Saharan-Africa has not benefited from the trend towards global production.

(4) The regional distribution of FDI in developing countries between 1980 and 1994 largely confirms the results deduced above. Table 4 demonstrates the increase in the influx of FDI, measured in absolute figures: It rose from a value under 10 billion Dollars in 1980 to reach 76 billion Dollars in 1994.

Table 4: Regional distribution of flows of FDI into developing countries, 1980-1994

Influx of FDI into developing countries	1980	1988	1994
All developing countries (amounts in billions of Dollars:)	9.6	20.1	76.0
Percentage share: All developing countries	*100*	*100*	*100*
South East and East Asia	*15.3*	*39.4*	*56.4*
South Asia	*2.2*	*1.7*	*1.1*
Sub-Saharan-Africa	*0.4*	*5.9*	*3.0*
Eastern Europe and Central Asia	*0.1*	*0.2*	*9.3*
Latin America and the Caribbean	*71.9*	*41.2*	*24.9*
Other	*10.2*	*11.5*	*5.4*

Source: Gundlach/Nunnenkamp, 1994, p 94, and own calculations

- Table 4 shows that the focus of foreign direct investment has moved from Latin America to Asia over the past 15 years. The share enjoyed by South East and East Asia has risen in this respect from 17.5 per cent to reach 57.5 per cent, more than tripling. This development was largely influenced by China's international demand for capital. In 1994, 26 billion Dollars of FDI flowed into this country alone, more than one-third of all the money invested in developing countries.
- The post-socialist countries in transition form the second group able to register an increasing share of FDI influx. This development is connected with the progress which has been made in transforming the system, as well as with the accompanying linkage of the reforming countries into international location-related competition. If one takes a closer look, however, the countries in transition reveal themselves to be highly heterogeneous. Thus, in the main only a few relatively high growth and low inflation countries in Central and Eastern Europe benefit from the influx of foreign capital. The former Soviet Republics in Central Asia, in contrast, have only been able to attract a small amount of foreign capital because of their political instability and poor macroeconomic framework data.
- Latin America seems to be one of the losers in globalisation[9]. If, in 1980, more than two-thirds of all FDI in developing countries flowed to this continent, in 1994 it was only almost

[9] A highly detailed country- and sector-specific analysis of FDI in South America is provided by *Nunnenkamp,* 1997, pp. 51-81.

one-quarter. These relative figures, however, hide two important developments. The influx of FDI into Latin America has risen steadily in absolute terms once more since the end of the eighties. The figure for the period 1993-1995 (24 billion Dollars) is three times higher than the reference figure for 1984-1989 [*Nunnenkamp,* 1997, p. 52]. The other is that Argentina, Chile and Mexico are in the group of developing countries which enjoyed the highest growth in the influx of FDI between 1984 and 1993 [*Nunnenkamp et al,* 1996, p. 95].[10]

- The significance of Africa as a location for foreign capital fell in the period between 1988 and 1994. The most populous continent after Asia only attracted three per cent of the global flows of FDI in 1994, much less than the countries in transition of Eastern Europe and Central Asia and - in spite of the increase in absolute figures - also much less than in 1988 in relation to all developing countries, when the share was almost 6 per cent.

(5) It is therefore possible to state that, as yet, not all countries have benefited from globalisation. Especially Sub-Saharan-Africa and parts of Central Asia remain virtually excluded from the trend towards greater international division of labour. Globalisation is, however, not restricted to a small group of countries. Roughly three-quarters of the overall influx of FDI in the developing countries is concentrated in the long term on only ten recipients. The composition of this group does however vary. Thus, the share of the ten major recipient countries in 1984 fell considerably over the following decade (from 77 to 63 per cent), even though China was able to considerably increase its share.[11]

(6) The prospects for latecomers have also improved to link into the tendencies towards globalisation, since several progressive, newly industrialised countries (such as Korea and Taiwan) are themselves operating as investors abroad. Their share of the world-wide flow of FDI is still only 5 per cent (1992), after 2 per cent in 1980. Still, the FDI of the newly industrialised countries is highly significant for some recipient countries in the Asian region. Asian newly industrialised countries have now become leading investors both in South East Asian ASEAN states and in China [*Nunnenkamp et al.,* 1996, p. 96].

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10 The relative loss of significance by South America as a location for FDI is mainly caused by the dramatic reduction in the attractiveness of Brazil for foreign capital. The country was by far the most important location for FDI in developing countries in the seventies. After 1982, not only the Brazilian share of FDI fell, but the latter also fell in absolute terms. The influx of FDI in 1990 was therefore only about half the amount received by Brazil ten years previously.

11 The share of the 25 major recipient countries in 1984 fell from 94 to 70 per cent over the same period.

3. Growth in the International Movement of Capital

(1) Even more extreme than with the growth of foreign trade and direct investment, globalisation is revealed in the integration of the financial markets. The rapid development of these markets can be retraced primarily to the liberalisation of the movement of capital, the increased use of modern communications technology and the heightened significance of institutional investors. The latter development was favoured by growing private assets, but also by a situation where national debt was increasing world wide and needed to be financed.

(2) In 1980, international bonds and shares transactions, measured as a percentage of gross domestic product (GDP), were not more than 10 per cent in any major industrialised nation. By 1995, they had risen to 65 per cent in Japan, and in Italy even to 250 per cent of the performance of the domestic economy. Comparable growth trends can be observed in all OECD countries [*Beyfuß et al.,* 1997, p. 48].

(3) The trade in derivative financial instruments, such as swaps, options and futures, has quite exploded. These financial securities derive their value from a security on which they are based, such as a share or a bond. These new instruments on the financial markets are primarily used by institutional investors in order to shore up against risks. If, in 1986, the world-wide trade in derivates quoted on the stock exchange had a volume of about 600 billion US Dollars, this figure had risen to more than 9,000 billion US Dollars in 1996. From a mathematical point of view, this means that it has been multiplied by fifteen, or has grown by more than 1,500 per cent [*Beyfuß et al.,* 1997, p. 49].

4. International Adjustment of Consumption Patterns

(1) The three manifestations of globalisation which have been detailed so far concern the production side. The equally significant trends towards adjusting the consumption patterns which can be observed in almost all countries of the world - where is there no Coca-Cola, where does no one wear jeans, where is there no McDonalds? - are much more difficult to define from an empirical point of view, and we are not able to quantify them at present. For this reason, we have to forego explaining their dimensions. It is only possible at this point to comment on trends.

(2) By means of the progress which has been made in international communication, the process of harmonising international consumption patterns in terms of the consumption patterns of those societies which are perceived to offer a role model (the *"trendsetting societies",* particularly the USA) has been made easier. The actual harmonisation of individual countries in terms of these trendsetters is, however, only possible in cases where the stronger acceptance of the market mechanism since the end of the Cold War has amplified the role played by consumers. On the

other hand, the sensitivity to influence on the part of consumers has increased - something which is due particularly to the activities of the multinationals, which in some cases use massive quantities of advertising in order to support their brand-name products which are available the world over. This means that production-orientated trends can contribute to emerging trends in consumption being accelerated and moulded in line with their interests by using advertising more intensively.

D. Economic Consequences of Globalisation with Respect to Developing Countries

(1) What are the economic consequences of globalisation for the developing countries concerned? With a view to covering them, it is necessary first of all to make a preliminary remark with regard to the method followed: not all effects which can be observed in the course of the globalisation process may be attributed to this process. Economists require in this kind of analysis that the *"with and without"* principle be taken into consideration: the constellation "without globalisation" must be simulated and compared to the situation of globalisation as it is actually observed. A *"before and after"* comparison, on the other hand, can easily become deceptive if observed changes have been caused by means of other values which arose independently. The major problem with this approach is, naturally, how to simulate the *"without"* case, which frequently can only be determined speculatively. This makes many attempts to determine causalities at least highly risky, and theoretically subject to manipulation, but it is nevertheless superior to a *"before and after"* comparison.

(2) In evaluating economic changes from an economic development point of view, a distinction is frequently made between their effects on the volume of production, on the distribution of income and on the environment. Accordingly, an attempt will be made below to discuss how globalisation effects these values.

1. Effects of globalisation on the volume of production

With the effects of globalisation on the volume of production, which is customarily calculated through changes to GDP, it is necessary to distinguish between short-term allocation effects, which arise with the extant resources available to the countries concerned, and long-term growth effects which occur by virtue of changes in the growth determinants.

a) *Short-term Allocation Effects*

(1) There is no disagreement between economists that the trend which is noticeable in the course of globalisation towards free trade and unhindered mobility of factors of production will, in the absence of external effects, lead to an increase in the prosperity of the economies involved. The allocation of resources is improved and the opportunities for growth in the economy are increased. What mechanism ensures these effects?

(2) The central trigger for globalisation was the removal of trade barriers and controls on the movement of capital since the start of the fifties. Labour, goods and especially the capital markets have reached a depth of integration since then which would have been considered inconceivable only a few decades ago. The cost of transportation and communication also fell considerably, and now are only a fraction of their pre-war values. In the course of the above processes, it was possible to gradually harmonise reality with the premises of the neo-classical model world, which made it possible to at least partly bring about the gains in efficiency which had been predicted by the foreign trade theory.

(3) It has been possible, especially on the financial markets, to increase market efficiency and to improve risk allocation by accelerating deregulation. Liberalising the movement of capital leads to savings flowing into their most productive use world-wide, i.e. into those countries where the marginal productivity of capital is greatest. In the neo-classical view, the marginal productivity of capital is greater the lower the macroeconomic capital intensity. Since developing countries have relatively little capital in an international comparison, and the industrialised countries are relatively rich in capital, in this view, there is a gap in the marginal productivity of capital between developing and industrialised countries. If for this reason capital is transferred from the industrialised countries to the developing countries, which have little capital, this may trigger a rapid growth process there which makes it possible to reduce the extant differences in per-capita income between relatively rich and poor nations. IMF data demonstrate that the net capital flows in several developing countries have been increasing at a higher than average rate in the past few years. This refutes the frequently proposed thesis that developing countries do not benefit from the globalisation of financial markets, at least in its general meaning.

(4) At the same time, the opening up of the capital markets, and the additional competition on them, leads on the one hand to better opportunities for savers to invest, and on the other to lower costs for borrowers, since the relevant market is no longer restricted by national frontiers, but loans can be offered and taken up world-wide. The result of this is positive incentives to save which increase the amount of capital offered world-wide. Investigations carried out by the OECD and the IMF demonstrate in fact that the efficiency of the financial markets has increased

over the past few years. Thus, for instance, the interest margins with banks in the OECD countries have been decreasing since 1991. The liberalisation of the capital market within the framework of the EU's common market programme also contributed towards reducing the transaction costs (bank fees, cost of exchange cover, and the like).

(5) On the other side, one should not overlook the associated risks, which have been demonstrated by the significance to development policy of the South East Asian crisis at the beginning of 1998: Increasing asymmetries of information between the individual transactors on the capital markets go hand-in-hand with the intertwining of world-wide capital. In connection with the differing individual willingness to take risks, there are here considerable principal-agent problems which may lead to tangible negative effects on the prosperity of individual transactors, particularly for many investors.

(6) The goods markets, too, have achieved a very high level of liberalisation in many areas which, due to the heterogeneity of the goods offered, cannot however be compared with the depth of the integration on the capital markets, the cost of transportation and the remaining tariff and non-tariff barriers to trade. Nevertheless, the prognoses of the neo-classical foreign trade model, which assumes the existence of free trade, is applied more frequently than was previously the case. However, the factor proportion theorem conceived by *Eli Heckscher and Bertil Ohlin* (H/O) is the focal point of the neo-classical foreign trade theory. This theorem states that a country will specialise in producing and exporting the product which most intensively uses the factor with which it is best endowed. Capital-rich countries therefore specialise in capital-intensive goods, whilst labour-rich countries concentrate on labour-intensive goods. In order to illustrate this attempt to provide an explanation, a two-country, two-product, two-factor model is to be taken as a basis below. The industrialised nation is relatively well endowed with capital, and the developing country is relatively well endowed with labour. Capital covers both material and human capital, so that labour is defined here as unskilled labour. Furthermore, the production of product no. 1 (for instance computers) is characterised by a high level of capital intensity, whilst product no. 2 (for instance textiles) is manufactured relatively labour-intensively. In accordance with the H/O model, the differing factor proportions lead the industrialised nation, after it has commenced foreign trade relations, to specialise in producing product no. 1, which is capital-intensive, and in exporting it. Product no. 2, on the other hand, which is labour-intensive, is imported, since the developing country has a comparative advantage here. The generally incomplete specialisation brought about through foreign trade enables both countries to bring about an increase in the level of prosperity as against an autarchic situation.[12]

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[12] Cf. *Rose/Sauernheimer, 1995,* p. 391 et seqq. for detailed proof.

As a consequence, countries which are relatively well endowed with labour - primarily developing countries - due to globalisation specialise in producing labour-intensive goods, whilst countries which are relatively rich in physical capital specialise in producing goods which are intensive in physical capital, and countries which are relatively rich in human capital specialise in producing goods which are intensive in human capital.

(7) The neo-classical factor proportion endowment theorem presupposes that the individual firms produce on condition of increasing marginal costs. There are, however, many products to which this does not apply, especially those produced industrially. Their production is frequently typified, rather, by increasing economies of scale which will lead to a cost digression as production increases. Globalisation now leads to an increase in the size of the market. The latter allows firms to bring about cost digressions, and thereby to strengthen their international competitiveness, so that production becomes more efficient as the market becomes larger. There is an incentive for open economies to specialise in producing a small number of products, and not only because of comparative advantages already existing. The possibility of attaining *economies of scale*, and hence of creating comparative cost advantages, makes it appear sensible to specialise appropriately. The increasing trends towards concentration, especially in the European car and chemical industries, make it clear that firms in these industrial sectors adjust to the changes on the market, and react to globalisation by forming alliances. They create larger production units which are able to compete on a world market which has increased in size. If one also presumes that a minimum production volume is needed in order to create *economies of scale*, it is especially countries which already have a highly developed internal market for the product in question which benefit from globalisation.

b) Long-term Growth Effects

(1) The short-term allocation effects which have been described here, create at the same time long-term growth effects for the economies involved. If one considers globalisation to be essentially a process of increasing opening up to foreign trade, the historical experience that export-orientated economies have been able to attain much higher GDP growth rates than those which are orientated in terms of their internal economies allows one to draw the conclusion that globalisation tends to promote growth [*Sachs,* 1995, p. 750]. But which effects give rise to the positive correlation between the extent to which a country is open and its growth rate? There are several possible approaches towards an explanation:

* One argument already consists of the significance of trade for obtaining economies of scale, which has already been mentioned. Since the size of the domestic market is limited

in many countries, and in addition - primarily in developing countries during the seventies and eighties - a policy of import substitution was pursued, these countries have restricted scope to act; they miss out on the opportunity to attain *economies of scale*. The reduction of trade restrictions now allows the market to expand, and domestic firms are able to expand by selling abroad. If economies of scale are significant, opening up to the world market may open the door to industrialisation and rapid growth [*Sachs,* 1995, p. 751].

* Another reason for the connection which has been mentioned between the degree of openness and growth in the economy lies in the fact that economies which are orientated towards foreign trade have more contact with foreign firms, and hence learn more about technological improvements and innovative products which come from abroad than autarchic economies. Whilst isolated countries may for instance also study specialist periodicals or obtain foreign know-how by informations from experts, such transfer processes are slower and less efficient than within an open economy. The process of dissemination of knowledge, which is stepped up through globalisation, hence leads to an improvement in the transfer rate, especially in countries which trade on the world markets, and can be a main source of increases in productivity, which in turn speed up the growth of the economy [*Sachs,* 1995, p. 753].

(2) In fact, in the experience gathered with the modern theory of growth, the accumulation of physical and human capital, as well as the creation and application of new knowledge, can be the decisive motor of positive growth in the per capita income of the individual countries. If in the course of globalisation a large amount of physical capital flows into developing countries because the marginal productivity of capital is higher there than in industrialised countries, owing to their poor endowment with per capita capital, positive growth effects are caused in the developing countries. The neo-classical theory predicts from this context, on condition of free movement of capital, that the per capita income growth rates will harmonise between industrialised countries and developing countries (so-called *convergence thesis).*

(3) Their empirical evidence is, however, quite varied in an international comparison. There is patently a strong tendency towards convergence within Europe, but this trend is weak in a large selection of developing and industrialised countries [*Barro,* 1991].[13] *Barro* explains the absence of a process of convergence between poor and rich countries primarily by the lack of political and economic institutions in the poorer countries which promote the influx of foreign capital and

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[13] *Barro* finds clear signs of convergence between the States of the USA and within Europe, and much weaker evidence in a broad selection of developing and industrialised countries.

know-how. The ability of individual countries to attract foreign capital and to absorb the progress in knowledge which has been made available internationally is, however, particularly significant to growth. In view of their sometimes severe shortages of human capital, the opportunities open to many countries to generate economic growth solely on the basis of their own efforts is clearly restricted. The central significance of attracting FDI for growth in the economy becomes clear. FDI is for many countries by far the greatest opportunity for obtaining the central growth determinants which are physical and human capital, as well as knowledge. Accordingly, the rapid growth of FDI since the mid-eighties has also been identified not only as the central manifestation of globalisation, but also as the major definition of the empirically determinable growth in per capita income. The world-wide flow of FDI increased by 8 per cent in 1996 over the previous year, and rose to almost 350 billion Dollars. The developing countries were able to attract almost 40 per cent of this sum [*Wartenberg,* 1997, p. 470]. If, however, individual developing countries are politically unstable or unable for other reasons to protect FDI, the flow of capital stops, and the forces for convergence are considerably weakened.

(4) Insofar one should avoid being exclusively positive about the contribution to growth made by FDI, since it may also lead to negative growth effects in the recipient countries [*Hemmer,* 1988, p. 248 et seqq.]. Only two aspects of foreign direct investment may be regarded as positive, irrespective of the countries investigated:

a) FDI leads to an increase in the accumulation of capital in the host country (this means that the investment quota of the national product increases). Since neither domestic savings nor the currency stocks of the host country are used by the foreign company, domestic investors are not pushed out by the foreign investment (no *crowding out* in terms of interest rates). This fact is especially significant if lack of access to capital goods had previously blocked development.[14]

b) FDI contributes to introducing production and management methods into the host country which were hitherto unknown. FDI provides not only financial assistance, but also technical and organisational support, i.e. access to knowledge which is useful for growth. This is highly significant to many developing countries as they can only keep the pace in international competition by importing such methods. Especially the creation of human capital by training engineers, specialist workers and managers can be expedited by means of technology transfer. The gap between the developing and the developed world in the

[14] There may be exceptions to this rule if the host country has to make investments of its own (such as infrastructure expenditure) in order to entice the foreign firm to invest there.

area of entrepreneurial and technological knowledge, the so-called "*technological and managerial gap*", thus tends to be reduced.

(5) The growth effects of FDI for the host country will be amplified as the developing country increases its participation with intermediate inputs from its own production in the gross value of production of the project in question. This effect is increased further if the demand for input goods infects upstream industries. If this additional demand leads to an expansion in production - which is to be expected if capacities are not used to the full - the level of employment in outside suppliers increases. If, however, the resources used by the foreign firm are removed from other uses within the developing country, the expansive growth effects of FDI are faced with a contraction due to the removal of factors from domestic firms. FDI may then only be added to the net growth effect, which may in fact be negative.

(6) In addition to the direct growth effects described above, FDI may also lead to an influx of foreign currency into the host country, which - where there is a shortage of foreign currency - leads to indirect growth effects. In order to clearly distinguish these effects, a distinction will be made below between outward orientated and inward orientated FDI.

a) Outward orientated FDI include projects where the products are not sold in the host country, but to other countries (frequently the investors' home country).[15] The advantage of this type of FDI is that the net contribution towards the national product of the developing country means that the full amount of foreign currency flows into that country. Since by definition the yield comes from export business, it automatically occurs in foreign currency, and the currency reserves of the host country certainly grow. This ceases to apply, however, if the activity of the foreign firm reduces the profit from exports made by domestic firms which manufacture products similar to those of the foreign supplier, or close substitutes. There may even be a negative effect in terms of foreign currency in such cases.

b) One reaches somewhat different results if the influence of inward orientated FDI on the foreign exchange situation of the host country is investigated. These FDI include projects where it is a priority to access the market in the host country, and no exports are carried out. The developing country may on the one hand save foreign exchange through domestic production, since goods which previously had to be imported can now be substituted by products made by the foreign firm. On the other hand, a burden is placed on the country's foreign exchange situation when the profit is transferred. Additionally, as a rule factors of

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15 One example could be a German sports shoe manufacturer having (labour-intensive) products manufactured in Asian or Eastern European countries in order to then sell them on the German market

production must be imported from abroad, which also means an outflow of foreign exchange. A priori, it is thus not possible to make any clear statements concerning the net effect on foreign exchange had by inward orientated FDI. Rather, the savings effect attained by means of the substitution of imports must be weighed up against the outflow of foreign exchange when the profit is transferred and factors of production are imported, in order to be able to say anything about the effect on saving foreign exchange.

(7) The observation which has already been made above that the contribution made by FDI to growth in developing countries is neither essentially positive nor always negative, is therefore confirmed by the above considerations. In fact, both growth-promoting effects and growth-blocking effects are conceivable, although the empirical trend emerging in a cross-section of all developing countries is that the contribution made by FDI towards growth is certainly positive. Fundamental generalised judgements will certainly not help. In the final analysis, it is only possible to make a well-founded judgment regarding the advantageous nature of FDI in relation to specific cases.

2. Effects of Globalisation on the Distribution of Income

(1) If one regards globalisation purely from the point of view of production, the distribution effects within the economy under observation are neglected. Thus, presently the worry is arising in the industrialised countries that unskilled workers will not be able to participate in the general increases in prosperity, and that they will have to accept a worsening of their relative or even absolute income. Here, globalisation is seen primarily as a threat.

(2) In analogy to the analysis of the effects on production, one should distinguish in discussing the distribution effects of globalisation between short-term effects which adjust in line with the resources presently available, and long-term effects which arise in the course of the growth within the economy.

a) Short-term distribution effects

(1) The short-term distribution effects of globalisation are largely predicted within the framework of the neo-classical theory, mostly with the aid of the factor price equalisation theorem, which is based on the factor proportion theorem. If we base our discussion once more on our model, where a capital-rich industrialised nation specialises in the production of capital-intensive computers, and the labour-rich developing country concentrates on the production of labour-intensive textiles, a reallocation of resources occurs with both specialisation processes:

a) The computer industry expands in the industrialised nation. This means greater demand for capital, but only a relatively low increase in the demand for labour. Since at the same time the textile industry shrinks, a relatively large amount of labour is released in the industrialised nation, but only a relatively small amount of capital. In the course of the adjustment process, the relative shortage of capital therefore increases in the industrialised nation. Assuming a flexible capital and labour market, interest rates in the industrialised nation must therefore increase in relation to wages, so that the factors remain fully employed.

b) The opposite development can be observed, on the other hand, in the labour-rich developing country. Specialising in textiles, the manufacture of which entails greater use of labour, which is freely available, leads to a rise in wages, whilst interest rates fall because of the drop in the demand for capital.

These simple considerations make it clear that the differences between the factor prices existing prior to the initiation of foreign trade between the two countries are at least partly removed if each country concentrates on producing the good which particularly requires the factor which is least lacking.

(3) *Samuelson* goes one step further, and demonstrates within the framework of the factor price equalisation theorem, which he developed, that even full equalisation of the factor prices can occur with free international trade. Once trade has been commenced, the relative prices of goods in both countries harmonise. If no complete specialisation in one good occurs, and no change takes place in the intensity of the factors[16], then there is a clear connection between the goods and the factor price relationship, so that the latter must be identical in both countries. Furthermore, the existence of world-wide identical production technology in a particular sector guarantees that the sector-specific capital intensities are the same at home and abroad, so that, finally, the real factor prices are the same.[17] There is no doubt that *Samuelson's* consideration is based on a series of highly restrictive suppositions which considerably restrict the practical relevance of his approach.[18] Critics conclude from this that the impossibility of meeting these suppositions is the proof that no factor price equalisation takes place. In fact, in economic reality

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[16] With a change in the intensity of the factors, for instance product no. 1 (computers) is produced at home with a high degree of capital, and abroad with a high degree of labour.

[17] cf. *Rose/Sauernheimer,* 1995, p. 394 et seqq. for detailed graphical and analytical proof.

[18] The following preconditions must be met for the factor price equalisation theorem to be valid:
1.) Perfect competition on goods and factor markets. 2.) No transaction costs, transport costs or trade barriers. 3.) The amount of the factors of production is constant. International factor movements are excluded. 4.) The production functions are identical in both countries for both goods. 5.) There are no changing factor intensities. Product no. 1 is therefore always capital-intensive, and product no. 2 is always labour-intensive. 6.) The production functions are linear and homogeneous (constant returns to scale).

complete equalisation of the factor prices will never take place, since international economic relations - in contradistinction to the neo-classical model suppositions - do not take place on a perfect world market. Nevertheless, even if one suspends some of the suppositions made within the framework of the neo-classical analysis, it is to be expected that at least a trend exists towards equalisation of factor prices.

(4) In the *Heckscher-Ohlin-Samuelson* analysis framework, the commencement of trade relations always entails advantages for the participating countries as a whole. However, within the countries only those factors of production benefit from the increased division of labour which are readily available, and hence are used intensively in producing goods for export. In the present example, this would be the owners of capital in the industrialised countries, and in the developing countries the unskilled workers. In view of the fact that, if capital is free to move, the interest rates in all countries will move to the same level in real terms, the equalisation of factor prices will largely be borne by the workers. In the industrialised countries the consequence of globalisation will be a drop in wages in real terms, and in the developing countries an increase in wages in real terms. In fact, in the capital-rich countries, particularly the less skilled workers will have to compete on an integrated world market with workers from countries where wages are far lower than in the established industrialised countries.

(5) Such adjustment processes which function via the price of labour (wage reductions), however, only work where the labour markets are sufficiently flexible. *Krugman* calls this constellation the American model [*Krugman*, 1995, p. 327 et seqq.]. In fact, the USA has been able to keep the unemployment rate at a constantly low level in the nineties, but in return has had to accept wage differentials and a moderately climbing polarisation of income distribution. Similar developments have been observable in Canada, New Zealand and the Netherlands, amongst others. In other regions, however, the entry of developing countries into the global division of labour led to unemployment among the unskilled. If their wages are unable to fall, and if an increase in the wage differential between qualified and less well qualified workers is prevented, unemployment is the logical consequence. The adjustment to the increased supply of labour then happens not via prices (falling wages), but via quantities (unemployment). *Krugman* rightly calls this path the European model, since a rapid rise in the number of the unemployed can be observed in many European countries since the mid-seventies, added to external shocks (oil crises) and structural adjustments (coal and steel industry, agriculture) primarily caused by inflexible labour markets.

(6) The extent of the worsening of the income position of the unskilled in the industrialised countries depends essentially on the size of the country under observation, as well as on the

organisation of the labour market. Thus, small (and hence in most cases very open) economies have to accept the most serious changes because such countries must adjust to the existing world market prices after commencing foreign trade relations. Large countries, on the other hand, exercise a significant influence on world market prices by virtue of their conduct in terms of supply and demand. They are not subject to comparable pressure to adjust, and are largely unaffected by free trade, not lastly because the share of imports in domestic supply is usually small in large economies.[19] This could be the reason why empirical studies are as a rule unable to show a significant influence of international trade on the remuneration of unskilled workers in the USA.[20]

(7) For low-wage countries, on the other hand, globalisation opens up opportunities to achieve a higher level of employment and higher relative wages. According to the Heckscher-Ohlin theorem, those developing countries which are well endowed with unskilled or semi-skilled labour specialise in manufacturing labour-intensive products, so that the wages there rise in comparison to the autarchic condition. If the supply of labour reacts positively to this increase in wages, the availability of labour increases, such as by means of immigration or by substituting leisure through work. As *Rybczynski* showed, with constant terms of trade the increase in one factor of production means that the production of those goods falls which make less use of this factor, whilst the production of the other goods where this factor is significant to production increases by more than the whole national product (Rybczynski theorem). To put it another way, specialisation increases (production of the labour-intensive export product rises, that of the capital-intensive import falls), and the national product grows [*Rose/Sauernheimer,* 1995, p. 429 et seqq.]. For the group of developing countries, globalisation hence offers the opportunity both to improve their aggregate income, and to make it possible to employ a growing number of unskilled people, and hence to enable them to attain a higher level of income.

(8) One of the main observations of the H/O model - the income gap in industrialised states caused by more intensive trade with developing countries - was, however, only partly confirmed by empirical economic research. The sceptical stance adopted towards the significance of international trade on the distribution of income is largely based on three observations here [*Krugman*, 1997, p. 80]:

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[19] Thus, the world's two largest economies, the USA and Japan, only imported 15.9 and 5.7 per cent respectively of the goods consumed domestically in 1993. Comparable values for small, open economies are much higher, for instance that of the Netherlands is 77.2 and of Belgium as high as 78.8 per cent.

[20] This thesis is subject to considerable dispute in academic circles. *Wood* for example stresses the significant influence of trade with developing countries (especially China) on the remuneration of simple labour in the USA [*Wood,* 1995].

- The H/O model presumes that international trade influences the distribution of income by changing the relative prices of goods. If, therefore, the trade in goods was in fact the driving force behind increasing inequalities of income in the highly-developed countries, it should be possible to observe an increase in the prices of human capital-intensive products, compared with those of labour-intensive products. The reality, however, shows rather the contrary: it is not the prices of (unskilled) labour-intensive goods which have fallen in relative terms, but those of human capital-intensive high-tech goods, such as hi-fi equipment and personal computers.
- Although the trade between economically advanced and developing countries has undergone rapid growth in the past twenty years, it is still quite modest in proportion to the total expenditure of the industrialised countries. Thus, in 1970 the highly-developed economies spent not quite one quarter of a per cent of their overall income on industrial goods imported from developing countries. By 1990, this proportion had risen to 1.61 per cent, thus growing more than six-fold, even if starting from a very low level. Estimates of the so-called factor intensity of this trade, that is the proportion of jobs indirectly imported and exported as a result of the trade in goods, confirms the rather small contribution made by globalisation towards the explanation of the growing labour market problems for unskilled labour, since only a small percentage of the total supply of labour is concerned by this trade.
- The H/O model forecasts that the factor income for simple labour will harmonise world-wide. Whilst wages fall in the industrialised countries, the opposite applies to the developing countries, which are well endowed with unskilled labour. Whilst in this region there was no statistical material comparable with western standards regarding the distribution of income, various studies nevertheless demonstrate that the forecasts made by the H/O model are inapplicable to many countries - especially China. The income gap has developed in the developing countries at least as quickly as in the industrialised nations, and highly-qualified workers (with human capital) have capitalised on globalisation everywhere.

b) Long-term Distribution Effects

(1) What, therefore, is the decisive reason explaining the growing wage gaps in industrialised countries (particularly in the USA)? Various studies have come to an unmistakable conclusion in this area. Accordingly, it is not the trade with developing countries, but especially labour-saving technical progress which is the primary driving force behind the growing inequalities in distribution. Technological innovations ensure that the productive significance of unskilled labour continually falls in the course of economic growth. Badly trained workers are today in

many cases no longer able to compete with highly-productive, flexible production equipment or robots, which are never ill and do not require social welfare contributions [*Krugman*, 1997, p. 82].

(2) Added to this is the statement of the modern growth theory, which is backed up by empirical observations, that unskilled labour is becoming less and less significant as a factor of production. The decisive growth determinants are capital accumulation and the progress of knowledge. The formation of human capital, and hence workers' level of education, play a particularly important role within capital accumulation. Hence, as the economy grows, there is a continuous fall in the significance of unskilled labour, and their income falls. Correspondingly there is an ongoing increase in the significance of qualified and highly-trained workers (in other words human capital) who continually improve their income in the growth process. Accordingly, the income gap between skilled and unskilled workers becomes ever wider. This process is amplified in the long term by globalisation because it makes it easier for all countries to gain access to the new technology which gives rise to this distribution effect. At the same time the demand pattern moves more towards capital-intensively produced goods, as a consequence of which the demand for unskilled labour recedes. In this respect, one may presume that a greater income gap between the different quality levels of labour will be the result of globalisation. It is to be expected that both in the industrialised countries and in the developing countries there will be a trend towards a dualisation of the labour market: Whilst especially the labour market for better trained workers will experience a tangible increase in demand, the labour market for the low levels of qualification are expected to undergo a drop in demand. Since those workers with little or no training depend on income for survival, an increasing number of activities on the informal labour market will arise accompanying officially registered unemployment (primarily illicit work in industrialised countries, as well as informal work in developing countries). Since it is usually impossible to tax the income earned here, the macroeconomic tax basis is undermined, and the government's scope for financing social compensation measures to benefit the losers in technological change are restricted. A kind of a vicious circle situation arises here for those concerned which they will only be able to escape by considerably improving their training. There are, however, limits to these efforts, so that the fear arises of the phenomenon of mass unemployment becoming a long-term problem in globalised economies.

(3) The classification of the contributions to growth which can be statistically ascertained as "gains in efficiency" is conditional on normative evaluations of the accompanying distribution effects under this constellation. Efficiency is usually defined in the light of a particular distribution situation which may only be changed "paretianically": There must be no losers, only winners or unchanged income positions. If changes in distribution go together with changes in

allocation in such a way that there are both winners and losers, clear statements regarding efficiency require the profits to be normatively equal in value, or to have an even greater value than the losses. If this value judgment does not apply, it is not possible to make any clear statements with regard to efficiency. As sometimes major considerable changes in distribution occur in the globalisation process, both internationally and intranationally, which mostly benefit the higher and upper-middle classes, but which at the same time harm the poorer sections of the population, it is questionable whether this normative prejudice is permissible. Certainly not from the point of view of the losers. Since, however, there is no central agency entitled to establish this kind of value judgment as a rule for political activity, the efficiency gain from globalisation is to be doubted, or at least qualified.

(4) Analogous considerations apply to the evaluation of the activities of foreign firms in the course of the influx of FDI. Taking into account also the distribution effects they cause, one should not only look at the number of domestic workers employed by the foreign firm. Rather, the changes which have been induced in the use of labour in other firms should be observed. These changes can be both positive (additional use of labour by virtue of greater demand for advance performance in cases of underemployment) and negative (such as pushing domestic firms out of established markets without an equivalent change in production taking place). Negative effects should be expected to occur to the situation on the labour market of the host country, particularly if the foreign firm moves into the market which was previously dominated by traditional, domestic suppliers with modern, capital-intensive production methods. Because of their uncompetitive, labour-intensive technology, domestic firms must accept considerable reductions in production or leave the market altogether. More labour is released in this process than can be absorbed by the foreign investors, since they use capital-intensive methods of production. The result is, hence, an increase in the number of the unemployed in the developing countries, unless the lower use of labour per head is compensated for by higher production. Foreign FDI may, therefore, lead to distribution effects which run counter to the prevailing goals of distribution policy.[21] They can certainly not be solved without making value judgments, but because of this FDI can also not be judged to be solely positive.

3. Effects of Globalisation on the Natural Environment

(1) The above illustrations have made it clear that free trade promotes growth in the economy by better allocating the factors of production. A growth impulse which is determined by foreign

[21] One should, however, take account here of the fact that the release effects are not attributable per se to the foreign firm, but, rather, to the new production technology. The effect on the labour market would presumably be identical if a domestic firm were to use the same technology.

trade will, however, not of necessity lead to increased prosperity in a country. This applies particularly if external effects in the environmental area cause resources to be allocated wrongly. Especially in the popular science discussion, the intensification of international bartering, and the accompanying increase in the volume of global transport, is frequently regarded as a reason why the natural basis of life is being eroded.

(2) Ongoing globalisation has in fact led to a considerable increase in the flows of goods and traffic, by virtue of which the burden on the natural environment has noticeably increased. The main reason for the unrestricted growth in goods and passenger transport is the fact that transport costs are largely determined by energy prices. These, however, do not fully reflect the ecological cost of burning fossil fuels. The gains in efficiency which have been made as a result of globalisation are therefore too high unless the cost to the environment of using energy is internalised in the cost of transport. A large part of the gains in efficiency which have been calculated in statistical terms (in the sense of statistically calculated gains in GDP with a certain system of relative prices, whilst at the same time cancelling out distribution value judgments) arises because of distorted relative prices. International transport costs in particular, which are a major determinant of globalisation, do not reflect the social costs of the transport resources which are deployed. A not inconsiderable proportion of the present environmental problems is caused by this, but not reflected in the price system. In reality, the transport costs within firms which are part of the decision on location and globalisation are too low in comparison with the social cost of transport. The result of this has been excessive globalisation. If, then, globalisation also occurs because of an "escape from national environmental requirements", the ecological questionability of globalisation quickly arises which is carried out at least in part to the detriment of future generations. It hence expresses a problem of distribution between the generations, whose present solution (i.e. via the present manifestation of globalisation) is questionable in ethical terms.

(3) Another argument which is frequently put forward in connection with the environmentally destructive effects of globalisation concerns moving production in emission-intensive production sites from the industrialised countries, which operate with strict environmental requirements, to developing countries, which tend to neglect the environment to a greater extent. As yet, however, it has not been possible to provide clear, empirical proof to confirm the industrial flight hypothesis. In most cases, the cost of environmental protection is not sufficiently high in the industrialised countries to justify changing locations, something which would also entail renunciation of a reservoir of highly-qualified labour and a good infrastructure. In some industrialised countries, however, there is an isolated trend towards intentionally promoting the moving of particularly environmentally damaging industries to developing countries. These are,

however, isolated cases which do not allow to deduce that there is a general trend. Apart from this, the industrial flight hypothesis ignores the fact that high environmental qualities are a positive criterion for many firms in choosing a location, since a clean environment directly makes it easier to attract qualified workers or to attain product quality.

(4) It therefore remains open whether the connection which is frequently asserted between production and trade relations, which have become increasingly global, and increasing environmental pollution can actually be ascertained in reality. In a detailed analysis, it is also possible to identify several environmentally protective effects of an increase in international trade:

- Liberalising trade promotes the distribution of environmentally compatible products and technologies. This is of particular significance for countries whose environmental protection industries are among the world market leaders (Germany and Japan), not lastly because of strict statutory provisions. An economic policy which is sensitive to ecological goals does not, therefore, necessarily lead to competitive disadvantages and loss of production. Rather, environmental policy may improve the competitive position of the country in question if it creates impulses towards innovation which speed up the development of new products and production procedures.
- The argument is frequently put forward that intensive foreign trade eases the burden on the domestic environment because of increased imports. Environmentally damaging goods are then no longer produced domestically, but increasingly imported. The consumption of these goods therefore no longer necessarily requires them to be produced at home. This argument should, however, take account of the fact that imports primarily have to be paid for through exports, and that production for export may in turn pose a burden on the environment. The net effect on the domestic environment hence decisively depends on the goods structure of imports and exports, as well as on the domestic production conditions and environmental protection regulations. However, as long as the consumption patterns remain unchanged, the burden on the domestic environment can only be relieved by imposing an added load on the environment abroad. It is therefore not possible to clearly judge the net effect on the global environment of foreign trade which increases in the course of globalisation, without knowing the ability of the environment to absorb pollutants in the various countries.

(5) In the context of the growth-promoting effects of globalisation, the argument is put forward in several places that the economic growth process *per se* is linked to an increase in environmentally unfriendly activities, and that globalisation therefore already contributes to a heavier burden on the environment because of its growth-stimulating effect. This argument,

however, only applies to a limited extent. For one thing, it oversees the fact that it is not only growth, but also poverty which causes damage to the environment. For another, it is possible to demonstrate that growth in the economy may on the one hand be the cause of environmental damage (because of increases in the emission of pollutants and the increasing consumption of resources), but that on the other hand also the ability and willingness of an economy to produce increased environmental quality increases. In the course of a growth process where the per capita income increases, however, the call for a cleaner environment becomes louder, since environmental preferences are income-elastic goods [*Ohr,* 1995, p. 441]. It appears nevertheless to be sensible to point out the ecological problems caused by the industrial boom triggered by globalisation in many parts of the Third World. Thus, the East Asian newly industrialised countries have been able to achieve tremendous growth by opening up their economies, but at the same time the quality of the environment has considerably worsened, particularly in the cities (megacities). What environmental effects are in fact caused depends to a considerable extent on the status afforded to the environmental goal in the development policy list of aims of the individual countries. Countries which take the environmental goal seriously may noticeably relieve the burden on the environment by using economic tools during a growth period, even if, as is feared in many quarters, this disadvantages the short- to medium-term success in terms of growth. In the long run, the economies concerned are presumably even better off since many subsequently develop environmental decontamination programmes which are considered to be important (when higher per capita income has been achieved).

(6) To sum up, it can certainly be stated that globalisation, in contradistinction to a widely held view, certainly can give rise to positive ecological effects (transfer of environmental technology), but that on the other hand it may also have a damaging effect on the environment, especially in the light of the tremendous increase in traffic volumes and the associated $C0_2$ emissions. Externalities which in the past were of a regional nature have now taken on global dimensions (the greenhouse effect), and have pushed national environment policy to its limits, particularly in the area of climatic protection. As a consequence, the necessity of internationally agreed conduct in internalising international external effects has grown continually. The implementation of effective international agreements has, however, so far proven itself to be very difficult because of divergent state interests, as was shown by the ecologically sobering discussions at the Earth Summits which were held in Rio and Kyoto.

E. Consequences for Development Policy

(1) The developing countries hence benefit from globalisation to a greatly varying extent. The divergences which have been observed therefore give rise to the question of the decisive determinants which enable a country to participate in the international division of labour and to attain high growth rates. Within this framework, this highly complicated question can certainly not be analysed down to the slightest detail. However, it should be shown that the present economic backwardness need not remain in the long term. Rather, a committed and plausible economic policy is certainly able to generate growth and FDI, and hence also to attract technical knowledge. However, in many countries there are still considerable shortcomings which will have to be disposed of if the country in question really wishes to participate successfully in globalisation. This frequently means a reform of the institutional framework covering the economy as a whole, meaning the entire economic order. This leads to political and social system questions; the South East Asian financial crisis which has taken place over the past few months proves this clearly. In some countries the institutional reforms required to participate in globalisation mean almost revolutionary changes. The question is then whether those holding political responsibility are willing to implement this process, since they would generally have to accept a loss of power.

As far as the most important macroeconomic framework conditions are concerned, the empirical evidence clearly shows that countries with low rates of inflation and high rates of investment in physical and human capital are at an advantage in international competition.

(2) Constantly low inflation rates (internal economic stability) are a decisive indicator of a healthy macroeconomic environment. Extreme changes in the general price level make it more difficult for producers and consumers to differentiate between relative and absolute price changes. If the content of information on relative prices decreases, the danger exists of an incorrect allocation of resources, with negative consequences for growth and employment. Even if it were to be made possible by means of a surprising increase in the money supply to raise the price level, and hence to enliven production by reducing wages in real terms, such a policy of cheating cannot be pursued by the monetary policy agencies without restriction. The economic subjects will see through the strategy of the central bank, and will not orientate their wage demands in line with the present rate of inflation, but with the expected rate. An unemployment rate lying below the natural rate of unemployment can hence only be achieved in the long term by accepting rising prices. If the central bank steers a permanently expansive course, it will rapidly lose its credibility, and confidence in the currency will be lost. Countries with high rates of inflation and budget deficits hence do not impose themselves as locations for international capital. Especially the South East and East Asian developing countries have been able to

maintain their macroeconomic stability. Between 1980 and 1992, the rate of inflation in this region was around 8 per cent. This good performance appears to have been at least partly responsible for the so-called „Asian miracle“. The comparative figures for Africa (28 %) and South America (229 %) are much higher than the Asian rate. In this respect South America is a special case, since the continent was particularly badly effected by the *debt crisis* of the eighties. As a result, some countries attempted to reduce their budget deficits by unhindered increases in the money supply, which finally led to a process of self-propelling inflation. This led to hyperinflation[22], a fall in production, political chaos and hence a flight of foreign investors. South America lost its position as the preferred location for FDI in developing countries to South East Asia. It was not until extensive stabilisation and structural adjustment programmes had been implemented (especially in Mexico and Chile) that it was possible to regain investors' confidence.[23]

(3) As well as macroeconomic stability, high physical capital investment is a precondition for successful participation in globalisation. If investment in an economy is growing more rapidly than the amount of labour deployed, the capital stock per worker (capital intensity) increases, and hence the productivity of labour. Finally, income increases. Once again, East Asia did much better in terms of investment than other groups of developing countries. One should take account here of the fact that high investment rates generally reflect a high rate of domestic savings.[24] Problems may arise if investment is financed in the long term by an influx of foreign capital (Mexico and Brazil). Conversely, the example of Eastern Europe shows that high rates of investment on their own are no guarantee of growing prosperity. The system of central economic planning was dominant in these countries until 1989, and in some cases even longer, and this system hardly took account of price signals emanating from the world market. Immense mistakes were therefore made in the allocation of resources, and the there was little growth in productivity.

(4) Besides physical capital investments, human capital formation is increasingly decisive for growth in the economy. The extensive study by *Barro* is interesting in this context which presents the microeconomic factors which determine the economic success of a group of 98 industrialised and developing countries [*Barro,* 1991]. *Barro* uses as an indicator of the stock of human capital of an economy the average number of school years finished per productively

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22 Hyperinflation means a monthly (!) rate of inflation of 50 per cent or more.

23 The situation in Brazil is the complete opposite: in the light of only partial reforms, the previous leading position as an investment location in the Third World was lost, and the influx of FDI in 1993 had shrunk to half the 1984 value.

24 The extent to which the high level of savings in East Asia is based on metaeconomic factors (the role of "neoconfucianism") is not to be discussed further here. What is decisive is merely the fact of the high level of savings in these countries.

employed person. As a result, a significantly positive correlation was discovered between the stock of human capital and growth in the economy. A series of subsequent international cross-section analyses confirms *Barros'* supposition [*Mankiw et al.,* 1992]: the gap in per capita income world-wide can easily be explained by virtue of the differences in the duration of schooling. In a world in which simple activities are being increasingly taken over by machines, and where state-of-the-art communication and information technologies are permeating the work process, investment in human capital is at least as important as investment in physical capital. This applies to developing countries in particular: the application of modern technologies in these regions means that complementary factors of production (well-trained workers) are available. One should therefore not be surprised by the fact that East Asia was able to accumulate far more human capital per person in terms of average school years than Sub-Saharan-Africa.

In contrast, the high standard of education in the former Eastern Bloc is noticeable. One can draw the conclusion from this observation that Central and Eastern Europe have relatively good chances to successfully take part in globalisation, once the unavoidable problems of the process of transformation to a market economy have been overcome.

(5) The size of the market in the different economies also plays a vital role. In view of the fact that modern industrialised production processes require firms to have a considerable minimum technical size, the internal sales potential of the domestic market is equally as important for some types of globalisation decisions as the internal size of the labour markets for certain groups of qualification required in the production process for other types.

(6) This list is not exhaustive, but cannot be expanded here for reasons of space. The contribution, for instance, made by the structural adjustment policy of the IMF and the World Bank can only be touched upon here. The same applies to the consequences of the increasingly popular liberalisation philosophy of the past few years, since the end of the East-West conflict, with its security policy dimension, and of increasing international migration. It should also be clearly pointed out that national policy measures on their own are insufficient to guarantee positive net effects of globalisation to the countries concerned. Extensive reforms of the international framework are also needed; the establishment of the WTO is certainly a first step in the right direction in this respect. A detailed discussion of these aspects, however, would go beyond the scope of the present paper.[25]

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[25] The reader is referred to *Hauchler et al,* 1997, p. 161 et seqq. in this respect.

F. Conclusions

(1) The empirical studies show that the economic success of the Asian economies and their attractiveness for FDI are determined by a series of short- and long-term factors, all of which can be influenced by domestic economic policy. There is therefore no need for economic backwardness to become a permanent phenomenon. For one thing, macroeconomic stability is a matter of the independence of the monetary bodies[26], for another, it is a question of state budgetary discipline. The level of investment depends inter alia on the amount of capital taxes and on regulations regarding the influx and outflow of foreign capital. The willingness of the state to produce public goods which promote growth and distribution is reflected in the quality and quantity of schooling.

(2) Furthermore, current empirical studies have shown that a high level of openness of an economy, in the shape of largely liberalised capital markets and the free movement of goods, is vital to achieving high growth rates [*Gundlach,* 1996]. Openness facilitates the necessary import of technology by bringing in investment goods, the influx of FDI, and by other forms of international joint ventures. In this respect too, the economic policies of the countries of East Asia have reacted better than elsewhere in the world to the requirements imposed by globalisation in the shape of the liberalisation of the trade in goods and the influx of FDI at an early date.

(3) In the final analysis, however, there are no reasons why it should not prove possible to also repeat the success enjoyed by Asia in other parts of the world. Thus, various countries in South America and Eastern Europe appear to have learned from the Asian experience, and are imitating the example set by South Korea, Taiwan or Singapore. Chile and Poland should be mentioned here as prominent examples. Their governments have set consistent macroeconomic stabilisation programmes in motion, have liberalised trade and relaxed restrictive provisions relating to FDI. In this way, the chances were improved of successfully taking part in globalisation, and the risk of becoming disconnected from the world-wide goods and capital markets reduced. In contrast, the danger of such a disconnection remains highly acute in many parts of Africa. Instead of an ongoing process of catching up, one can observe there, rather, a trend towards economic divergence, the consequence of the hesitation of many African potentates to undertake consistent economic reforms.

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[26] One of the constitutive characteristics of an independent monetary instance is, amongst others, sovereignty over the rate of exchange, a prohibition to lend to public authorities, and independence from attempts to exercise a political influence on monetary policy.

List of References

Barro [1991]:
Robert Barro: Economic Growth in a Cross Section of Countries; in: Quarterly Journal of Economics, Vol. 106, 1991, pp. 407-443.

Beyfuß et al. [1997]:
Jörg Beyfuß, Winfried Fuest, Michael Grömling: Globalisierung im Spiegel von Theorie und Empirie; Cologne: Deutscher Instituts-Verlag, 1997 (Beiträge zur Wirtschafts- und Sozialpolitik 235, 2/1997).

Dicken [1992]:
Peter Dicken: Global Shift - The Internationalisation of Economic Activity; Second Edition, New York: The Guilford Press, 1992.

Gundlach et al. [1996]:
Erich Gundlach, Peter Nunnenkamp: Aufholprozesse oder Abkopplungstendenzen? Entwicklungsländer im Zeitalter der Globalisierung; in: Hans-Bernd Schäfer (ed.), Die Entwicklungsländer im Zeitalter der Globalisierung; Berlin: Duncker & Humblot, 1996, pp. 87-112 (Schriften des Vereins für Socialpolitik, Vol. 245).

Hasse [1996]:
Rolf H. Hasse: Globalisierung versus Protektionismus; in: Reinhold Biskup (ed.): Globalisierung und Wettbewerb, 2nd., unchanged edition, Berne/Stuttgart/Vienna: Verlag Paul Haupt, 1996, pp. 285-327 (Beiträge zur Wirtschaftspolitik, Vol. 63).

Harris [1993]:
Richard G. Harris: Globalisation, Trade and Income; in: Canadian Journal of Economics, Vol. 26, 1993, pp. 755-776.

Hauchler et al. [1997]:
Ingomar Hauchler, Dirk Messner, Franz Nuscheler (Stiftung Entwicklung und Frieden): Globale Trends 1998. Fakten - Analysen - Prognosen; Frankfurt am Main: Fischer Taschenbuch Verlag, 1997.

Hemmer [1988]:
Hans-Rimbert Hemmer: Wirtschaftsprobleme der Entwicklungsländer - Eine Einführung; 2nd revised and extended edition, Munich: Vahlen, 1988.

Institut der deutschen Wirtschaft [1998]:
Informationsdienst des Instituts der deutschen Wirtschaft, 24th year, 1998, No. 10, pp. 6-7.

Krugman [1995]:
Paul Krugman: Growing World Trade: Causes and Consequences, in: Brookings Papers of Economic Activity, Washington, 1995, pp. 329-377.

Krugman et al. [1997]:
Paul Krugman, Maurice Obstfeld: International Economics - Theory and Policy, 4th edition, Assison-Wesley, 1997.

Mankiw et al. [1992]:
Gregory Mankiw, David Romer, David Weil: A Contribution to the Empirics of Economic Growth, in: Quarterly Journal of Economics, Vol. 107, 1992, pp. 408-437.

Nunnenkamp et al. [1994]:
Peter Nunnenkamp, Erich Gundlach, Jamuna P. Agarwal: Globalisation of Production and Markets; Tübingen: Mohr, 1994 (Kieler Studien 262).

Nunnenkamp [1996]:
Peter Nunnenkamp: Winners and Losers in the Global Economy - Recent Trends in the International Division of Labour and Policy Challenges, in: Institut für Weltwirtschaft (ed.), Kieler Diskussionsbeiträge 281, 9/1996.

Nunnenkamp [1997]:
Peter Nunnenkamp: Foreign Direct Investment in Latin America in the Era of Globalized Production, in: Transnational Corporations, Vol. 6, No. 1, 4/1997, pp. 51-81.

Ohr [1995]:
Renate Ohr: Umweltschutz und Freihandel; in: WiSt, No. 9/1995, pp. 441.

Rose et al. [1995]:
Klaus Rose, Karlhans Sauernheimer: Theorie der Außenwirtschaft; 12th edition, Munich: Vahlen, 1995 (Vahlens Handbücher der Wirtschafts- und Sozialwissenschaften).

Sachs et al. [1995]:
Jeffrey Sachs, Felipe Larrain: Makroökonomik in globaler Sicht, Munich, Vienna: Oldenbourg, 1995 (Wolls Lehr- und Handbücher der Wirtschafts- und Sozialwissenschaften).

Senti [1994]:
Richard Senti: Die neue Welthandelsordnung - Ergebnisse der Uruguay-Runde, Chancen und Risiken; in: Ordo - Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft, Vol. 45, Gustav Fischer Verlag: Stuttgart, 1994, pp. 301-314.

Straubhaar [1996]:
Thomas Straubhaar: Standortbedingungen im globalen Wettbewerb; in: Reinhold Biskup (ed.): Globalisierung und Wettbewerb, 2nd unchanged edition, Bern/Stuttgart/Vienna: Verlag Paul Haupt, 1996 (Beiträge zur Wirtschaftspolitik, Vol. 63).

von Wartenberg [1997]:
Ludolf von Wartenberg: Auslandsinvestitionen im Zeitalter der Globalisierung, in: NORD-SÜD aktuell, 11th year, No. 3, 1997, pp. 470-476.

Wood [1995]:
Adrian Wood: How Trade Hurt Unskilled Workers, in: Journal of Economic Perspectives, Vol. 9, No. 3, 1995, pp. 57-80.

Williamson [1997]:
Jeffrey Williamson: Globalisation and Inequality: Past and Present, in: The World Bank Research Observer, Vol. 12, No. 2, 1997, pp. 117-135.

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