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General Agreement
on Tariffs and Trade

International Trade 89-90

Volume I

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GATT

General Agreement
on Tariffs and Trade

International Trade 89-90

Volume I

Geneva 1990

The GATT Secretariat's annual report *International Trade* appears in two volumes. Volume II, which will be published later in the year, is devoted primarily to statistical tables. The two-volume set is available in English, French, and Spanish language editions, and may be ordered from the GATT Secretariat or through booksellers at a price of 30 Swiss francs per volume.

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Abbreviations and symbols

ASEAN	Association of South-East Asian Nations
CMEA	Council for Mutual Economic Assistance
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
EC	European Communities
EFTA	European Free Trade Association
FAO	Food and Agriculture Organisation of the United Nations
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GNP	Gross National Product
IBRD	International Bank for Reconstruction and Development (World Bank)
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
LAIA	Latin American Integration Association
OECD	Organization for Economic Co-operation and Development
OPEC	Organization of Petroleum Exporting Countries
SITC	Standard International Trade Classification
UNCTAD	United Nations Conference on Trade and Development
UNSO	United Nations Statistical Office

c.i.f.	cost, insurance and freight
f.o.b.	free on board
n.e.s.	not elsewhere specified
n.i.e.	not included elsewhere

The following symbols are used in this publication:

...	not available
0	figure is zero or became zero due to rounding
-	not applicable
$	United States dollars

The metric system is used throughout.

Billion means one thousand million.

Minor discrepancies between constituent figures and totals are due to rounding.

All value figures are expressed in United States dollars. Unless otherwise stated (i) all import data are c.i.f. and all export data are f.o.b., and (ii) all trade figures are on a customs basis and include the intra-trade of free trade areas, customs unions, regional and other country groupings. Data for the latest year are provisional. For many developing economies, figures for the latest year are Secretariat estimates.

Closing date
October 1, 1990

I. Overview and outlook for the world economy

This report reviews developments in world trade and output, first during 1989 and then in more detail for the 1980s as a whole. As is clear from the review, there were a number of developments in the 1980s that are important both in their own right and for their trade policy implications. Some were a continuation of earlier trends, while others occurred unexpectedly as the decade progressed. Regardless of their nature, however, these developments have taken on added interest in the aftermath of the Gulf crisis that began on 2 August 1990 and economic events which it set in motion – a more than doubling of the spot price of petroleum by the end of September, increased fears of slower economic growth and higher inflation, declining prices on major stock markets, and a sharp increase in general uncertainty about future developments.

In terms of what lies ahead, the experience of the 1980s is less interesting for the short-term outlook than for the insights it may offer into the medium-term prospects. This is taken up below in the «Outlook» section.

Trends in 1989

For the world economy as a whole 1989 was a good year despite the fact that economic growth was less rapid than the year before. With world merchandise trade and output up 7 per cent and 4 per cent, respectively, it was the third-best annual growth performance in the course of the economic expansion which began in 1983, and marked another year in which the growth in the volume of world trade exceeded the growth of output by a wide margin. Exports of manufactured goods continued to be the main source of strength in merchandise trade. On a value basis, preliminary figures for 1989 suggest that world trade in commercial services – which includes transportation, tourism, telecommunications, insurance, banking and other professional services – expanded moderately faster than both trade in manufactures and total merchandise trade.

In sharp contrast to the trends during 1980-88, higher oil prices and increased export volumes last year raised the export earnings of the petroleum exporting countries, and allowed the Middle East and Africa to increase their shares of world exports for the first time since 1980. Exports from the United States also expanded at well above the world average in 1989, making it once again the world's leading merchandise exporter, after three years in second place behind the Federal Republic of Germany. In the developed countries as a group, economic growth was sufficient for unemployment to decline for the sixth consecutive year, but the inflation rate continued to edge up.

Against these generally positive developments must be set the developments last year in the highly indebted countries, the least developed countries, and the Central/Eastern Europe-USSR region, together home to about one-quarter of the world's population and the origin of roughly 15 per cent of world output and trade. Exports of the highly indebted countries increased last year for the third year in a row, but imports remain $20 billion below the 1981 level, per capita investment continues to lag that in other countries and living standards remain below the levels of the end of the 1970s. For a majority of the least developed countries, exports – and often living standards – remained below their peaks of the 1970s. And while the medium-term outlook for countries which are moving from a command economy to a market-based economy is very positive, last year marked the beginning of a transition period which many experts believe will involve declining or stagnant output and incomes for some time to come.

The dynamic 1980s

After a slow start (1980-82), the 1980s became a period of strong output growth and even stronger trade growth. During 1983-89 trade grew about 50 per cent faster than output. For the decade as a whole, the volume of world trade increased about 50 per cent, while in value terms it rose by three-quarters. These figures testify to

the ongoing integration of the world economy, the relative openness of markets, and the numerous opportunities which expanding markets presented to newcomers.

With the exception of petroleum production, world output of all the major categories of goods and services expanded between the beginning and end of the decade. But because the production of services and manufactured goods grew even faster than agricultural products, their shares of world output continued to increase, while those of agriculture and mining (mainly fuels) declined. By and large, these trends were also evident in world trade.

The economic expansion which began in 1983 drew its strength from the growth of trade and output in North America, Western Europe and Asia. With the fastest growing regional trade flows in the 1980s involving trade between or within these three regions, and with their inter-regional trade more dynamic than their intra-regional trade in recent years, they continue to be – cyclical fluctuations aside – the world's globally-oriented growth centres.

There were numerous examples during the 1980s of the opportunities which the world market offers for adjusting to changing circumstances. Close to one out of four of the 25 top merchandise exporters in 1989 had moved up 10 ranks or more since 1979. On average, nearly one out of six product groups exported by developed countries to one another in 1989 was not on the list of principal export products in 1979, and an even larger proportion of the developing countries' 1989 exports to developed countries involved new product groups. And between the beginning and end of the decade, eight markets (one in five) disappeared from the typical developed country's list of principal export markets, and four new markets were added. While the current trading system is far from perfect – a glance at the agenda of the current Uruguay Round trade negotiations is enough to make that clear – there is little doubt that the current multilateral rules and disciplines have helped to maintain the openness of markets and flexibility of trading opportunities which are reflected in these figures.

The ongoing integration of the world economy is not, however, only providing an important stimulus to economic growth. Through its impact on the competitive environment, it is also simultaneously adding to adjustment pressures and blurring the distinction between «domestic issues» and issues stemming from participation in world markets for goods, services and capital. Friction in traditional areas of conflict (agriculture, textiles, clothing) has intensified, and economic policies that ten years ago were of little or no interest to trading partners are now potential sources of serious trade conflicts. In such a constantly changing setting, the rules and disciplines of the trading system acquire an added importance, both as a framework for the conduct of international economic relations and as an aid to governments in dealing with the protectionist demands of special interest groups at home.

The short-term economic outlook

Immediately prior to the Gulf crisis, the outlook for the world economy in 1990 could have been characterized as «more of the same». The expansion was expected to continue but at a slower pace, with world GDP projected to grow at just under 2½ per cent, compared to 3 per cent in 1989. Continuing a trend already evident last year, the slowdown was expected to be more pronounced in North America than in Asia and Western Europe. Output in Latin America and Central and Eastern Europe was expected to continue to grow at rates below the world average, while growth in the Middle East was projected to moderate slightly, but remain above the average for the world.

Mid-year forecasts for the growth in the volume of world trade in 1990 were in the 6 to 7 per cent range, down only slightly from 1989 and more than double projected output growth. Export volumes for the United States and Western Europe were forecast to grow at rates above the world average, while Japan was expected to have another year of below-average export growth. This was expected to be another year of divergent trade performances outside the developed countries, with slower growth in North Africa and the Middle East, but continuing recovery in sub-Saharan Africa. Among the developing economies, those in Asia were once again expected to record the fastest growth of trade in 1990.

Upward adjustments to forecasts of inflation in the industrial countries as a group had appeared even before the recent doubling of spot petroleum prices. The expected moderation of inflation in 1990 – a result of tighter monetary policies in 1989

– had been modified due to the higher than expected consumer price inflation in several countries. Inflation in the industrial countries was, however, expected to decline marginally in 1991 as economic activity weakened.

The first reaction to the jump in spot petroleum prices following Iraq's invasion of Kuwait at the beginning of August was to draw parallels with the oil-price shocks of 1973 and 1979. On both previous occasions, real petroleum price hikes were followed by (but not directly related to) periods of higher inflation and sharply diminished GNP growth in industrial countries. As numerous commentators have noted in subsequent analyses, the current situation is, however, significantly different for at least two reasons.

To begin with, increases in spot prices to the $35-$40 range still leave the real price of crude petroleum below its 1981 peak level: in order to reach that level today, the spot price would have to rise to at least $50 a barrel. Second, the developed countries are better positioned in 1990 than in 1979 to cope with higher energy prices. Economic activity is less dependent on energy than in the 1970s, the inflation rate is less than half what it was in 1979, and policy makers have learned the lesson that monetary accommodation of a real price shock has persistent inflationary effects. The recent petroleum price rise is, however, expected to worsen significantly the already difficult economic situations of the Central and East European countries, and of those countries among the highly indebted and least developed countries which are net fuel importers.

For the developed countries the more serious economic risk in the current situation, as many analysts have noted, is the large increase in uncertainty reflected in developments in financial and stock markets since early August, and the possibility that policy lessons so painfully learned in the aftermath of the 1973 oil price shock – that a shift to easier monetary policy in an attempt to ease the economy's adjustment to the higher price of oil, or efforts to block the full pass-through of higher fuel prices to buyers, only make the situation worse – will be forgotten under the pressure of current events.

It is apparent from the preceding discussion that the outlook for the world economy as a whole in 1990 has been dampened by the recent petroleum price rise, but (so far) not significantly. On the basis of an assumed spot market price of oil of $25 a barrel, growth forecasts for the world economy were revised down and consumer price inflation forecasts for the industrial countries in 1990 were revised upward by one-quarter of a percentage point (these are, in fact, not inflation forecasts, but rather forecasts of the impact of higher oil prices on the average level of prices, as measured by the consumer price index).[1] If the price stays in the $35-$40 range (or increases further), world economic growth is expected to be even lower and inflation higher, and the decline in living standards in most lower income countries, especially those that were already struggling with pressing economic problems before August, even more pronounced.

While the general situation remains highly uncertain, it appears that the growth in the volume of world trade in 1990 is unlikely to be seriously affected by the Gulf crisis, and the GATT Secretariat continues to expect trade growth in the vicinity of 6 per cent. A comparison of figures for the trade of the major countries during the first half of 1990 with the year earlier figures shows an increase in the volume of merchandise trade only modestly below the 7 per cent increase recorded for 1989 as a whole. Moreover, the loss of petroleum exports from Iraq and Kuwait beginning in August is expected to be more or less offset by increased exports from other petroleum producers. On the other hand, if the oil-importing countries compensate for higher oil bills by sharply reducing import volumes, and the extra revenue of the oil exporters does not lead more or less immediately to offsetting purchases, the trade figures could be adversely affected in the final months of 1990.

The medium term

Last year this report raised the possibility that the world economy may have entered a more favourable growth environment, characterized by ongoing integration, spreading industrialization,

[1] Inflation is correctly defined as a *sustained* rise in the prices of a large number of goods and services. In the absence of accommodating monetary policy, an increase in the price of a key product such as petroleum leads not to inflation, but to a one-time increase in the average level of prices, perhaps spread over several months as the change works its way through the economy. See H.G. Johnson, *Essays in Monetary Economics*. (London: Allen and Unwin), 1969, Second Edition, pages 104-7.

technological innovation and policy reforms/initiatives in a broad cross section of countries designed to increase the rôle of the market mechanism, reduce trade barriers and in general make economies more flexible and responsive to change. For the most part, the results of the review of trade and output developments in the 1980s and of some of the factors behind those developments, which occupies the main body of this report, are consistent with the view first raised in last year's report.

At the same time, it is also true that various developments evident even before the Gulf crisis have called attention to a concern that could, to a degree, qualify that generally optimistic medium-term outlook. The concern is about the impact on world interest rates of increasing demands for capital if savings rates remain at current levels. In its 1990 annual report, the Bank for International Settlements pointed to a «lower global propensity to save» in the 1980s, and the IMF has reported that savings rates have declined in most developed and developing countries since the 1970s.[2] Meanwhile, the need for capital is rising. In addition to the normal business investment required to sustain growth, the list includes re-starting growth in the least developed countries, resolving the third world's debt-service problems and rebuilding stocks of plant and equipment depleted by years of stagnant investment, and more generally providing the plant and equipment (and infrastructure) for an estimated 500 million new workers in the developing countries and China between now and the year 2000; assisting the Central and East European countries and the USSR in the major restructuring of their economies; and cleaning up and protecting the environment.

Keeping in mind that the countries with current account surpluses are net suppliers of savings to the world capital market, while countries with current account deficits are net borrowers, it is evident that the recent petroleum price rise could put additional upward pressure on world interest rates. A higher oil import bill is likely to arrest the decline in the United States' current account deficit and may further accentuate the reduction in Japan's surplus (which has been on a declining trend since 1988). Even before the Gulf crisis, costs associated with German unification claimed a higher share of domestic savings in the Federal Republic of Germany, reducing the funds that would otherwise have been available to the rest of the world. A higher oil import bill will only accentuate that trend. On the other hand, when examining the possible impact on savings and interest rates, it is also necessary to consider (among other things) what the petroleum exporting countries will do with their increased foreign exchange earnings. In other words, the recycling issue of the 1970s is back, albeit currently on a smaller scale.

If the net fuel importing countries' response to higher oil prices is the appropriate one – no monetary accommodation and full pass-through of higher prices – the overall impact of the Gulf crisis in the medium term is likely to turn importantly on the answers to two questions: what are the new medium-term prices of petroleum and other fuels, and what is the impact of those medium-term prices on the level of world savings and interest rates? At the individual country level, the higher price of petroleum redistributes income from net petroleum importers to net exporters. This not only has implications for welfare, but also for the level of world savings if savings rates differ at the margin between the two groups of countries.[3]

A shortage of capital at current interest rates would lead to higher world interest rates and cause investment plans in many countries to be curtailed. This would cloud future growth prospects. Avoiding such a development hinges on increasing private household savings and reducing government dissaving in the form of budget deficits in the larger countries. In many of the low income oil-importing countries, on the other hand, longer term efforts at economic reform and structural adjustment will need to be supported through renewed efforts to expand existing trade opportunities and develop additional sources of financial resources.

[2] See BIS, *60th Annual Report*, page 79 and IMF, *Annual Report 1990*, pages 24-5.

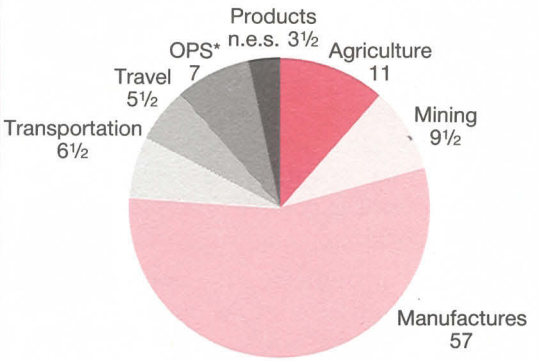
[3] In both the petroleum exporting and petroleum importing countries the «savings response» will depend in part on whether the higher price of petroleum is expected to be permanent or temporary. A perception that the price increase is temporary would cause the petroleum exporters to save a larger share of their increased earnings than would be the case if it were viewed as relatively permanent. Similarly, if the oil importing countries view the higher price as temporary, they are more likely to finance higher fuel bills out of reduced savings than if they believe the higher price is permanent. Uncertainty about perceptions concerning the future price of petroleum is one of the main reasons why it is difficult to predict the impact of the Gulf crisis on the level of world savings.

II. World trade in 1989

An assessment of trends in world trade in 1989 involves a consideration of both value and volume figures.[4] For last year, these figures paint a broadly similar picture of a world economy in which trade expanded more slowly than in the previous year, but still turned in one of the best performances of the 1980s.

The *value* of world merchandise trade increased to a new record level of $3.1 trillion (Table 1), despite the deflationary «valuation effect» of the dollar's appreciation last year against the major currencies.[5] Although the 7½ per cent increase was barely more than half the 14 per cent recorded in 1988, it was above the average for the 1980s.

Chart 1
Composition of world trade, 1989
(Percentage share based on value data)



* Other private services and income.

Note: World excludes the USSR, the German Democratic Republic and China.

Table 1
Value of world exports, 1988 and 1989

(Billion dollars and percentage)

Value			Annual percentage change	
1988	1989		1988	1989
385	405	Agricultural products	14	5
370	415	Mining products	1½	12
2010	2155	Manufactures	16½	7½
2875	**3095**	**All merchandise**	**14**	**7½**
210	225	Transportation	12½	7
185	195	Travel	15½	6½
230	260	Other private services and income	9½	13
625	**680**	**All commercial services**	**12**	**9**

Notes: 1. The statistics for commercial services are taken from balance-of-payments statistics, while the statistics for merchandise trade are taken from customs data. These two sets of data are not directly comparable because (i) the country coverage of available data on commercial services trade is less comprehensive than for merchandise trade, and (ii) the data on commercial services trade are subject to other sources of (primarily downward) bias. See Section III of Volume I of *International Trade 1988-89* for additional details on these and other aspects of international trade in commercial services.

2. Figures for product groups do not add up to the total for merchandise trade due to exports of products n.e.s.

3. World imports of commercial services exceed world exports by a substantial margin (an estimated $31.5 billion in 1989), due to under-reporting and non-reporting of world exports of shipment services. The difference between the two figures has been added to the figure for exports of transportation services.

World trade in commercial services, which includes transportation, tourism, telecommunications, insurance, banking and other professional services, increased an estimated 9 per cent last year to a new high of $680 billion. On the basis of this figure, which is subject to a significant downward bias (see the Technical Appendix), trade in commercial services accounted for nearly one-fifth of the value of world exports in 1989 (Chart 1).

While there is no denying that world merchandise trade expanded more slowly in *volume* terms, in 1989 – 7 per cent versus 8½ per cent in 1988 – it was still the third largest volume gain of the

[4] Part II of this Report is an updated and extended version of the GATT Secretariat's first assessment of world trade developments in 1989, published earlier this year (GATT Press Release, GATT/1477, 14 March 1990).

[5] According to the International Monetary Fund, the average value of the dollar's (trade weighted) nominal effective exchange rate in 1989 was 5 per cent above the average level in 1988; the corresponding change between 1987 and 1988 was a decline of 6 per cent.

Table 2
Growth in the volume of world merchandise exports and output by major product group, 1983-89

(Average annual percentage change)

	1983-89	1988	1989
World exports	**6**	**8½**	**7**
Agricultural products	2	3½	4
Mining products	4	6	4½
Manufactures	7½	10	8
World output	**4**	**4½**	**4**
Agriculture	2	½	4
Mining	2½	5½	2
Manufacturing	5	6½	5

1980s (Table 2). Last year also marked the fourth consecutive year in which the volume of world merchandise trade expanded *more than 50 per cent faster* than world merchandise production.[6]

Exports of manufactured goods grew more slowly last year on both a value and volume basis. For mining products, the increase in petroleum prices in 1989 was large enough to cause a sharp increase in the value of exports (up 12 per cent) despite a moderate slowdown in volume growth (from 6 per cent in 1988 to 4½ per cent last year). For agricultural products, in contrast, the volume of exports grew more rapidly in 1989 while aggregate price increases were much more modest than growth in 1988, leading to a sharp deceleration in the value of world trade in this group.

As has been true throughout the expansion which began in 1983, trade in manufactures was the driving force – on a volume basis – behind the growth of world merchandise trade in 1989, as well as the major factor behind the excess of trade over output growth. With a share of 70 per cent in the value of world merchandise trade, manufactures contributed 80 per cent of the total increase in the volume of world merchandise trade last year.

Following two years of weather-related disruptions, agricultural production recovered sharply last year – it is the only product group in which output growth was higher in 1989 than in 1988. Even though output recovered, the growth in the volume of exports accelerated, boosted in part by imports of the USSR and China. This maintained the trade-to-output ratio in agriculture at its highest level since the early 1980s (among other developments in 1988, stocks had been drawn down, biasing upwards the trade-to-output ratio).

In the category of mining products, the ratio of the volume of fuel exports to the volume of fuel production continued to rise last year, as production growth slowed down much more than export growth. Dependence on oil imports continued to rise among major net importers – among them, Japan and the United States – and the demand for imports was also strong among dynamic Asian exporters of manufactures. For ores, minerals and non-ferrous metals, the slower growth of the world economy led to a deceleration in the growth in the volume of output and trade.

Trade of country groups, regions and countries

The sharp deceleration last year in the growth in the *value* of world merchandise trade involved principally the trade of the developed countries and the Eastern trading area (Table 3). The slowdown was comparatively modest for developing economies as a group, with exports growing at almost twice the rate for world exports. For the Eastern trading area, there was a stagnation of export earnings last year, due to the disruption of traditional trade ties within the CMEA. World trade in commercial services also decelerated in 1989, but less sharply than merchandise trade (Table 1).

Within the group of developing economies, export trends varied considerably. The value of exports from non-OPEC developing economies (over two-thirds of the total), expanded at a rate moderately above the world average. In contrast, rising prices and export volumes for petroleum

[6] Because of methodological problems and the lack of data, it is currently not possible to estimate trends in the volume of trade in commercial services. In order to improve the comparability of the trade and output figures, the output figures refer only to the production of goods – that is, they exclude services.

Estimating annual changes in the volume of merchandise trade by adjusting the value figures for estimated changes in dollar unit values is necessarily an imprecise process, and the resulting volume estimates are useful primarily as a rough guide to year-to-year changes. When both volume and value data are available, the decision as to which is the more relevant series depends on the issue being analysed. For example, the volume figures generally are a better guide to developments which influence levels of capacity utilization and employment, while the value figures are more relevant to financial considerations, for example in evaluating a country's capacity for servicing foreign debt or investing abroad.

Table 3
Value of world merchandise trade by major country group, 1989

(Billion dollars and percentage change)

Exports				Imports (f.o.b)		
Value	Annual percentage change			Value	Annual percentage change	
1989	1988	1989		1989	1988	1989
2175	14½	7	Developed countries	2210	13	8
650	15	13	Developing economies	610	21	9
270	7½	0	Eastern trading area*	275	11½	2
3095	**14**	**7½**	**World**	**3095**	**14**	**7½**

* Central/East European countries (including the German Democratic Republic), the USSR, China and other centrally planned economies in Asia.

products helped boost merchandise exports from the OPEC countries by more than 20 per cent last year.[7] Several of the dynamic exporters of manufactures in Asia recorded a sharp slowdown from the high growth rates of the last two or three years. For a number of other developing countries declining trends in many non-fuel primary commodity prices (prices of palm oil, fish meal, coffee, cocoa and aluminium were down by at least 20 per cent) reinforced the effects of weak volume growth.

Economic trends in the 1980s (see Part III below for details) increased the diversity of development levels within the group of developing countries, and the move to more market-oriented policies in several of the countries in the Eastern trading area group is removing much of the rationale for treating them as a distinct group of countries. One option for dealing with the declining analytical usefulness of the developed/developing/centrally planned grouping is to focus more on particular countries or groups of countries – as is done in Table 4 and in the discussion below of developments in the highly indebted and least developed countries.

Each of the major country groups contributed to slower growth in the *volume* of world merchandise trade in 1989, with the sharpest decline in growth occurring in the Eastern trading area. Both the value and volume figures for the Eastern trading area reflect the stagnation of the trade of the countries in the Central/Eastern Europe-USSR region – particularly trade with each other – as political and economic reforms continued to unravel traditional trade ties. China's export growth also slowed sharply, from well above the world average in 1988 to below the world average last year.

As far as overall trends are concerned, a key development was the slight deceleration in the volume of merchandise exports from the develop-

Table 4
Merchandise trade volumes of selected countries and country groups, 1988 and 1989

(Annual percentage change)

Exports			Imports	
1988	1989		1988	1989
8½	**8**	**Developed countries**	**9**	**7**
9½	1½	Canada	13½	5
8½	7	France	7	8
6½	8	Germany, Fed. Rep.	6½	7½
8½	8½	Italy	4	10
5	4	Japan	16½	8
8	5½	Netherlands	7	5½
2½	5	United Kingdom	14	7½
21	12½	United States	6½	6½
9½		**Developing economies**	**10**	**8**
16½	5½	Six dynamic Asian exporters*	25½	11½
12	11	OPEC	−1	2
6½	**0**	**Eastern trading area**	**7**	**6**
8½	**7**	**World**	**9**	**7**

* Hong Kong, the Republic of Korea, Malaysia, Singapore, Taiwan and Thailand.

[7] The spot market price of crude petroleum rose almost 20 per cent in 1989, compared to a decline of over 20 per cent in 1988. For the most part, developed countries' import unit values for petroleum followed a similar pattern.

ed countries as a group. This overall trend is explained primarily by the sharply lower growth of exports from the United States, down from 21 per cent in 1988 to 12½ per cent last year, although the 1989 growth rate remained well above the world average of 7 per cent. Among the top five traders in Western Europe, export volume growth remained strong in Italy and accelerated in the Federal Republic of Germany and the United Kingdom. For Japan, in contrast, last year's export volume growth of 4 per cent – about half the world average – marked the fifth consecutive year of export expansion below the world average. On the import side, the stimulus to trade was more evenly distributed among the leading developed country traders in 1989 than in 1988, with the countries whose import volumes grew rapidly in 1988 (Japan, Canada and the United Kingdom) reporting smaller increases in 1989, and most of the others reporting faster import volume growth.

Among the leading developing economy traders, the sharpest slowdown in export volume growth was reported by the six Asian dynamic exporters as a group, where export growth fell from nearly double the world average in 1988 to below the world average in 1989. Key factors behind this development were the sharply lower growth rates of exports from Hong Kong and Singapore (but still above 10 per cent) and the decrease in the volume of exports from the Republic of Korea. The volume of imports into the six Asian economies as a group increased twice as rapidly last year as the volume of their exports. Export volume growth in the OPEC countries, in contrast, remained well above the world average last year.

Regional trade in 1989

Figures for the *value* of world trade by region (Table 5) underline once again the strong export performances of the Middle East and Africa in 1989, two regions that saw their shares in world trade steadily decline in the 1980s. Indeed, 1989 marked the first year since 1980 in which both Africa and the Middle East increased their share of world exports.[8] Net fuel exporters in both regions benefited from strong demand for energy products, as well as the increase in petroleum prices on world markets. Imports into these two regions, in contrast, virtually stagnated in value terms.

The slower growth in the value of world trade in 1989 is easily seen in the declining export and import growth rates for North America, Western Europe and Asia – three regions which together accounted for over 80 per cent of world exports in 1989. Among the centres of trade growth in Asia in previous years, China, the Republic of Korea, Singapore and Hong Kong each reported growth rates for export earnings equal to one-half or less

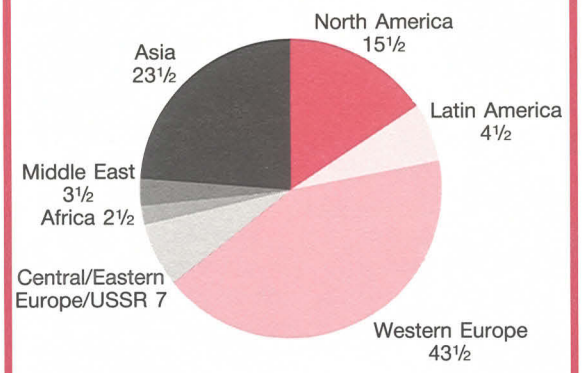
[8] The volume of Africa's fuel exports was up an estimated 8 per cent in 1989, primarily due to exports from Gabon, Nigeria, Libya and Algeria.

Table 5
Value of world merchandise trade by region, 1989

(Billion dollars and percentage)

Exports				Imports (f.o.b)		
Value	Annual percentage change			Value	Annual percentage change	
1989	1988	1989		1989	1988	1989
480	25	10½	North America	595	10½	7½
135	17	10	Latin America	110	15	7½
1345	11	6½	Western Europe	1355	12½	7½
210	5	−2	Central/Eastern Europe/USSR	210	8	½
80	½	10½	Africa	90	16½	1
105	−3½	23½	Middle East	85	7	−2
730	19½	8½	Asia	650	26½	13½
3095	**14**	**7½**	**World**	**3095**	**14**	**7½**

Chart 2
Regional composition of world merchandise exports, 1989
(Percentage share based on value data)



of the 1988 increases. In contrast, the growth of Asia's imports remained relatively strong, making it the only one of the seven regions to record import growth in excess of the world average.

Trade at the individual country level

There were a number of interesting developments at the individual country level last year (see Table 11 in Part III below). First, the United States regained its position as the world's leading merchandise *exporter* after three years in second place behind the Federal Republic of Germany. This was the result of two factors – relatively higher export volume growth for the United States and the depreciation of the D-mark against the dollar – either one of which would have been sufficient to move the United States into first place. Second, among the twenty-five leading merchandise traders in 1989, there were three which reported percentage gains in export earnings that were at least double the 7½ per cent world average (Saudi Arabia, Mexico and Hong Kong, in descending order), and three which increased their export ranking by two places relative to 1988 (Saudi Arabia, Mexico and China).

While Saudi Arabia's strong export performance was based on petroleum, Mexico's involved not only petroleum, but also increased shipments of manufactures to the United States. China's export expansion was also broadly based in terms of products, with shipments to the United States showing especially strong growth. Re-exports accounted for all of Hong Kong's export strength.

In addition, five of the 25 top traders in 1989 increased their *imports* at a rate more than double the world average (Australia, Mexico, Thailand, the Republic of Korea and Spain) and the Republic of Korea and Thailand increased their import ranking by two and five places, respectively.

In 1989, Japan replaced the United States as the world's leading importer of commercial services, jumping from third to first place as imports rose 17 per cent (Table 12). The expansion of Japan's imports was broadly based among the categories of commercial services, but increases in travel and other private services and income were particularly notable (up 20 and 18 per cent, respectively). On the export side, Taiwan, Mexico, Singapore, the Republic of Korea and Sweden (in descending order), reported increases in exports more than double the 9 per cent average for world exports.

Update on three challenges to the world community

While the picture at the global level last year was one of continuing economic growth, many areas shared only marginally or not at all in that growth. Pockets of poverty continue to exist in the prosperous countries. Output expanded in a number of low income countries, but at rates which are modest relative to development needs, especially when those growth rates are expressed in per capita terms.

There are, in addition, a number of countries in which living standards are stagnant or even declining and which fall into one of three more or less readily identifiable categories – the highly indebted developing economies, the least developed countries, and the Central/Eastern Europe-USSR region.[9] Although collectively these groupings account for only a moderate share of world output and trade – roughly 15 per cent in each case – they

[9] See the Technical Appendix for the country composition of each group.

are home to 1.3 billion people or about one-quarter of the world's population.

The highly indebted countries

Merchandise exports from the fifteen highly indebted countries increased 10 per cent in value terms last year, a sharp deceleration from the 17 per cent increase recorded in 1988 but well above the increase for the world as a whole. This increase marked the third year of expansion and brought their combined foreign exchange earnings from merchandise exports to a level close to $20 billion above the pre-debt crisis peak in 1981 (Chart 3).

Chart 3
Merchandise trade of fifteen highly indebted countries, 1980-89
(Billion dollars)



Note: Figures adjusted for trade through Mexico's outward processing zones.

Coupled with a relatively stable level of debt, last year's export growth improved the ratio of debt to exports (of goods and services) for the highly indebted countries as a group, bringing it to the lowest level since 1982. Total merchandise imports of this group of countries rose by 8½ per cent, but despite three consecutive years of import expansion, the need to service foreign debts has kept the level of aggregate imports into the fifteen highly indebted countries more than $20 billion below the 1981 peak. The aggregate merchandise trade surplus reached $26 billion (on a f.o.b – c.i.f. basis) up from $24 billion in 1988. Increased trade surpluses in Venezuela, Peru and Colombia helped offset a lower surplus for Brazil – which at $14 billion still accounted for more than half of the total surplus of the group.

The merchandise export performances of the net petroleum exporters among the debtors – Bolivia, Ecuador, Mexico, Peru, Nigeria and Venezuela – were generally stronger than those of the other highly indebted countries. The rise in petroleum prices, for example, was behind Venezuela's 23 per cent increase in export earnings in 1989 which, together with a decline of one-third in imports, produced the first surplus on merchandise trade since 1985. For the net-oil importers, in contrast, the higher oil prices only made their situation more difficult. One development which hit all of the highly indebted countries was the upward drift of interest rates in 1989. The benchmark London interbank overnight rate (LIBOR) on U.S. dollar deposits increased, on an annual average basis, from 7.7 per cent in 1988 to 9.2 per cent last year. This pre-empted additional export earnings and contributed to an increase in interest arrears for a number of debtor countries.

Among the highly indebted countries in Latin America there are examples where economic reforms are paying off. In Mexico a programme of economic reforms introduced in 1987 helped reduce inflation from an annual rate of 177 per cent in the first quarter of 1988 to under 20 per cent in the second quarter of 1989, and contributed to Mexico's strong trade performance in 1989. Per capita output in 1989 was significantly above that of 1980 only in Colombia and Chile, countries where a strong recovery of trade has contributed to economic growth since 1982 (both countries recorded export growth rates of around 15 per cent last year, as shipments to the United States continued to boom). More recently, major economic reforms – including large-scale liberalization of trade regimes – have been implemented or announced in Brazil, Argentina and other highly indebted countries. Given the fact that the trade liberalization is expected to have an early impact on the level of imports, including imports to cover long-standing adjustment needs, all of these countries would clearly benefit from improved

Box 1: Export-led growth in Chile

Within the group of 15 highly indebted countries whose trade developments the Secretariat regularly follows, Chile has had one of the more successful recoveries from the 1982 debt crisis. Among other indicators, the unemployment rate dropped by two-thirds to 6 per cent between 1982 and 1989, and Chile's debt trades at a low discount relative to the debt of other indebted countries on secondary markets. The key to this success was a commitment to comprehensive economic reform, with trade liberalization as the cornerstone, supported by an appropriate macroeconomic policy mix.

At the onset of the debt crisis in 1982, Chile underwent a severe contraction as the steady flow of international capital that had helped finance the rapid economic growth of the late 1970s and early 1980s dried up. At the same time, the price of copper and other primary commodities exported by Chile dropped sharply on world markets.

The recovery of the Chilean economy beginning in 1984 owes much to a reform of domestic incentives designed to put all economic activities on an equal footing, and to fiscal reform. These have included interest rate deregulation and a reduction in the rôle of the public sector in the economy through control of government expenditures and privatization of state enterprises. The uniform import tariff rate was reduced from 35 per cent to 20 per cent in 1985, and to 15 per cent in 1988.[1] Exchange rate policy was geared to prevent an erosion in the competitiveness of Chilean exports.

The combination of these efforts at reform and strong demand from Chile's main export markets led to booming exports, as well as rapid economic growth. The export sector has accounted for more than 40 per cent of overall GDP growth since 1984. Export expansion was primarily due to a deepening and diversification of Chile's traditional exports – copper, forestry and fishery products, and fruit and vegetables – in part through the introduction of new products based on these primary commodities.

[1] Trade liberalization began in Chile in 1974 and by mid-1979, all non-tariff barriers had been eliminated. In that year, import tariffs reached the lowest level for the period as a whole (10 per cent). Thereafter, import tariffs were increased in 1983 and in 1984.

access for their exports in foreign markets, as well as from actions by their creditors to reduce current debt service burdens.

Divergent export performances among the least developed countries

Because there are so few recent trade data available for the least developed countries, it is necessary to rely on a combination of partner country trade statistics and trends in world market prices of primary commodities to get some insight into their trade performance in 1989.

The trade of the least developed countries with the United States, Japan and the European Communities accounts on average for about two-thirds of their total merchandise trade.[10] For exports the importance is somewhat greater than for imports, due in part to the fact that the least developed countries as a group are net fuel importers and that they purchase their imported oil primarily from other developing countries. Merchandise imports of this group of developed countries from the least developed countries increased in 1989 by 9 per cent to $7.2 billion (c.i.f.). It was the fourth consecutive annual increase, with the result that merchandise exports of the least developed countries to the major developed country markets are up one-third from the 1980 level and up nearly two-thirds from the trough in 1981. The level of exports of developed countries to the group of least developed countries in 1989 appears to have been roughly the same as in 1980.

Aggregate figures on the trade of the least developed with developed countries obscure, however, substantial differences in individual country experiences. In 1989, for example, 20 countries in the group saw their exports to the United States, Japan and the European Communities (combined) decline in absolute terms. Most of the increase for the group as a whole is explained by the Arab Republic of Yemen, an exporter primarily of fuels, whose exports almost doubled in 1989.

The upward trend in non-fuel primary commodity prices (expressed in dollars) that began in mid-1986 came to an end in the course of 1989. Price declines were recorded for a number of primary

[10] The discussion on least developed countries based on partner trade statistics excludes Botswana and Lesotho, countries which are part of the South African Customs Union.

commodities of export interest to the least developed countries, although some price increases were also evident. The continuing divergent trends in commodity prices evident in 1989 are likely to have contributed to substantial differences in the overall export and import performances among the least developed countries (note that volume developments, for which data are not available, are also a key factor in export earnings).

Cocoa and robusta coffee prices fell by more than 20 per cent in 1989, and by December had reached 15-year lows. While other factors are also important, these price developments help explain the likely declines in the export earnings of the least developed countries where coffee or cocoa are important sources of foreign exchange earnings – Burundi, Haiti, Rwanda, Sao Tome and Principe, and Uganda. In contrast, price developments last year were favourable for exporters of cotton, tobacco and petroleum. The almost 20 per cent rise in the price of cotton, in particular, helped Chad, Mali and other exporters of cotton. The further strengthening of jute prices in 1989, which benefited particularly Bangladesh, continued into 1990.

It seems likely that in 1989 the dollar value of the export earnings of many of the least developed countries still had not recovered to their peaks of the late 1970s.[11] The expansion of exports in the 1980s has, however, been well above the world average for Bangladesh, Botswana, Gambia, Guinea, Maldives, Mauritania, Nepal and Yemen. Yet for most of the other least developed countries, as for many of the highly indebted countries, the stagnation or decline of trade contributed to making the 1980s a decade of lost opportunities for economic development.

The region of Central/Eastern Europe/ USSR

For the region comprising Central and Eastern Europe and the USSR, 1989 was a year marked by an absolute decline in the value of intra-regional trade and accelerating trade with countries outside the region (Table 6). These trends, which were already evident in the first half of 1989, are in line with the intention of many of the countries in this region to increase the proportion of their trade with countries outside the CMEA area.

While much interest has been expressed recently in statistics on the product and geographic composition of the trade of the countries in the Central/Eastern Europe-USSR region, fully reliable trade statistics are currently not available (Box 2). By using the statistics of the developed countries, however, it is possible to get a good picture of at least one aspect of the trade of these countries (as is the case with Table 6). Those data show, for

[11] Exports to developed countries are above their peaks of the 1970s for less than half of the least developed countries.

Table 6
Merchandise trade of the countries in Central and Eastern Europe and the USSR, 1988 and 1989

(Annual percentage change)

Trade with CMEA					Trade with developed countries			
Exports		Imports			Exports		Imports	
1988	1989	1988	1989		1988	1989	1988	1989
6½	−4	−5½	−11	Bulgaria	−3½	10	½	1½
6	−5	1½	6½	Czechoslovakia	9½	7½	5½	2½
1½	0	−1	−3½	German Dem. Rep.	7	5	12½	8
8	−10	0	−9	Hungary	10½	10½	½	18
3	4	−4	1	Poland	16½	7	21½	26½
−2	−4	−7½	7½	Romania	−½	−5½	−7½	½
−3	−1½	3	3	USSR	−1½	13	19	14½

Notes: 1. Trade with the CMEA refers to trade conducted in the transferable rouble; figures on trade with the developed countries (developed Asia, North America, EC (12) and EFTA (6)) is based on partner country statistics data expressed in dollars.
2. Figures for the German Democratic Republic exclude trade with the Federal Republic of Germany.
Sources: Economic Commission for Europe and GATT.

example, that imports of the developed countries increased from $43 billion in 1988 to $47 billion last year, and that exports of the developed countries to the region increased from $43 billion to nearly $49 billion. They also reveal that in 1989 the USSR was a more important trading partner for the developed countries than were the six countries in Central and Eastern Europe, especially on the export side (Appendix Table 1).

The trade experience of individual countries of Central/Eastern Europe-USSR region last year was mixed. The value of merchandise exports of Bulgaria and the USSR to developed countries – primarily Western Europe – accelerated in 1989.[12] Although Hungary's exports to developed countries recorded the same rate of growth in 1989 as in 1988, they remained among the fastest growing from the region. Imports from developed countries into Poland and Hungary recorded strong gains in 1989. For the USSR, the growth of imports from developed countries decelerated, although growth was almost double the world average and well above the corresponding rate for imports from the CMEA (the USSR accounts for over one-half of the region's hard currency imports).

The product composition of the merchandise trade of the Central and East European countries and the USSR with Western Europe (which currently accounts for 78 and 86 per cent of the developed countries' merchandise export and import trade with the region, respectively) is shown in Table 7. Fuels is the dominant product in Western Europe's imports from the USSR, by virtue of important import markets such as Italy, the Federal Republic of Germany and Finland. Food and fuels are important items in imports from Central and Eastern Europe, the latter due primarily to products refined in those countries from imported crude petroleum. Important products in the exports of Western Europe to Central and Eastern Europe and the USSR include various items of non-electric machinery, chemicals, and iron and steel.

Table 7
Product composition of Western Europe's merchandise trade with Central and Eastern Europe and the USSR, 1989

(Percentage share)

Exports to			Imports from	
Central/ Eastern Europe	USSR		Central/ Eastern Europe	USSR
17½	**12½**	**Primary products**	**41½**	**83½**
10	9½	Food	14½	1½
4	1½	Raw materials	5½	9
1	½	Ores and minerals	2½	2½
1	½	Fuels	14½	63
1½	½	Non-ferrous metals	4½	7½
81½	**86½**	**Manufactures**	**57½**	**15**
4	13	Iron and steel	7½	2
17½	15½	Chemicals	10	4½
8½	8½	Other semi-manufactures	8	3
1	½	Power machinery	1	0
22½	23½	Other non-electric machinery	4½	½
3½	3½	Office machines and telecom equip.	½	½
3½	2½	Electrical machinery	2½	½
4	1½	Automotive products	2	2
2½	5½	Other transport equipment	1½	1
6	2	Textiles	3	½
1½	1	Clothing	7½	0
100	**100**	**Total**	**100**	**100**

Note: Western Europe is composed of EC(12) and EFTA(6), and figures exclude trade between the German Democratic Republic and the Federal Republic of Germany.

[12] The figures in Table 6 on trade with developed countries are based on data collected by the developed countries. In many instances, the growth rates based on these figures do not match the growth rates based on the corresponding statistics published by the countries of Central and Eastern Europe, and the USSR.

Box 2: Cautionary note on trade statistics for Central and East European countries and the USSR

Intra-regional trade has traditionally been an important part of the total trade of the members of the Council of Mutual Economic Assistance (CMEA), principally the Central and East European countries and the USSR. The common form of exchange between members of the CMEA is a bilateral agreement specifying the exchange of merchandise. For example, Hungary would agree to export a list of products (specified in either physical quantities or in transferable roubles) in exchange for a list of imports from the USSR. The accounting of transactions and the periodic adjustment of balances are conducted for the most part in transferable roubles (TR) – a unit of account but not a currency – where benchmark prices are often averages of «world market prices» for like products sold in the West.

Trade statistics expressed in United States dollars are clearly sensitive to the implicit conversion rate for the TR vis-à-vis the dollar (again an accounting procedure since the TR is not a currency). Each country has several conversion factors for domestic enterprises engaged in CMEA trade, and in most of the countries these are not linked to the actual supply and demand for currencies reflected in the exchange of merchandise.

In the past, each country's trade with the CMEA area has been converted to dollars using official conversion factors. This figure was then added to the total for trade with convertible currency areas to arrive at an estimate of the dollar value of the country's total merchandise trade. When new TR/domestic currency conversion rates *and* new exchange rates against convertible currencies were introduced in recent years by some CMEA members, however, it became clear that using these rates made cross-country and historical comparisons impossible, and also led to an increasing inconsistency between countries on the value of intra-CMEA trade.[1]

A downward adjustment of the TR vis-à-vis the dollar results in a lower value for trade among CMEA members, which in turn reduces the share of trade with CMEA countries in the country's total trade (the recent revisions of Czechoslovakia and the German Democratic Republic reduced the dollar value of their CMEA trade by nearly one-half). As the product composition of regional trade flows differs significantly between intra-CMEA trade and trade with the industrial countries (mainly Western Europe), the product structure of total trade is also affected. For example, since manufactures are more important in intra-CMEA trade than in exports to Western Europe, these adjustments result in a lower share of manufactured goods in total exports.

The current problems surrounding the dollar valuation of intra-CMEA trade are such that there is no fully satisfactory way of arriving at reliable figures. Pending the introduction of a new basis for valuing trade within the CMEA, the Secretariat will continue to use the pre-1988 conversion factors and exchange rates for arriving at estimates of the dollar value of the trade of the Central and East European countries and the USSR. It should be noted, in this regard, that it appears very likely that beginning on 1 January 1991 a significant part of intra-CMEA trade will be conducted in convertible currencies.

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[1] A comparison between the official rouble/dollar exchange rate of the USSR (.63 roubles) and Poland's implicit rouble/dollar rate (2.96 roubles) in 1989 reveals the extent of the potential inconsistency for trade data measured in dollars.

III. The 1980s: a dynamic decade for world trade

During the decade of the 1980s the *volume* of world trade increased by about 50 per cent. Measured in dollars, the *value* of world trade increased by three-quarters. These impressive figures mean that, in most instances, there were numerous opportunities for newcomers as firms competed not for shares of stagnant or shrinking markets, but for shares of expanding markets.

The focus of this section is an examination of the more important developments in world trade in goods and services during that decade, and of some of the key factors behind those developments. Before turning to the detailed analysis, however, it is helpful to put those trade developments in perspective by reviewing briefly the major economic events and trends in the world economy during the past decade.

Several important trade policy developments occurred during the 1980s. Tariff reductions and the new codes negotiated during the Tokyo Round (1973-79) were implemented. The 1982 GATT Ministerial meeting, and the work programme which it established, set the stage for the launching of the Uruguay Round in 1986. Several initiatives, under different circumstances and with varied goals, took place at the regional level, including the enlargement of the European Communities to include Spain and Portugal, the European Communities' programme to achieve a single internal market by 1992, the Australia/New Zealand Closer Economic Trade Agreement, and the Free Trade Agreement between Canada and the United States. At the individual country level there were a large number of trade policy developments during 1980-89, ranging from the across-the-board liberalization of trade regimes in several developing countries to increases and reductions in barriers on individual products in nearly every country.[13] Eleven economies – including Colombia, Thailand, Hong Kong, Mexico and Morocco – joined the GATT, and at the end of 1989 working parties were examining membership requests from an additional ten countries.

It is not enough, however, to consider only developments in the trade policy area. Viewing the evolution of world trade in a broader context is necessary for two reasons. First, trade is not an end in itself. In economic terms, trade based on comparative advantage is important because it contributes to the basic goal of increasing the efficiency with which countries use their labour, capital, land and technology to raise living standards. This alone would be enough to insist that trade developments should be seen in the context of general trends in the world economy. Second, the evolution of world trade is influenced – positively and negatively – by many factors from outside the trade area, including technological innovation, the stance of monetary and tax policy in the major countries, shifts in the relationship between savings and investment in individual countries, debt-service difficulties, and general economic reforms such as those taking place in several formerly centrally planned economies. Without reference to what was occurring in other areas of the world economy, it would be impossible to understand many of the more important developments in world trade.

On the eve of the new decade

By the end of the 1970s, the events of that decade had all but eliminated the optimism generated by the strong performance of the world economy in the 1950s and 1960s. Among the more important developments that made the decade an exceptionally turbulent one for the world economy were two bouts of double-digit inflation in the developed countries, the collapse of the Bretton Woods system of fixed exchange rates, two oil price shocks, the sharpest one-year decline in world trade and production in 40 years (1975), a

[13] For details on trade policy developments in the 1980s, see the GATT Secretariat's semi-annual report «Review of Developments in the Trading System» (the final issue of which appeared in July 1989), and the Director General's report to the GATT Council in December 1989, «The International Trade Environment». Detailed analyses of trade policy developments in individual countries are now becoming available in reports prepared under GATT's Trade Policy Review Mechanism (initial reports cover Australia, Morocco, United States, Colombia, Sweden, Canada, Japan, Hong Kong, New Zealand).

resurgence of protectionist pressures in the developed countries that reversed the liberalization momentum of the preceding two decades, rising unemployment in nearly all of the developed countries, and a sharp reduction in the growth of world output and trade relative to the 1960s.

As the decade of the 1980s got underway, the second oil price shock had just hit, with crude oil spot prices tripling over a fifteen month period to January 1980 (almost exactly ten years later, as the decade of the 1990s was getting underway, the Gulf crisis led to a more than doubling of spot market oil prices between July and September).[14] The result in 1980 was widespread pessimism in the oil-importing countries about the future energy situation.[15] Other commodity prices were also on the rise, temporarily reversing the trend toward lower real prices which was evident in the second half of the 1970s. There was a widespread worsening of inflation during 1979, the escalation of prices having begun well before the oil price increase started to affect final product prices. Nominal interest rates, which had risen sharply in 1979 in most industrial countries, were volatile and real economic growth in the near future was widely expected to be sluggish at best.[16] More generally, the world economic picture was described as grim, with one well-known commentator of the time arguing that the coming decade of the 1980s would begin an «epoch of malaise».[17]

Viewed from the vantage point of ten years later, the analyses made at the beginning of the 1980s can only inspire modesty as regards the ability of economists and forecasters to anticipate major developments in the world economy. It is not too much of an exaggeration to say that none of the major economic developments of the 1980s which were new – that is, those which were not simply a continuation of familiar developments already well underway in the 1970s – were foreseen in 1980. The unanticipated developments included:

- The very sharp decline in the price of petroleum and in the volume of trade in petroleum. Anyone who forecast in 1980 that the spot price of petroleum would decline from the current $37.50 a barrel to below $10 a barrel by 1986, and remain below $20 a barrel through to the end of the decade (momentarily dropping below $11 in late 1988), surely was dismissed as being completely out of touch with reality.
- Double-digit inflation in the developed countries was brought under control. Only in the fifth year of the recovery did the average level of inflation in the OECD countries begin creeping up, and in 1989 – the seventh year of continuous expansion – the average increase in consumer prices in the OECD area was under 5 per cent, compared with 13 per cent in 1980. This helped set the stage for the best sustained growth performance (1983-89) for the world economy since the 1960s, and a very strong performance of world trade, with the excess of trade growth over output growth increasing as the expansion continued. (As was noted above in Part I, there has been growing concern about inflation in the developed countries since the beginning of 1990.)
- Major changes in expenditure/output (investment/savings) relationships in a number of key economies, which led to shifts in trade flows and to large changes in current account balances and in international flows of savings. (A country in which national expenditure exceeds national production of goods and services will have an

[14] *Fortune* magazine (January 28, 1980, page 54 «Life Is Getting Scary in the Oil Markets»). By the middle of January 1980 the spot price of Arabian light had reached $37.50 a barrel. Just fifteen months earlier it had been about $12.70.

[15] The following are representative of the prevailing views: «The real price of energy can be expected to rise during the 1980s.» (World Bank *World Development Report,* 1980, page 3); «... household and corporate oil consumers as well as the governments of oil-importing countries have now come round to the conviction that the higher real price of energy, and of oil in particular, is here to stay.» (Bank for International Settlements *Annual Report*, June 1981, page 4); «The essential feature of energy developments in the 1980s is likely to be a continuation, or worsening, of the energy uncertainties which have recently emerged.» (*Outlook for the 1980s*, International Energy Agency, OECD, 1980, page 25). In the popular press, not surprisingly, the mood was at times apocalyptic.

[16] In its *World Development Report* for 1980, the World Bank observed: «The industrialized economies face more serious difficulties than in the mid-1970s ... and although their slowdown may not be as marked in 1980-81 as in 1974-75, no quick recovery can be expected.» (page 5). Similarly, the IMF, in its *World Economic Outlook*, of May 1980 asserted that «In conjunction with high and rising inflation, the world economy has also entered a period of sharp curtailment in the growth of total output.» (page 4) In *International Trade 1979-80*, the GATT Secretariat observed that «Two developments dominate the attention of economic policy makers in 1980. One is the spreading recession; the other, the repercussions of the 1979-80 oil price increases on the importing countries.» (page 11).

[17] Herman Kahn, *U.S. News & World Report*, August 20, 1979, as quoted in *U.S. News*, December 25, 1989, page 92.

import surplus – in other words, a current account deficit – and, with foreign exchange reserves unchanged, a net inflow of capital from abroad to finance that deficit. In the same way, a country in which spending is less than production will have a current account surplus and a capital account deficit, as its excess savings are lent abroad.) Thus imports into the United States surged as expenditure increased faster than output and the country switched from being the world's largest creditor to the largest debtor.[18] Japan became the largest creditor, and Taiwan's foreign exchange reserves reached a level second only to those of Japan.

- The emergence and persistence throughout the decade of very serious debt service problems in a number of developing, Central and East European countries. The debt problem, together with generally lower primary commodity prices, contributed to the stagnant, or even declining living standards in most of the highly indebted and least developed countries, home to one-fifth of the world's population (these countries had done relatively well in the 1970s).
- Stimulated by the failure of interventionist and inward-oriented economic policies to produce growth, market-oriented policies spread into many developing countries and – at the close of the decade – into many of Europe's centrally planned economies. Together with the end of the Cold War, these developments have sparked discussions of the implications of increased competition for foreign capital and foreign markets.
- The launching of the eighth and most ambitious multilateral trade negotiation in GATT's history (as the Tokyo Round negotiations were winding up in 1979, there were numerous predictions that it would be the last GATT round in this century), plus significant new efforts at closer regional integration in Western Europe and in North America, resulting in a renewal of the debate over «regionalism» versus «multilateralism».

Not all of the major economic developments in the 1980s were surprises, of course, since some were a continuation – or accentuation – of fundamental trends that had been evident for some time. Technology-driven integration of the world market, facilitated by continued reductions in barriers to international capital flows, is in this category, as is the on-going industrialization in many developing countries. Given the large movements in exchange rates in the 1970s, it would also be difficult to describe the large swings in the exchange rates of the major currencies against the dollar during the 1980s as a surprise.

Whether the past decade was unusual in terms of the number of unanticipated major economic developments and disturbances is difficult to say (the 1970s certainly would be a close competitor on this score). What does seem clear is that over a time horizon as short as ten years – a period well within the economic life of the typical business investment – many features of the economic landscape can change in important and unexpected ways. These unanticipated changes, moreover, are in addition to the more or less predictable changes, in particular those stemming from the ongoing integration of the world economy.

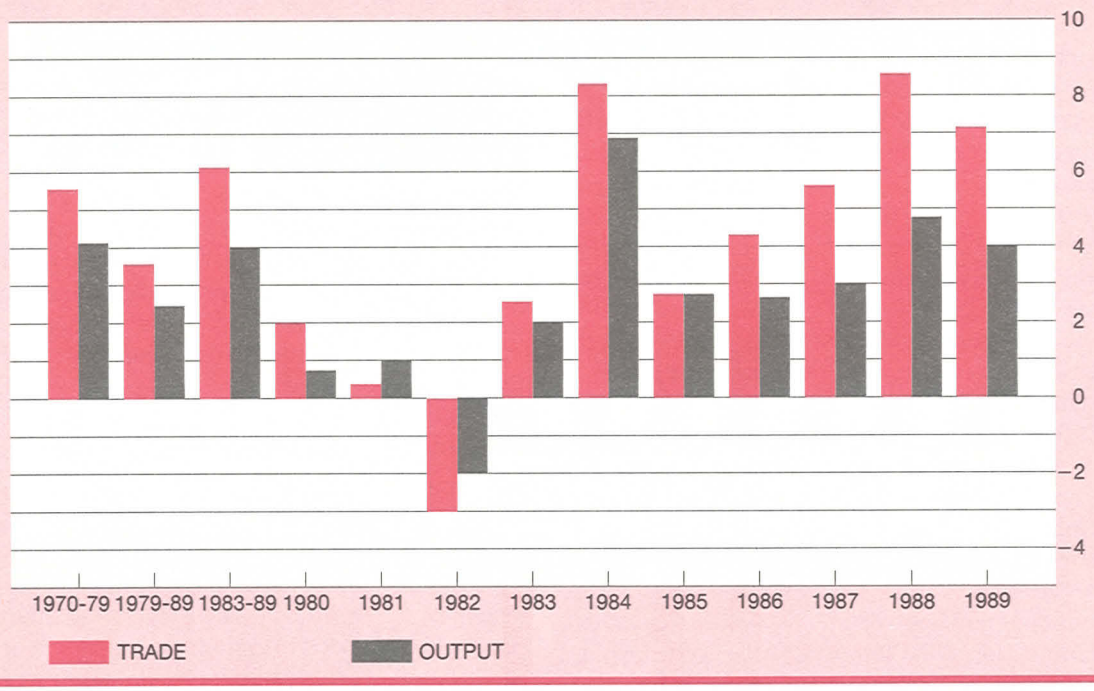
Against this background, it is not surprising that over the course of the 1980s countries became increasingly concerned with the questions of what set of policies is best suited to helping the economy steer its way through such a changing landscape, and what kind of world trading system will be most effective in helping national authorities to implement those policies. In the concluding section of the report, there is an attempt to answer these questions and to show how those answers, together with developments in the world economy in the 1980s, shaped the agenda of the current multilateral trade negotiations. Now, however, the discussion turns to the major trends in the pattern of production and trade which occurred in the past decade.

Developments in output and trade

The growth of world merchandise trade and commodity output in the 1980s are shown in Chart 4. For the first three years of the decade, the figures reflect the impact on economic growth of the concerted effort by the developed countries to bring double-digit inflation under control.

[18] There is an ongoing debate about the factors behind the emergence of large current account deficits in the United States, between those who believe the principal cause was an excess of expenditure over output (with the capital inflows an «accommodating» factor) and those who believe the principal cause was an inflow of foreign capital which led the United States to have a level of expenditure in excess of output.

Chart 4
Volume of world merchandise trade and output, 1970-89
(Average annual percentage change)



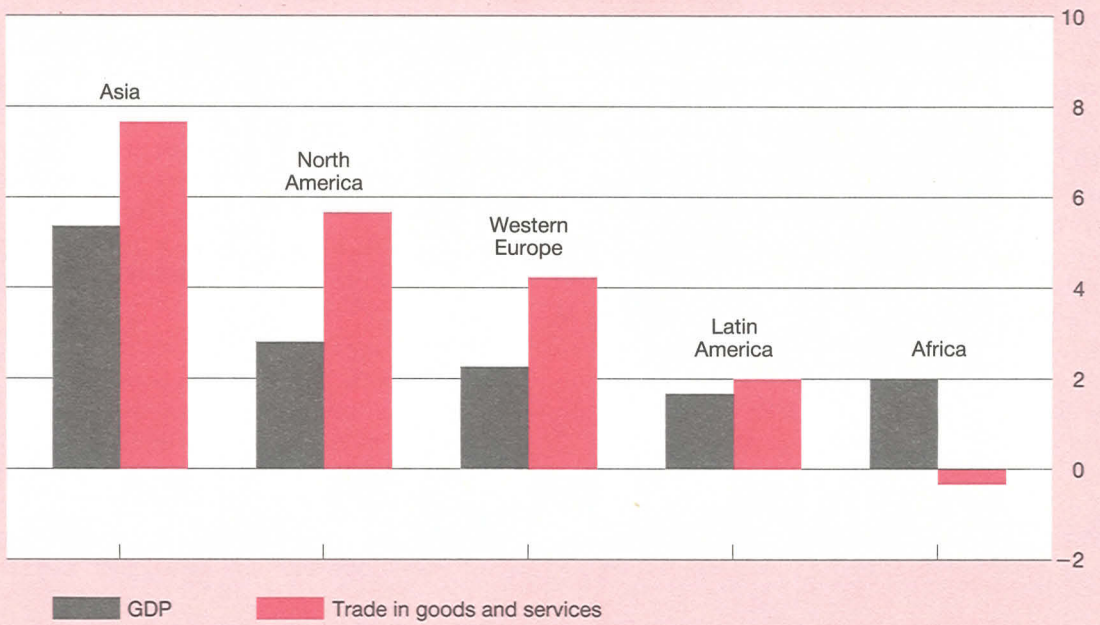
A comparison of the average growth rate for the 1980s with that of the 1970s indicates a modest slowdown in the more recent period. If the first three years of the decade are excluded from the average, on the other hand, the 4 per cent output growth matches that of the 1970s, while the excess of trade growth over output growth – trade grew on average 50 per cent faster than output – is greater than in the 1970s. Indeed, a comparison is much more favourable to the recent decade than the Chart suggests because of the very different situations behind the respective average growth rates. Excessively expansionary monetary policies in the developed countries and over-borrowing by many developing countries produced growth rates in the 1970s that were unsustainable. In contrast, the expansion which began in 1983 – and which has yet to show signs of coming to an end – was achieved without resort to overly expansionary policies.

As was noted earlier in this report, it is generally not possible to include services in a comparison of trade growth and output growth because there are no internationally comparable *volume* data for exports of commercial services. However, recently available aggregate trade data derived from national account statistics do make possible tentative comparisons of real GDP growth and estimates of the volume growth of world trade in goods and services.

The picture which emerges from the services-inclusive national accounts statistics is very similar to that provided by the merchandise output and trade statistics in Chart 4, both in terms of the growth rates and of the excess of trade growth over output growth. This holds not only for the entire decade, but also for the 1983-89 expansion. The only noticeable difference is a greater year-to-year variability of the merchandise figures, especially for output. This is consistent with the well-known tendency for services output (which includes the government sector) to vary less over the cycle than merchandise output. Subject to this caveat, statistics on aggregate world merchandise output and trade in the 1980s appear to be a good proxy for statistics on aggregate world GDP and trade in goods and services.

Using national accounts statistics, it is also possible to estimate the growth in GDP and in trade

Chart 5
Trade and GDP growth in selected regions, 1979-89
(Average annual percentage change)



in goods and services during the 1980s for five of the seven regions (Chart 5).[19] Asia clearly was the most dynamic region, followed by North America and Western Europe. It was in North America, however, that trade growth was strongest relative to output growth. Thus while each of the three regions reported a continued increase in the importance of trade in domestic economic activity, the increase was largest in North America, followed by Western Europe. There was also a small increase in Latin America's trade-to-GDP ratio, while in Africa – hard hit by declines in petroleum exports and the general weakness of primary commodity prices – the ratio fell fairly sharply.

Looking behind the regional totals, it is evident that Asia's dynamic performance in the 1980s owed much to that of the fast-growing Asian developing economies and China. These economies and China together accounted for about 60 per cent of the volume growth of both output and merchandise trade (exports *plus* imports) in Asia. In particular, the volume of China's merchandise trade, stimulated by the adoption of the «open door» policy in 1979 (and the availability of MFN treatment), increased at an average annual rate of 13 per cent in the 1980s, close to double the average for Asia and nearly 50 per cent faster than China's GDP growth (see Boxes 4 and 5 below). Much of the rise in China's trade-to-output ratio occurred in the first half of the decade (in the years immediately following the policy change), while the opposite was true for the rest of Asia, and indeed for most of the rest of the world.

Until 1986, the dynamic growth of North America's trade relied on the strong growth of imports into the United States. Since 1987, however, the volume of exports of goods and services from the United States has recovered so strongly that for the 1979-89 period as a whole North American export growth was very close to import growth. Western Europe's trade grew more rapidly as the decade progressed, stimulated by faster economic growth (due in part to the success in controlling

[19] Estimates are not available for the Middle East. Data for Central and Eastern Europe and the USSR cover only net material product (essentially the same as merchandise output). Those data indicate average annual growth rates of output, export and import volumes of just under 3 per cent during the 1980s.

inflation in most countries), the expansion of the membership of the European Communities, and the private sector's positive response to the programme for achieving a unified market by 1992. Within Western Europe the strongest gains in trade were reported by the newest members of the European Communities, namely Portugal and Spain.

The marginally faster expansion of Latin America's trade relative to GDP conceals the fact that exports of goods and services expanded at twice the rate of GDP, while import growth was more sluggish – both developments being closely linked to debt-service problems. Most of the decline in Africa's trade occurred in the period 1980-87 when both exports and imports were shrinking. Available data suggest that since 1988 exports and imports have been growing faster than GDP.

Product composition and pattern of world trade

Trends in the product composition of world trade in goods and services are shown in Table 8 for the first two levels of disaggregation. The figures indicate a moderate shift from merchandise (goods) to services in the course of the 1980s. However, this was largely the result of the decline in the share of mining products in world trade which, other things equal, «automatically» increases the shares of other products, including services. By and large, this simply reversed the change in shares which had occurred in the 1970s as a result of the large increases in fuel prices. This is readily apparent from the large fluctuations in the share of mining – which in value terms is mostly fuels trade – evident from the figures in the lower half of the table.

Even though the value of world trade in agricultural products increased on average by 3½ per cent a year during the 1980s, this was not enough to prevent its share of world trade from declining, continuing a downward trend which has been evident throughout the postwar period.[20] World exports of transportation services (moving people and goods between countries) also increased in

[20] See Part II of Volume I of *International Trade 1987-88*.

Table 8
Product composition of world exports, 1970-89

(Percentage based on *value* data)

	Share in world exports			Average annual change in exports	
	1970	1980	1989	1980-89	1983-89
Merchandise	81	83	81	4½	9½
Commercial services	19	17	19	6½	10
	100	**100**	**100**		
Agricultural products	16½	12½	11	3½	7½
Mining products	12	22	9½	−4½	−1½
Manufactures	50	45½	57	8	13
Transportation	8½	7½	6½	3½	6½
Travel	5½	4	5½	8½	13½
Other private services and income	6	6	7	7½	10

Notes: 1. When making comparisons between statistics on merchandise trade and services trade, it is important to keep in mind the significant downward bias and generally lower quality of the services data. The shares in this table for both merchandise trade and trade in commercial services were calculated using only data for countries that reported commercial services trade to the IMF on a balance-of-payments basis for all years. The total excludes China, USSR and the German Democratic Republic. As a result, the figures on the value of merchandise trade which were used in compiling this Table are smaller than the figures reported in Table 1, and the product composition of trade may be affected.

2. The product shares in the lower half of the table do not add to 100 because of exports of products n.e.s.

3. In 1981, 1984 and 1986-88 the United States improved its survey methods for trade in commercial services, which resulted in an upward adjustment to its figures for trade in commercial services. Another effect is an upward adjustment to the world total for commercial services, resulting in an upward bias to growth rates for the 1980s.

Box 3: Relative shares and absolute gains

It is common for discussions of the evolution of world trade to focus primarily on the *relative* performance of various products, groups of countries or individual countries. This is particularly true when, as in the case of this report, much of the data are available only in current value terms, and not in volume terms. One way of reducing the distorting effects of inflation and large short-term movements in exchange rates on the value data is to focus on changes over time in a product's or a country's share of the trade flow in question.

The problem is not only that the market-share approach easily obscures the underlying actual performance – a good growth performance is fully compatible with a declining share in world trade, especially if trade has been expanding at a good pace – but also that it can encourage erroneous thinking about world trade in terms of a «fixed pie». Competition in world markets is viewed as a zero sum game in which if one product gains, one or more other products must lose. Countries are described as gaining shares «at the expense» of others, and the world is divided into winners and losers. This rhetoric implicitly (if not explicitly) rules out situations in which everyone, or nearly everyone, has improved their economic situation.

There are, of course, instances in which the absolute level of trade declines, even when overall world trade is growing strongly. Examples include the absolute decline in the foreign exchange earnings of some major petroleum exporting countries in the 1980s, or the failure to date of imports into many of the highly indebted countries to regain their 1981 level. But in the vast majority of instances in this report in which there was a decline in the share of a product, country or group of countries in world trade, the underlying actual performance registered a gain.

Mention might also be made of the related tendency to use language more appropriate to a military battlefield to describe the evolution of what are, after all, voluntary exchanges between individuals and firms. Thus we read that «imports threaten an economy», or that a particular product or country is «invading» the domestic market, or concern is expressed about the degree of «import penetration» in a particular market. Nor is the supposedly detached and objective academic community immune to this, as is evidenced by numerous writings on «strategic» trade theory in recent years. Exposed to such rhetoric, the average citizen, who does not have a lot of time to think about trade issues, could be forgiven for occasionally losing sight of the fact that voluntary exchange is a positive sum – not a zero or negative sum – activity. There may be a small number of exceptions to this generalization, but even they tend to evaporate when the perspective is cosmopolitan rather than narrowly nationalistic.

value over the decade, but declined as a share of world trade because the increase fell short of the increase in total trade. Only in the case of mining products was a declining share coupled with a decline in the value of world exports (down 4½ per cent a year on average).

The strong growth of trade in other private services and income – telecommunications, non-merchandise insurance, banking, and other professional services – is evident in the fact that its share remained constant in the 1970s, at the same time as mining's share nearly doubled (note that the shares of manufactures and other product groups in world trade fell in the 1970s as a result of the large increase in mining trade). Even on the basis of data which are subject to a strong downward bias, trade in all commercial services is now twice as large as trade in mining products, and is approaching the point at which it will be twice as large as trade in agricultural products.

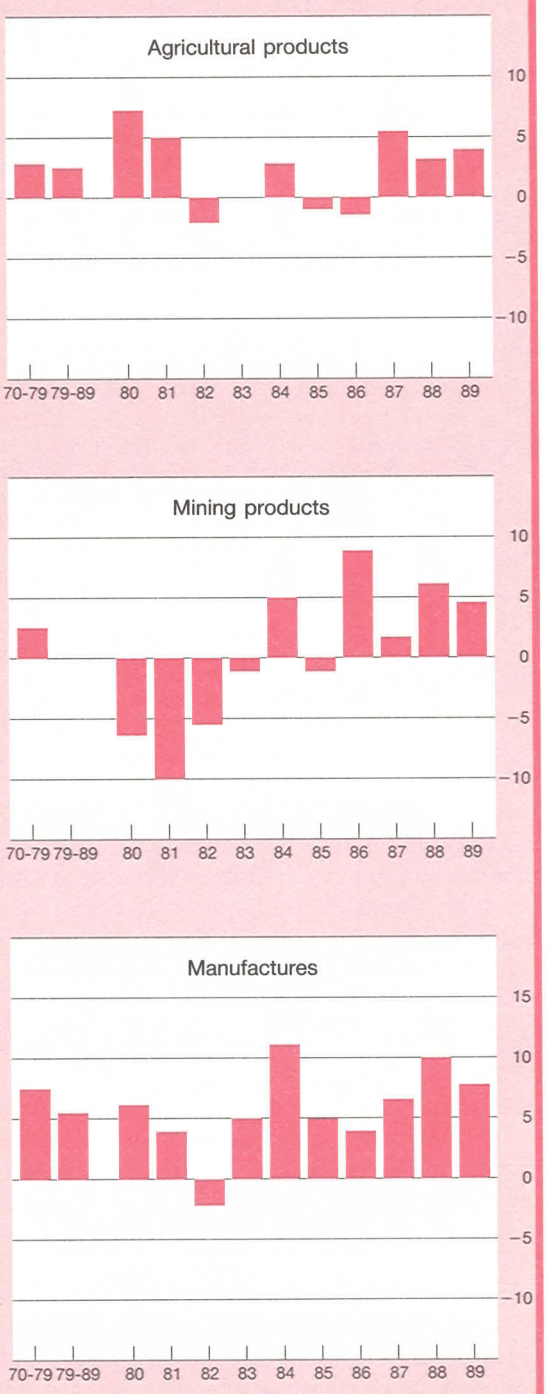
For exports of agricultural, mining and manufactured products, the *volume* figures in Chart 6 shed additional light on trade developments in the 1980s (volume data are not available for the three categories of commercial services). The differences between the three categories are striking. Exports of agricultural products show no relation to fluctuations in the level of economic activity, and an average growth rate for the 1980s that is only modestly below that for the 1970s. Developments in fuels markets caused mining exports to collapse in the first part of the decade, and on average they did not expand at all in the 1980s. Exports of manufactured goods followed the business cycle quite closely, and out-performed exports of agricultural and mining products by a wide margin.

The figures in Table 9 provide additional details on the evolution of the product composition of

world exports in the 1980s.[21] Except for non-ferrous metals, the products which expanded at an above average rate are either manufactures or services and all of the products whose export performance was below average are primary products.

The two most dynamic product groups in Table 9 offer an intriguing study in contrasts. While clothing is one of the most traditional of manufactured products, office and telecommunications equipment includes a large number of new, «high technology» products, such as personal and business computers and related equipment (for example, laser printers), semi-conductors, a large variety of telephone equipment, facsimile machines, radio and television broadcast equipment and consumer electronics. The rapid growth of trade in this product group is partly the result of the buoyant demand for products that increase firms' productivity and cater to consumers' desires for new and improved products. In other words, these products embody new technology and are one of the principal means for disseminating technological innovations to firms and households. As regards particular sources of demand for many of these products, it should be noted that the category of other private services and income which includes telecommunications, insurance, banking and other professional services – all sectors for which office and telecommunications equipment is a particularly important part of their capital equipment – has already been mentioned as one of the fastest growing categories of trade in the 1980s (see Table 8).

Chart 6
Growth in the volume of world trade in agricultural, mining and manufactured products, 1970-89
(Average annual percentage change)



[21] The percentage change in the value for each product group in Table 9 is a composite of changes in five elements: changes in trade volume, prices, product quality, product mix and exchange rates. For example, the dollar value of trade in clothing may have increased because (i) the volume of trade in clothing increased, (ii) domestic market prices for clothing of a given quality increased, (iii) world demand shifted from less expensive to more expensive versions of particular products (for example, from T-shirts to designer shirts), (iv) the product mix changed across types of clothing, for example from T-shirts to suits, or (v) exchange rate changes led to valuation effects. There is, of course, no need for all five elements to be changing in the same direction, even when the change in the dollar value of a product group is large. For example, exports of many categories of advanced electronic products have been rising rapidly in value at the same time as per unit prices are declining sharply.

Table 9
Trends in exports of 17 products in world trade in merchandise and commercial services, 1979-89

(Percentage based on *value*)

	Average annual change
	1979-89
Expanded faster than world trade	
Office and telecom equipment	14
Clothing	11
Other consumer goods	10
Automotive products	9
Travel	8½
Other private services and income	8½
Chemicals	8½
Other machinery and transport equipment*	8
Other semi-manufactures	7
Non-ferrous metals	7
Textiles	6½
Expanded at about the same rate as world trade	
Transportation	5
Ores and minerals	5
Raw materials	4½
Iron and steel	4½
Expanded more slowly than world trade	
Food	4
Fuels	−1

* Power generating machinery, other non-electrical machinery, electrical machinery and apparatus, other transport equipment.

Clothing is not only one of the most traditional product groups in world trade, but also one in which – along with textiles, which is also in the above-average growth category – a sizeable proportion of exports are covered by bilateral quantitative restrictions under the Multifibre Arrangement (MFA). The main factors behind the impressive growth in the value of clothing exports in the 1980s include the following.[22] First, there have been major shifts in comparative advantage in clothing within Western Europe, with the northern economies of the European Communities and EFTA losing competitive ground to Italy and new EC entrants, particularly Greece, Portugal and (as an associate member) Turkey. Clothing exports from these southern European countries grew at 12 per cent per year during the 1980s. Second, there has been the sustained growth of clothing exports, at around 10 per cent per year, from Hong Kong, the Republic of Korea and Taiwan – one element presumably being quality upgrading (the growth rates refer to the value of exports, whereas MFA quotas limit the *volume* of exports). And third, numerous other economies have dramatically expanded their exports of clothing. Most notable among these are China and the ASEAN countries (both with export growth of around 20 per cent per year), as well as South Asia (export growth of around 18 per cent starting from a low level). As a group, the developing economies supplied only 3 per cent of the clothing sold in the developed countries in 1970, but that share had increased to 13 per cent by 1979 and to 20 per cent by 1986 (the latest year for which complete data are available).[23]

The expansion of clothing exports from Southern Europe was stimulated by the fact that the countries in question were either full or associate members of the European Communities, which meant that they had essentially barrier-free access to markets in Western Europe's high-income countries – markets which are highly protected against most non-European suppliers as part of the Multifibre Arrangement (MFA).[24] More generally, the continuing expansion of clothing exports from Asian and other developing countries is part of the global shift in comparative advantage accompanying world economic growth (see Box 4). Asia's developing economies now account for one-third of world clothing exports. This global shift – which is occurring despite the presence of MFA restrictions in North America and Western Europe and the exploitation of regional comparative advantage behind Western Europe's external barriers to clothing imports – is a testament to the strength of those changing economic forces.

Turning to the primary commodities in Table 9, it is notable that their world market prices were generally weaker than those of manufactured goods, and were also more volatile in the latter

[22] As is true of all the trade figures in this report, the figures for world trade in clothing include trade between the twelve members of the European Communities.

[23] These import penetration data are taken from the OECD's compatible trade and production data base. It should be kept in mind that such data have several limitations, as discussed in Appendix IV of the GATT's 1984 study, *Textiles and Clothing in the World Economy*.

[24] For some of the new members of the European Communities, membership resulted in the phasing out of quantitative restrictions in the markets of non-EC developed countries.

Box 4: Textiles and global interdependence

The United Kingdom's modern economic growth had its genesis in textile trade. In the latter half of the eighteenth century textiles accounted for more than half of the United Kingdom's exports, and by the 1840s this share had risen to almost three-quarters. Imports of wool and other fibres to supply the textile mills represented a major source of economic growth for the newly settled regions of North and South America, Australia, New Zealand and South Africa (cotton and wool), as well as an expanding source of foreign exchange for East Asia (via the so-called Silk Road).

Even though some countries of continental Europe expanded their textile factories during the nineteenth century, the United Kingdom continued to dominate world trade in textiles, supplying more than half of world exports until the 1890s. Following the Meiji Restoration in Japan in 1868, the importance of the United Kingdom in world textile and fibre trade, and the shares of these products in the United Kingdom's trade, began to decline. The share of densely populated Japan in world exports of textiles grew rapidly, from less than 2 per cent to 22 per cent by 1939, during which time the United Kingdom's share fell from 47 to 37 per cent.

In the late 1950s and early 1960s a third generation of export-oriented newly industrializing economies appeared, most notably Hong Kong, the Republic of Korea and Taiwan. Being densely populated like Japan and the United Kingdom, their comparative advantage in primary products was weak. And with comparatively low wage costs, the opening of those economies enabled them to compete successfully in those activities which used unskilled labour relatively intensively, namely finished textiles and clothing.

This pattern of development is now being repeated by another generation of economies moving up the development ladder. During the 1980s the textile and clothing industries of both mainland China and some South and Southeast Asian economies (particularly Thailand) grew very rapidly as those countries adopted more outward-looking policies. Just as the relative decline of the United Kingdom and other European textile exporters was accompanied by the increasing importance of first Japan and then Hong Kong, the Republic of Korea and Taiwan, so the emergence of China and ASEAN exporters is contributing to the smaller share of world textile exports not only from high-income countries but also from East Asia's middle-income economies, as their comparative advantage switches to manufactures that are more intensive in the use of their increasingly more abundant endowment of human and physical capital per worker.

While the emergence of new generations of exporters is putting greatest pressure on the segments of the textile and clothing industries that are most intensive in the use of unskilled labour, it is enhancing the prospects of the sector's more capital-intensive segments. As a result, a high degree of complementarity between new and established suppliers is emerging. One reflection of this is the growth of intra-industry trade in this sector. Another is the flow of financial, technological and managerial capital from textile firms in more-advanced economies to newly industrializing economies, leading to growth of intra-firm trade as well.

These forms of international specialization in and relocation of production and trade are occurring despite the limitations on that process that have been increasingly applied through the Multifibre Arrangement. The MFA has certainly slowed economic progress at home and abroad by distorting the pattern of trade and production, but holding back the tide of economic progress with protectionist policies is clearly not easy.

part of the 1980s. Taking a longer-term perspective, relative price trends in the 1970s, when price aggregates for food, beverages, agricultural raw materials, and crude petroleum performed at least as well as the average price of manufactures, were more favourable for primary commodities than in the 1980s (Appendix Table 2).

Available data indicate a decrease in the *volume* of traded crude petroleum for the 1980s as a whole, as world production and consumption declined. Regional self-sufficiency increased significantly in Western Europe, but rose only slightly for Asia and remained unchanged in North America. Between 1979 and 1989, Latin America and the Central/Eastern Europe/USSR region expanded their net exports. The Middle East bore the brunt of the rearrangement in the pattern of world trade in crude petroleum, with its supply to the world market falling by about one-half.

Among major traded food products, the significant changes in the regional pattern of trade in cereals (wheat, coarse grains and rice) during the 1980s can be traced to support policies practised by major industrial countries. At the start of the decade, North America accounted for 50 per cent of the value of world cereal exports. By 1988, that share was only 41 per cent, while Western Europe had raised its share during those eight years from 24 to 38 per cent. This change was partly related to seasonal factors (1988 was a drought year in North America) but was also related to the process by which Western Europe shifted from net impor-

ter to net exporter status in cereals, as a result of the cumulative effects of price supports in the 1970s and 1980s. Meanwhile, developing regions as a whole barely maintained their share of world exports of cereals during the 1980s at 13 per cent.

Trade in the main product groups by region

Estimates of the shares of each of the seven regions in world merchandise exports, in world exports of commercial services and in each major product group, for 1980 and 1988 are given in Appendix Table 3. Because of the strong growth in world trade in the 1980s nearly all of the trade flows in the Table recorded an increase in value between 1980 and 1988. The percentage increase in the value of exports was much larger for some trade flows than for others, however, which meant that there were a number of changes in the relative importance (share) of each of the regions in world exports of the product groups.[25] These include:

- Although every region reported an increase in the value of agricultural exports, only Western Europe increased its share of world agricultural exports between 1980 and 1988.
- Asia's dynamism as an exporter of manufactures was so great that it was the only region to increase its share of world exports of manufactures.
- While every region's exports of commercial services increased in value terms, North America and Asia were the only two to increase their shares, not only of total exports of commercial services, but also of each of the three sub-categories.[26]
- Although the generally disappointing merchandise export performances of Latin America, Africa and the Middle East in the 1980s were heavily influenced by developments in primary commodity markets, their trade in other major product categories at best matched the growth of world trade. Thus in no instance did any of those lagging regions increase its share of world exports of one of the six major categories of goods and services.

In addition to examining each region's share of world trade in the major product groups, it is also interesting to consider briefly trends in the share of the major product groups in each region's trade (Appendix Tables 4 and 5). As in so many other instances in this report, it is important to keep in mind, in interpreting the figures in the tables, that a decline in the share of a particular product group in a region's exports generally does not mean that exports actually declined in value. Aside from the changes in the share of mining products due to the sharp decline in fuels trade, other interesting developments in merchandise trade include: (i) the significant decline in the share of agricultural products in North America's and Asia's exports (despite increases in value of $12 billion and $16 billion, respectively), as well as the virtually unchanged share of agricultural products in Western Europe's exports (which increased by $46 billion); (ii) all seven regions reported an increase in the share of manufactured goods in merchandise exports; and (iii) with the rapid growth of imports of manufactured goods and the fall in the share of fuels in Asia, manufactured goods now account for more than half of merchandise imports in all seven regions.

The largest changes between 1980 and 1988 in the product composition of trade in commercial services occurred in the Middle East, as large declines in the value of exports and imports of transportation and travel services caused the shares of these two categories of services to fall and the shares of other private services and income to increase. Developments in Saudi Arabia's

[25] Because there are no data available for exports of commercial services from Central and Eastern Europe and the USSR, the figures for the other six regions overstate their respective shares of world exports of commercial services (both for total commercial services and for each of the three subgroups). This does not, however, affect comparisons *between* the six regions: for example, the figures in Appendix Table 3 indicate that in 1988 North America and Asia had virtually identical shares of world exports of commercial services (17 and 18 per cent, respectively). If data were available for Central and Eastern Europe and the USSR, those shares would be reduced, but would remain virtually identical with one another.

[26] Regarding the strong increase in North America's share of world exports of commercial services, it is important to note that the United States introduced major changes in 1981, 1984 and 1986-88 in the recording of services data in balance-of-payments statistics. Each of these changes had the effect of increasing the figures for export receipts (and, in most instances, import expenditures). Estimates suggest that if the statistical procedures had not changed, United States exports of commercial services would have increased at an average annual rate of around 9 per cent between 1979 and 1988, rather than the 12.8 per cent actually reported (at 9 per cent, it would still exceed the corresponding growth rate for United States exports of merchandise).

trade – including sharp reductions in the value of exports of port services and in imports of shipping services – are behind most of these changes. Asia reported large declines in the share of transportation in exports and imports of commercial services, but large increases in travel. Transportation's share in North America's exports and imports also fell, but by less than in Asia or in the Middle East.[27]

Earlier it was noted that other private services and income was the fastest growing of the three main groups of commercial services. All seven regions on the export side, and all the regions except Africa on the import side, recorded an increase between 1980 and 1988 in the share of other private services and income in their commercial services trade (in the cases of Africa's imports of other private services and income, the value was higher in 1988 than in 1979).

One interesting feature of trade in commercial services which is evident from the figures in Appendix Table 5 is the much greater uniformity – relative to merchandise trade – in the export and import shares of the three major categories of commercial services. This holds both for the shares in each region's trade, and across regions. For example, in 1988, shares in Asia's merchandise exports ranged from 6 per cent (mining) to 81 per cent (manufactures), whereas for the three groups of commercial services they ranged from 30 to 35 per cent. Again on the export side in 1988, the range between the regions in the share of manufactures in merchandise exports was from 18 per cent (Africa and the Middle East) to 81 per cent (Asia), whereas the largest range for any of the commercial services groups was from 28 to 44 per cent for travel (the Middle East and Latin America, respectively). Finally, for each region, the export and import shares of each of the three commercial service groups are more nearly balanced than is the case with the three merchandise groups.[28]

Regional trade flows

Of the 28 inter- and intra-regional trade flows in Table 10, the six largest in 1989 involved either trade between or within Western Europe, Asia and North America, each accounting for at least 5 per cent of world merchandise trade. A decade ago, Western Europe's trade with the Middle East and with Africa would have figured on this list (but not intra-North American trade). For the Middle East, price and volume developments in fuels (nearly 95 per cent of the region's merchandise exports in 1979) in the intervening years led to absolute declines in the value of the region's exports and sluggish import growth. To a lesser extent, declines in fuels and other primary commodities also explain the decline or stagnation of regional trade flows involving Africa, although debt-related difficulties contributed to sluggish import growth. Every trade flow in Table 10 in which one or the other of these two regions was a partner suffered a decline in its *share* of world trade between 1979 and 1989, except for trade between Africa and the Middle East where the share was unchanged. Moreover, it is evident from the figures in the third column of the table that Africa or the Middle East was involved in five of the seven instances in which the *value* of a regional trade flow declined between 1979 and 1989.

For Latin America, where fuels accounted for about 40 per cent of merchandise exports at the beginning of the decade, and declining earnings from petroleum were compounded by debt service problems, the results were nearly as disappointing – six out of seven trade flows in which Latin America was a partner represented a smaller share of world merchandise trade in 1989 than in 1979, while one remained unchanged (Asia). The decline in the share of world trade accounted for by

[27] At first glance, the relatively weaker performance of transportation services appears inconsistent with the strong growth in the volume of world merchandise trade in the 1980s. Two factors provide the most likely explanation: a relative decline in prices for transportation services, and the decline in world seaborne trade. Freight rates for sea transport were depressed in the first half of the 1980s as tramp shipping rates (dry cargo and tanker) declined sharply. These declines were linked to the steep fall in the volume of world seaborne trade (measured in ton-miles). A decline in the volume of oil trade in the 1980's – the largest segment of global seaborne trade – together with a shift in the sourcing of oil from the Middle East to areas closer to the major oil importing regions (North Sea and Alaska) led to excess shipping capacity and depressed freight rates. The strength of global output growth and the rise in oil trade since 1986 led to a recovery of freight rates at the end of the 1980s.

[28] It is unclear whether the more closely balanced trade indicates a lower degree of specialization across countries in commercial services than is the case with merchandise. For example, it could also indicate that greater product disaggregation is needed in services to reveal the operation of international specialization.

intra-Latin American trade is especially noticeable because it is one of only two trade flows in Table 10 not involving the Middle East or Africa which actually declined in dollar value between 1979 and 1989 (the other was trade between North America and Central/Eastern Europe/USSR).

The six trade flows between or within Western Europe, North America and Asia were not only the largest but also, for the most part, the most rapidly expanding regional trade flows last year. Within this buoyant trade performance, the dynamics of merchandise trade growth in the three regions in the 1980s favoured inter-regional (rather than intra-regional) trade. For both Western Europe and North America, the fastest growing trade – by a sizeable margin – was their trade with Asia. In the case of Western Europe, where

Table 10
Developments in regional merchandise trade flows, 1979-89

(Percentage based on *value* data)

	Share of world merchandise trade		Average annual change
	1979	1989	1979-89
Trade between:			
North America and			
Latin America	4.0	3.6	5½
Western Europe	6.6	7.3	7½
Central/Eastern Europe/USSR	0.5	0.3	-½
Africa	1.9	0.6	-4½
Middle East	1.9	0.8	-2½
Asia	6.4	11.9	12½
(Intra-North America)	4.6	5.3	8
Latin America and			
Western Europe	2.6	1.7	2½
Central/Eastern Europe/USSR	0.6	0.5	5
Africa	0.3	0.1	-2½
Middle East	0.5	0.3	2
Asia	0.9	0.9	6½
(Intra-Latin America)	1.1	0.5	-1½
Western Europe and			
Central/Eastern Europe/USSR	4.1	3.2	4
Africa	5.0	2.8	½
Middle East	5.7	2.1	-3½
Asia	5.0	7.6	11
(Intra-Western Europe)	28.8	31.1	7
Central/Eastern Europe/USSR and			
Africa	0.3	0.2	2
Middle East	0.5	0.2	-2
Asia	1.0	1.1	8
(Intra-Central/Eastern Europe/USSR)	4.3	3.5	4½
Africa and			
Middle East	0.2	0.2	6
Asia	0.7	0.7	6
(Intra-Africa)	0.3	0.2	3
Middle East and			
Asia	3.8	2.1	0
(Intra-Middle East)	0.4	0.3	1
(Intra-Asia)	6.3	10.0	11½
Trade flows n.e.s.	1.7	1.8	–
	100.0	**100.0**	–

Note: The trade of region A with region B is defined as the sum of A's exports to B and B's exports to A.

Greece, Spain and Portugal were being integrated into the European Communities, this supports the view that regional integration stimulates not only internal trade but also trade with third countries. From Asia's viewpoint, its trade with North America grew faster than intra-Asian trade. In terms of dollar value, North America's trade with Asia, and its trade with Western Europe, each exceeded intra-North American trade by substantial amounts. Similarly, Asia's trade with North America exceeded the value of intra-Asian trade.

It is true that during the 1980s, the intra-regional trade of North America, Western Europe and Asia increased more rapidly than their total inter-regional trade, with the result that the share of intra-regional trade increased in each instance. However, much of this trend is explained by the declining trade with the Middle East and Africa (note that a decline in the value of trade with these two regions automatically increases the share of intra-regional trade in North America, Western Europe and Asia). If the Middle East and Africa are excluded from the calculations, inter-regional trade expanded faster than intra-regional trade in each of the three regions.

Strong trade growth in the regions which are home to the three largest traders – the European Communities, the United States and Japan – in combination with important and dynamic inter-regional trade flows among the three, suggests a situation not of evolving trading blocs, with the inward orientation which the term «bloc» connotes, but of evolving trade centres with world-wide commercial interests. This distinction is important for a number of reasons, including the implications it has for the four regions – Latin America, Africa, the Middle East and Central/Eastern Europe/USSR region – whose economic performance was relatively weak in the 1980s. In a world of «inward-looking blocs», their efforts to improve their economic performance would inevitably draw them toward one bloc, to the exclusion of the rest of the world. As it is, their development strategies for the 1990s can be based on access to the entire world market.

The leading traders

The 25 leading exporters and importers of merchandise and of commercial services are shown in Tables 11 and 12, respectively. Major changes in rankings in both tables during the 1980s testify to the rapid pace of change in the past decade. This change is linked, for the most part, to successful structural adjustment in many of the leading traders, as well as to the general openness of markets – achieved through successive reductions in import barriers in the seven previous GATT rounds – which provides newcomers with opportunities to enter world markets.

Nearly half of the traders in Table 11 increased their merchandise export ranking by three places or more between 1979 and 1989. The largest increases were recorded by China (up 20 places, from the 34th to the 14th largest exporter), Mexico (37th to 20th), Hong Kong (27th to 11th), the Republic of Korea (29th to 13th), Singapore (32nd to 17th) and Taiwan (22nd to 12th). Each of these economies either had a liberal trade regime at the beginning of the 1980s, or introduced in the course of the decade economic reforms which increased their ability to compete in world markets. On the import side the leading gainers were Thailand (44th to 24th), Hong Kong (21st to 11th), China (24th to 14th), Taiwan (25th to 16th) and Mexico (29th to 21st).

As for the countries whose rankings slipped, it is evident from the figures in the two «percentage change» columns that because trade was growing at a strong pace from 1983 onward, nearly all of those countries reported substantial increases in the dollar value of their trade during the 1980s. In other words, it is important to keep in mind that in the 1980s – indeed, throughout the postwar period – the trade rankings are determined not against a static level of trade, but rather against a rising level of world trade.

Another important fact which is evident from Table 11 is the considerable overlap between the traders with the strongest export growth in the 1980s and the traders with the strongest import growth. For example, the four leading traders in terms of export growth were among the five leading traders in terms of import growth.

Although various factors no doubt influenced developments in each economy's ranking, the overall merchandise trade picture was heavily influenced by three general developments which had their greatest impact on the rankings in the first half of the decade when most of the large changes occurred. One was the decline in oil prices and export volume beginning early in the decade,

Box 5: Hong Kong and China

Hong Kong and China have been two of the leading gainers in both the export and import rankings and their trade has evolved since 1979 – the start of China's open-door policy – in such a way that it is best analyzed as a joint phenomenon. They began the decade with roughly similar levels of exports, but beginning in 1983, when both were expanding their trade, Hong Kong moved ahead as re-exports boomed, especially those in which China was the origin or destination. Between 1979 and 1989 Hong Kong's domestic merchandise exports doubled and re-exports increased six-fold, with the result that the share of domestic exports in total merchandise exports fell from 70 per cent in 1979 to 40 per cent in 1989. The share of China in Hong Kong's re-exports (as an origin and as a destination) jumped from one-third in 1979 to over 80 per cent in 1989. Clearly, Hong Kong benefited twice from trade with China : by re-exporting from the rest of the world to China, and by re-exporting from China to other export markets. Because goods which are simply transshipped through Hong Kong are not included in the trade statistics, it is clear that these re-exports included value added in Hong Kong, such as packing, marketing, distribution and other commercial services.

Both the growing importance of trade with China and Hong Kong's growing emphasis on the service industry aspects of merchandise trade, were stimulated by rising production costs in Hong Kong (especially wages) and the stimulus this has given to foreign direct investment by Hong Kong firms. By the end of the decade, Hong Kong accounted for an estimated two-thirds of the foreign direct investment in China, and in neighbouring Guangdong Province Hong Kong enterprises are reported to employ two million Chinese workers (in 1989 Hong Kong's own labour force numbered some 2.8 million).

The most important products in Hong Kong-China trade remain textiles and clothing. These products account for one-third of Hong Kong's imports for re-export of Chinese origin ; all of Hong Kong's re-export trade in textiles is related to China. Recently, new products in China's trade such as toys, baby carriages, footwear and travel goods have their origin in the relocation of labour-intensive aspects of Hong Kong's industries to Guangdong province, spurred by the extension of outward processing zones. Although the physical proximity and traditional ties between Hong Kong and China favoured the development of a special trading relationship, a key factor in Hong Kong's impressive trade and economic performance in the 1980s was its free trade policy, which insured continuous adjustment to changing comparative advantage.

which reduced the rankings of oil exporters in the Middle East, Africa and Latin America, thereby «automatically» increasing the ranking of countries immediately below them, including Brazil and several in East Asia. This trend was reinforced by a second factor, namely the strong growth of United States import demand beginning in 1983, which tended to favour this same group of economies, as well as Mexico. The third factor was the favourable trend in world trade in manufactures relative to trade in primary products throughout most of the decade which, by and large, tended to favour that same group of economies since they were the ones in which the industrialization process had reached the stage such that they were, or were poised to become, important exporters of manufactured goods.

Corresponding figures for the 25 leading traders of commercial services – which include transportation, tourism, telecommunications, insurance, banking and other professional services – are given in Table 12. Every economy in the table reported an increase in the value of exports or imports of commercial services between 1979 and 1989, except for Saudi Arabia on the import side. Five economies increased their export ranking by three places or more: Turkey's impressive gain of 28 places in just 10 years was the result of gains across all the major groups of commercial services; for Thailand (up 10 places) it was passenger services and travel; for Taiwan (5 places) it was the transport of goods and people; for Hong Kong (5 places) it was other private services and income (essentially business services); and for the Republic of Korea (4 places) it was largely due to travel.

Changes were even more pronounced on the import side of Table 12, partly because sharply lower earnings from petroleum, plus debt service problems and other developments caused several countries to cut back substantially on their imports of commercial services (Nigeria, Iran, Venezuela, Brazil and South Africa were among the top 25 importers in 1979 but not in 1989, while Norway, Saudi Arabia and Mexico declined in the ranking).

Table 11
Leading exporters and importers in world merchandise trade, 1979-89

(Billion dollars and percentage)

Rank		EXPORTERS	1989		Percentage change 1989	Rank		IMPORTERS	1989		Percentage change 1989
1979	1989		Value	Share	1979	1979	1989		Value	Share	1979
1	1	United States	364	11.8	100	1	1	United States	493	15.4	122
2	2	Germany, Fed. Rep.	341	11.0	99	2	2	Germany, Fed. Rep.	270	8.4	69
3	3	Japan	274	8.9	168	3	3	Japan	210	6.5	91
4	4	France	179	5.8	78	5	4	United Kingdom	198	6.2	99
5	5	United Kingdom	152	4.9	76	4	5	France	193	6.0	80
6	6	Italy	141	4.6	95	6	6	Italy	153	4.8	96
10	7	Canada	120	3.9	106	10	7	Canada	120	3.7	112
7	8	USSR	109	3.5	69	9	8	USSR[b]	115	3.6	99
8	9	Netherlands	108	3.5	69	7	9	Netherlands	104	3.2	53
11	10	Belgium-Luxembourg	100	3.2	76	8	10	Belgium-Luxembourg	99	3.1	62
27	11	Hong Kong[a]	73	2.4	383	21	11	Hong Kong[c]	72	2.2	321
22	12	Taiwan	66	2.1	311	13	12	Spain	72	2.2	181
29	13	Korea, Rep.	62	2.0	314	15	13	Korea, Rep.	61	1.9	201
34	14	China	52	1.7	279	24	14	China	58	1.8	273
12	15	Sweden	52	1.7	87	11	15	Switzerland	58	1.8	98
13	16	Switzerland	52	1.7	94	25	16	Taiwan	53	1.7	255
32	17	Singapore[a]	45	1.4	214	20	17	Singapore[c]	50	1.6	182
19	18	Spain	45	1.4	144	12	18	Sweden	49	1.5	70
17	19	Australia	38	1.2	102	19	19	Australia	45	1.4	147
37	20	Mexico[d]	36	1.2	185	16	20	Austria	39	1.2	93
26	21	Brazil	34	1.1	126	29	21	Mexico[d]	34	1.1	133
25	22	Austria	32	1.0	106	22	22	German Dem. Rep.[b]	27	0.8	63
28	23	German Dem. Rep.	29	0.9	92	18	23	Denmark	27	0.8	45
9	24	Saudi Arabia	28	0.9	−55	44	24	Thailand	25	0.8	251
30	25	Denmark	28	0.9	91	27	25	Czechoslovakia[b]	22	0.7	57
		Total	**2560**	**82.7**	**103**			**Total**	**2645**	**82.4**	**104**
		World	**3095**	**100.0**	**86**			**World**	**3210**	**100.0**	**86**

[a] Includes substantial re-exports. For Hong Kong, re-exports accounted for 61 per cent of total exports in 1989, and for Singapore the corresponding figure was 37 per cent.
[b] Imports f.o.b. See Box 2 for details on the valuation of trade for CMEA countries.
[c] Includes substantial imports for re-export.
[d] Includes estimates of trade flows through processing zones.

In total, six traders moved up three places or more on the import ranking for commercial services, among them three of the leading gainers in the export ranking – Taiwan, Hong Kong and the Republic of Korea (by 16, 9 and 5 places, respectively). Japan was the leading importer of commercial services in 1989 up from second spot in 1979. For the exporters of commercial services, the 1980s clearly was a decade of major shifts in growth centres among the leading importers.

As in the case of merchandise trade, there is considerable overlap between the dynamic exporters and dynamic importers of commercial services: five of the eight leading traders in Table 12 in terms of *export* growth during the 1980s were among the eight leading traders in terms of *import* growth.

There is also considerable overlap between the leading merchandise traders and the leading traders in commercial services. In 1989, 20 of the 25 leading exporters of merchandise were among the 25 leading exporters of commercial services. For imports the figures were identical – 20 economies were among the top 25 for both merchandise and

Table 12
Leading exporters and importers in world trade in commercial services, 1979-89

(Billion dollars and percentage)

Rank		EXPORTERS	1989		Percentage change 1989	Rank		IMPORTERS	1989		Percentage change 1989
1979	1989		Value	Share	1979	1979	1989		Value	Share	1979
2	1	United States[a]	102.5	15.7	241	2	1	Japan	80.5	12.0	195
1	2	France	67.1	10.3	81	3	2	United States[a]	78.0	11.7	187
3	3	United Kingdom	47.3	7.2	63	1	3	Germany, Fed. Rep.	70.4	10.5	67
4	4	Germany, Fed. Rep.	45.4	7.0	113	4	4	France	52.1	7.8	94
6	5	Japan	39.4	6.0	164	5	5	United Kingdom	39.0	5.8	94
5	6	Italy[b]	37.3	5.7	87	7	6	Italy[b]	33.0	4.9	152
9	7	Spain	25.1	3.8	146	6	7	Netherlands	24.5	3.7	68
7	8	Netherlands	24.4	3.7	64	9	8	Belgium-Luxembourg	22.2	3.3	97
8	9	Belgium-Luxembourg	23.1	3.5	85	10	9	Canada	19.6	2.9	134
10	10	Austria	17.2	2.6	105	11	10	Sweden	14.9	2.2	133
12	11	Switzerland	15.5	2.4	135	27	11	Taiwan	14.0	2.1	417
14	12	Canada	13.1	2.0	114	13	12	Switzerland	13.7	2.0	145
18	13	Hong Kong[b]	11.6	1.8	205	20	13	Spain	12.8	1.9	220
13	14	Sweden	11.6	1.8	78	14	14	Australia	12.4	1.9	125
19	15	Korea, Rep.	11.0	1.7	149	8	15	Saudi Arabia[b]	10.5	1.6	−10
17	16	Singapore	11.0	1.7	150	12	16	Norway	10.5	1.6	83
11	17	Norway	10.6	1.6	52	26	17	Hong Kong	10.1	1.5	201
15	18	Mexico	10.1	1.5	70	23	18	Korea, Rep.	9.5	1.4	192
16	19	Denmark	9.5	1.5	90	15	19	Austria	9.4	1.4	88
22	20	Australia	8.5	1.3	174	19	20	Denmark	8.7	1.3	117
26	21	Taiwan	7.5	1.1	275	21	21	Yugoslavia	8.2	1.2	110
32	22	Thailand	6.3	1.0	457	17	22	Mexico	7.6	1.1	58
51	23	Turkey	5.7	0.9	934	32	23	Singapore	6.5	1.0	225
21	24	Yugoslavia	5.4	0.8	67	34	24	Finland	6.2	0.9	215
20	25	Greece	4.9	0.8	44	25	25	Indonesia	5.2	0.8	86
		Total	**571.1**	**87.5**				**Total**	**579.8**	**86.7**	
		World	**653**	**100.0**				**World**	**669**	**100.0**	

[a] Major changes were introduced in 1981, 1984, and 1986-88 in the recording of services data, which had the effect of increasing figures for export receipts (as well as import expenditures). Estimates suggest that if these changes had not been made, the percentage change between 1989 and 1979 in exports would have been about 150 per cent. See U.S. Department of Commerce, *Survey of Current Business*, June 1989.

[b] Estimates.

Note: World exports of commercial services excludes the discrepancy for shipment services (see note to Table 1).

commercial services. In fact, the «fit» is even closer than these figures suggest, since the merchandise import ranking includes three economies which do not report services statistics (the USSR, the German Democratic Republic and Czechoslovakia).

Trends in the product composition of exports

Significant changes within a single decade in regional trade flows and in the rankings of the leading traders raise the prospect of important changes, at the level of individual countries, in both the product composition of exports and the geographic pattern of trade. This is not, however, an easy proposition to analyze in a definitive way because there is no single «correct» way to measure changes in the product composition of a country's exports, or in its geographic pattern of trade. This section, therefore, has the more modest goal of examining general trends in the product composition and pattern of trade.

In the following analysis, trends in the product

composition of exports for each of 133 economies are analyzed using a 233 product breakdown of world merchandise trade.[29] Because of delays in reporting detailed export data to the United Nations, the only option for including reasonably up-to-date statistics for a broad cross section of developing countries was to use developed country statistics on their imports from developing countries. In the interest of consistency, the calculations for the developed countries are based on the same set of data, that is, on intra-developed country trade. The change in product composition is calculated by counting the number of «principal» products in a country's exports in 1979 and in 1988 (the latest year for which reasonably complete statistics are available). Products were considered to be «principal» products if they passed a threshold value, arbitrarily chosen to be one-quarter of one per cent of the individual exporting country's total merchandise exports to developed countries in the year in question.[30] This yielded 1988 threshold values, for example, of $515 million for the United States, $84 million for Spain and $5½ million for Côte d'Ivoire.

Table 13
Change in product composition of merchandise exports to developed countries, 1979-88

(Average number of products per country in the group or region)

	Change in number of principal product groups			Number of product groups in 1988
	Gross decline	New products	Net change	
Developed countries	**−11**	**11**	**0**	**72**
North America	−11	6	−5	75
Western Europe	−11	11	0	74
Developed Asia*	−6	12	6	52
Developing economies	**−5**	**8**	**3**	**22**
Latin America	−5	10	5	26
Africa	−4	6	2	15
Middle East	−4	7	3	16
Asia	−9	10	1	30
Eastern trading area	**−14**	**17**	**3**	**71**
Central/Eastern Europe/USSR	−10	16	6	76
China	−34	11	−23	71

* Australia, Japan and New Zealand.
Note: Figures are based on data for the imports of EC(12), EFTA(6), North America and developed Asia.

Results based on import statistics for the developed countries are likely to be reasonably representative of export trends for developed and developing countries, since 75 per cent of developed countries' exports, and 70 per cent of developing economies' exports, are sold in developed country markets. In contrast, only about one-third of the exports of the Central/Eastern Europe/USSR region are shipped to developed countries, implying that the results reported below may not be representative of the overall exports of the countries in this region.

Although there was no net change in the number of principal product groups in the exports of the developed countries between 1979 and 1988, there was a significant turnover within the group's total of 72. Eleven product groups – nearly one in six – dropped off the list and eleven new groups took their place, which meant that 22 principal product groups were affected by the changing product composition of the developed countries' merchandise exports (Table 13).[31]

[29] Because the available statistics on trade in commercial services do not permit an internationally comparable product disaggregation more detailed than that in Table 8 above, it is necessary to limit the analysis to merchandise trade; it is also necessary to exclude services from the subsequent analysis of trends in the geographic diversification of trade, as there is very little trade data available on a destination/origin basis for services.

[30] The aim was to choose products that are relatively important for the individual exporting country, independent of the importance of the products in world trade or in the imports of the developed countries. One drawback to this particular measure of the composition of exports is that each product which passes the threshold is treated equally – that is, a product which just barely passed the threshold and one which is equivalent to ten times the threshold value count equally.

[31] Two points which are relevant both to the analysis of changes in product composition and to the analysis of changes in the geographic pattern of trade should be noted. First, a comparison which is limited to the beginning and end years of a period (1979 and 1988 in this case) necessarily overlooks certain changes in product composition and geographic patterns which occurred within the period; for example, if a particular product group joined the list of principal exports in 1982 and fell off the list in 1987, that particular change would not be recorded. It follows that the measure of «change» or «turnover» in a country's trade which is used in this report almost certainly *understates* the amount of change that occurred between 1979 and 1988. Second, the definition of a new principal product or new principal trading partner used in this report does not exclude the possibility that a product or trading partner was formerly on the list of principal products or trading partners – all it means is that the product or trading partner was not on the list in 1979.

The average figures for the developed country groups conceal two opposite trends. Among the larger established traders in Asia, North America and Western Europe, relatively few new principal products were added to the export list between 1979 and 1988, and in fact the number of principal products declined. For the smaller West European exporters (below the top ten) plus Australia and New Zealand, however, the number of additional new principal products was much larger and amounted to a relatively higher turnover of the trade structure over the period.

Booming import demands for a variety of manufactured products in the 1980s helped establish a number of new suppliers among the developed countries, as well as the developing economies. The following list includes a sample drawn from countries which experienced both a large turnover in the product composition of exports and a strong expansion of exports in the 1980s, along with an indication of the more important principal products added to their exports: Bangladesh, clothing, which now accounts for almost one-half of the country's manufactured exports (the increase in exports was sufficient for Bangladesh, with one of the world's lowest per capita incomes, to be drawn into the MFA); Brazil, refined petroleum products, aluminium, and passenger motor cars; Finland, manmade fibres, alcohols and office machines; Greece, wheat (in addition to a number of other products covered by the Common Agricultural Policy), as well as cement and ships; Mexico, television receivers and videocassette recorders; Portugal, hydrocarbons and automotive parts; Thailand, footwear and office machines; and Turkey, refined petroleum products, iron and steel, and under-garments.

New products were relatively more important in the trade structures of developing regions at the end of the 1980s than for developed countries, although the average number of principal exports remained lower. The proportion of new products in the structure of their exports to developed countries ranged from double (Asia) to triple (Africa) the 15 per cent developed country figure.

While the addition of new products helped explain the expansion of exports of a number of countries in the 1980s, it was by no means the only route. Indeed, some countries did very well because resources were devoted to a deepening of traditional industries (see Box 1 on Chile) or because they were devoted to a small number of industries. For example, Burkina Faso almost trebled the value of its exports to developed countries in the 1980s – the best performance among sub-Saharan least developed countries – by adding gold. It also needs to be kept in mind that the measure of change in the product composition of exports used in this section does not capture rapidly growing new products until they have passed the threshold value, nor does it capture new products which arise *within* one of the principal product groups (for example, due to increased processing of an intermediate product).

The question of trends in a country's trade can be approached not only in terms of the product composition of exports, but also in terms of the number of trading partners. Do the statistics reveal sizeable changes in the markets for countries' exports or in the sources of imports, or does the typical country have more or less the same trading partners as it did at the beginning of the 1980's? This is the subject of the next section.

Trends in the geographic pattern of trade

The method for measuring trends in the geographic pattern of merchandise trade is very similar to the one used to measure trends in the product composition of exports. There are, however, three important differences from the product analysis. First, the analysis covers imports as well as exports. Second, the trade data necessarily refer to each country's total merchandise trade with all countries in 1979 and 1988, and not just to their trade with developed countries. The third difference, which follows directly from the second, is that data were available for only 39 countries (in contrast to the 133 covered above in the product analysis). Coverage of the developed countries is almost complete, but for the developing countries the coverage is both very limited and, to a degree, biased in the direction of economies which are large traders and have higher incomes than the average developing country. This, of course, limits the extent to which the results described below can be generalized to all developing countries. Threshold values – equivalent to one-quarter of one per cent of the country's total merchandise exports and imports, respectively – were used to screen out relatively small trading partners, that is, to identify «principal» trading partners.

Table 14
Change in geographic composition of trade for selected countries, 1979-88

Net increase of 5 to 10 trading partners		Net decrease of 5 to 12 trading partners	
Exports	Imports	Exports	Imports
Morocco	Tunisia	Denmark	Ireland
Uruguay	Philippines	Germany, Fed. Rep.	Italy
Colombia	Jordan	Italy	Sweden
Trinidad-Tobago	Trinidad-Tobago	Norway	United Kingdom
Indonesia		Canada	Spain
Tunisia		Singapore	
Jordan		United Kingdom	
		Austria	
		France	
		Japan	
		Portugal	
		Spain	
		Hong Kong	
		United States	

Notes: 1. See Technical Appendix for a description of the measure.
2. The traders are listed in ascending order of the increase or decrease in the number of trading partners.

With a few exceptions, each developed country lost principal export markets in Latin America, Africa and the Middle East, and gained principal export markets in Asia. A similar pattern but with more moderate declines, is evident on the import side. The likely explanation is that the decline in earnings from primary commodity exports (especially exports of crude petroleum) and debt service difficulties in the course of the 1980s reduced the import demand of many countries in the Middle East, Africa and Latin America.

There was considerable overlap in the Asian export markets gained by developed countries. Taiwan was added by one out of two developed countries and one out of three added Hong Kong, (at least one out of six developed countries added the Republic of Korea, Singapore, China and Thailand). A similar pattern is evident on the import side: one of every two developed countries added purchases from China, and one of every three added Taiwan and Thailand. This supports the point that dynamic exporters tend to be dynamic importers, as well as revealing the broad basis of the expansion of Asia's trade with Western Europe and North America on both the export and import sides. An early resolution of the third world debt problem would no doubt allow other dynamic exporters to become dynamic importers.

The results for the trade of the five leading merchandise traders, plus the average for all developed countries, are shown in Table 15. The figures indicate that 12 countries were «involved» in the typical developed country's net loss of 4 significant export markets (the 8 which dropped off the list, plus the 4 which joined the list; note that the 8 which dropped off the list represented 20 per cent – 1 out of 5 – of the average of 40 partners in 1979). The three West European countries in Table 15 reported a total of six new export markets between 1979 and 1988, five of which are in Asia; Japan's two new partners, in contrast, are in Western Europe.

The corresponding averages for new trading partners on the import side are also given in Table 15. Except for a smaller net decline, the figures are remarkably similar to those for exports: not only did the typical developed country have the same number of significant trading partners on the import side as on the export side in 1988, but the number of trading partners involved in the net decline between 1979 and 1988 was the same (7 plus 5, or 12).

Table 15
Changes in the geographic pattern of merchandise trade for the five leading traders, 1979-88

	Change in number of principal trading partners			Trading partners in 1988
	Gross decline	New partners	Net change	
Exports				
France	−11	2	−9	45
Germany, Fed. Rep.	−7	2	−5	42
Japan	−11	2	−9	37
United Kingdom	−10	2	−8	44
United States	−14	2	−12	42
Developed countries (average)	**−8**	**4**	**−4**	**36**
Imports				
France	−9	7	−2	47
Germany, Fed. Rep.	−3	0	−3	46
Japan	−4	4	0	44
United Kingdom	−8	2	−6	36
United States	−7	3	−4	42
Developed countries (average)	**−7**	**5**	**−2**	**36**

Note: See Technical Appendix for a description of the method.

In general, the developed countries reported a smaller proportion of new export markets/import origins in 1988 than did the developing countries. One factor is the net expansion of geographical trade ties for the majority of developing economies, as 10 out of 14 developing countries in the sample experienced an increase in the number of principal trading partners on the import side, the export side or on both. Among the more important destinations added by countries with at least one-third of their 1988 trade structures composed of new markets were: Indonesia added Belgium-Luxembourg and China; Trinidad and Tobago added Belgium-Luxembourg and Taiwan; Algeria added Portugal and Turkey; and Tunisia added China, Iraq and the USSR.

The general picture which emerges from this brief examination of trends between 1979 and 1988 in the geographic pattern of 39 economies' merchandise trade is one of considerable change. For a number of the mostly developed economies, there were declines in the number of principal export markets even though trade expanded, while many of the developing economies in the sample reported increases in the number of export markets.

The analysis uncovered two other aspects which, while not directly related to the amount of change in the geographic pattern of trade, are nonetheless interesting. First for both exports and imports, there is a noticeable uniformity across countries in the number of trading partners. The typical country in the sample (developed and developing) had 35 significant trading partners on both the export and import sides of its merchandise trade in 1988. Of the 39 countries, 27 had between 30 and 40 trading partners for imports. In the case of exports, the average was essentially the same, but with somewhat more variation in the individual country figures: 19 countries had between 30 and 40 trading partners.[32]

Second, geographic proximity clearly plays a rôle in trade patterns. Asian countries have proportionately more trading partners in Asia than in other regions, and countries in Latin America have proportionately more Latin American trading partners; and, of course, the West European countries were trading intensely with one another even before the formation of the EC and EFTA. It is important, however, not to exaggerate the extent to which countries' trade interests are focused on regional neighbours; on average, one-half of the total number of principal export and import markets of West European traders were situated outside the region.

One final point concerns the results of the analysis of trends in product composition, as well as the results of the analysis of trends in the geographic pattern of trade. Granting the limitations of the method used to gauge the trends, the results demonstrate that small trading nations can have diversified trade interests in terms of products and markets, and that even if they are seldom major suppliers of a particular product in a given market or major trading partners, an open trading system is crucial to their development prospects. The analysis also makes it clear that what appears to be a «small» amount of trade can be more important to employment and GDP growth in a small trading nation than is a much larger trade flow to employment and growth in a large country. To take an extreme example – but one that readily illustrates the general point – recall that the 1988 quarter-of-one per cent export threshold values for Côte d'Ivoire and the United States in the product analysis were $5½ million and $515 million, respectively. Since the trade-to-output ratio of Côte d'Ivoire is about five times larger than that of the United States, it can be argued that a $5½ million trade flow matters more for the Côte d'Ivoire economy than does a $515 million trade flow for the United States economy.

It is important to keep in mind the previously mentioned point that there are various ways of measuring the amount of change in the product composition of a country's trade and in the number of trading partners. When interpreting the results reported above, particular care must be taken to emphasize that only those products or

[32] The particular method used in this report to determine the number of principal trading partners has, it should be noted, a tendency to treat large and small traders asymmetrically. In particular, it is more difficult for a small trading nation to reach the threshold value of a big trading nation than vice versa. Or, to put it slightly differently, a large trading nation with a high threshold value will tend to have «fewer» principal trading partners than its level of trade would suggest, because only a fraction of the world's trading nations are large enough to stand a chance, in practice, of passing that high threshold value; small trading nations, in contrast, will tend to have «more» principal trading partners, than their levels of trade would suggest, because their low threshold value means that a large proportion of the world's trading nations are potential principal trading partners.

trading partners which passed the threshold values were counted, and that the ones that did pass the threshold value counted equally, regardless of the value of the trade flow in question.

Change and integration

The material presented above leaves little doubt that two fundamental characteristics of the world economy in the 1980s were change and ongoing integration. Some degree of change is implied, of course, by the integration. But the number and variety of changes which occurred in the 1980s extend well beyond those which were an essential part of the integration process. Unanticipated developments such as the sharp drop in petroleum prices and trade, the emergence of serious debt-service problems, stagnant or falling living standards in countries which are home to one-fifth of the world's population, and the emergence of the United States as the world's largest debtor may have had repercussions on the integration process, but they were not in any way central to it.

There is nothing unique about the 1980s in this regard, since change and integration have characterized the world economy in every postwar decade – in contrast to much of the first 45 years of this century, when change and dis-integration were the rule. There may, however, have been an increase in the pace of the integration process. Possible causes include increases in the number of technological innovations that have reduced the «economic distance» between countries, in the pace of industrialization in lower income countries, or in the rate at which economic policies

Box 6: Defining and measuring integration

Major forces behind integration are those that reduce price differences between domestic and world markets for identical goods or services. Viewed from another perspective, the reduction or elimination of barriers that prevent the «law of one price» from holding is evidence that integration is taking place. There are two types of barriers to full economic integration, natural and manmade. A reduction in either type of barrier, without an offsetting increase in the other, allows the world economy to become more integrated.

Natural barriers encompass all the non-policy reasons why the same good or service can sell for different prices in different locations. These fall primarily into two categories: transportation costs, and a variety of factors – including communications costs and different customs and regulations – that result in rational ignorance on the part of buyers and sellers.[1] Manmade barriers encompass all policies which create or add to price differences, including import restrictions (broadly defined), special incentives or restrictions on exports, and departures from national treatment; they also include policies which act to increase the costs imposed by natural barriers – for example, regulations in the transportation and communication areas that keep the prices of these services artificially high. The existence of different national currencies also belongs on the list of barriers to full integration.

Monitoring reductions in natural and manmade barriers is a useful but not wholly satisfactory way of measuring the pace of economic integration. Simply counting technological innovations in transportation, for example, ignores the fact that the impact of different innovations can vary enormously. Counting changes in manmade barriers has this problem too, plus the problem of trying to estimate the net impact in a period when some barriers have been reduced and others raised.

Another way of measuring progress in the integration of the world economy would be to monitor prices of a large number of more or less identical goods and services in markets around the world to see if differences were narrowing. However, experience has shown this to be a notoriously difficult thing to do, even for relatively homogenous goods. It simply is not a realistic option in a situation which necessarily involves a large number of goods and services.

A more credible indicator of progress in the integration of the world economy, which can be used in conjunction with evidence on trends in barriers, is the trend in trade growth relative to output growth. If there is evidence of reductions in natural or manmade barriers (certainly the case for the postwar period as a whole), and if trade is growing faster than output (as it was during 1983-89, and indeed has been for nearly all of the postwar period), it is reasonable to conclude that the world economy is becoming more integrated. The first is concerned with developments which permit increased integration to occur, while the second is a measure of the extent to which firms have actually responded to the new conditions. This line of reasoning will be familiar to regular readers of GATT publications.

[1] Rational ignorance occurs when a buyer or seller remains uninformed of the full range of market opportunities because the expected cost of becoming informed exceeds the expected benefit.

have been improved as experience with different policies cumulates.

Some of the proximate causes of the major trade developments in the 1980s have been briefly noted in the preceding discussion. The impact of the sharp decline in petroleum prices, and in the volume of petroleum trade, was mentioned frequently in connection with trends in growth rates, changes in the market shares of other products, and changes in the market shares of the various regions. Similar references were made to the trade effects of the debt-servicing problems of many lower income countries, and a brief mention was made of the numerous market-oriented policy reforms, and the substantial benefits that came with the improvements in macroeconomic policies as evidenced by the far superior inflation record of the 1980s as compared with that of the 1970s.

With the partial exception of the petroleum market and debt-servicing issues, however, no attempt was made to analyze in detail the nature of the causal relationship between these and other factors, on the one hand, and the various trade developments on the other. Space limitations rule out what obviously would be a major undertaking. There are, however, two factors whose importance is so central to the trade developments of the 1980s that the analysis would be incomplete without at least a first look at some of the linkages. Both have been briefly noted in this report in recent years, and both are closely related to the integration process, the dominant economic force at work today in the world economy. One is technological change and the impact it is having on production, marketing and trade. The other is foreign direct investment, which is both a vehicle for the international transfer of capital and technology, and a process that interacts with trade in important ways.

The impact of technological change

Two types of barriers to trade distinguish international from domestic trade – manmade barriers and natural barriers (Box 6). Unilateral trade liberalization and multilateral trade negotiations deal with many of the manmade barriers, such as tariffs, quotas, subsidies and various regulations, including differing technical standards. Reductions in natural barriers to trade, in contrast, depend first of all on technological advances in transportation and communication which reduce the «economic distance» between potential trading partners, but also on the extent to which government policies facilitate or frustrate the availability of the innovations to firms and individuals (transportation and communications being two of the most highly regulated sectors in most countries). There are good reasons for believing that such technological advances played a major rôle in the ongoing integration of the world economy in the 1980s.

The concept of economic distance captures at once all the frictions, costs, and uncertainties associated with transactions across national boundaries. The main element, clearly, is geographical distance. The distance that physically separates nations affects transport costs, communication costs and delivery uncertainties. All of these act in some degree to inhibit trade flows. But the economic distance separating international trading partners includes other elements as well, such as differences in regulations and customs which increase information costs. This economic distance is not fixed, of course, and the significance for world trade of the revolutions in telecommunications and microelectronics in the 1980s can best be understood in terms of the reduction in economic distance they imply. Or, to put it slightly differently, thanks to technological innovations the degree to which geographic distance and information costs influence trading patterns is steadily diminishing.

In 1983 it cost $12,000 to $14,000 a month to lease the United States half of a private transatlantic voice channel, while today the cost is from $4,000 to $5,000.[33] In mid-1988 the first transatlantic fibre optic cable (TAT 8) began operation, connecting France, the United Kingdom and the United States. The TAT 8 fibre optic cable provides a four-fold increase in capacity, while the cost per circuit is reported to be half that of the previous system.[34] These examples point to the dramatic reduction in the real cost of telecommunications in the 1980s.[35] Not only has the cost of using telecommunications fallen, but the value of telecommunications services has increased dramatically as well.

[33] Pipe (1990), «Telecommunications», *The Uruguay Round: Services in the World Economy*, page 107.

[34] See OECD (1988), «Satellites and Fibre Optics», *Information Computer Communications Policy*, 15, pages 16-7.

The cost of information processing fell by an estimated 65 per cent from 1975 to 1985.[36] Dramatic advances in microprocessor speed and function have taken place since 1985, suggesting even greater cost improvements in the second half of the decade. Examining the performance characteristics of various high-performance computers delivered from 1981 to 1987 reveals a more than twenty-fold increase in processing speed.[37] Similar advances in the processing speed and function of desktop computers are well known. Together with the refinement of fax and modem technologies, and the development of high-resolution computer images combined with private satellite transmission networks, these innovations have enhanced dramatically both the ability to collect and process information, and the quality of communications over long distances. In Western Europe and Japan, the number of telefax subscribers increased ten-fold in the second half of the 1980s to 1.2 million and 0.4 million respectively; in the United States, where the telefax boom set in early, the number of subscribers rose during the same period by a factor of five to nearly 2.5 million. The successful international transmission of highly detailed and complex information that might have required the physical presence of one or more professionals in the past can now be accomplished routinely, cheaply and rapidly by modern telecommunications.

Data on international telephone traffic provide one indication of the increase in international communications in the 1980s. Table 16 presents statistics on the number of international calls made in 1979 and 1988 by major users of telecommunications.[38] The available data indicate a very similar ranking to that of the leading exporters of merchandise and commercial services, lending support to the view that the level and pattern of telecommunications usage are often highly correlated with the level and pattern of trade in merchandise and commercial services. Whether an expanding supply of communications services stimulates trade, or is the result of emerging opportunities for profitable trade (both effects undoubtedly are at work) is less important than the fact that contemporary trade flows are increasingly dependent on good communications.

Growth rates of outgoing international telecommunications traffic have been very high during the 1980s, averaging about 20 per cent per year on a call basis (note that these are *volume* data rather than – as is usually the case with services statistics – value data). This implies that total traffic has increased more than five-fold over the nine year period. Asian countries have been especially dynamic, often registering annual growth rates ranging from 30 to 50 per cent.[39]

Information on the distribution of outgoing tele-

[35] The decline for both the United States and the Federal Republic of Germany was between 40 and 50 per cent between 1979 and 1989. Incomplete data for France and Japan indicate a similar decline for these two countries. Two points need to be made, however. First, the cost reductions are not attributable exclusively to technological change. The deregulation of telecommunications sectors in the United States, Japan, the United Kingdom, New Zealand and certain other countries has also put downward pressure on costs by introducing competition where public monopolies were once the rule. Second, there is a much larger group of countries in which PTT pricing policies resulted in only a fraction of the dramatic cost reductions being passed on to the phone users (see *Financial Times*, April 3 1990). Future deregulation and a closer surveillance of price-setting policies should give a larger rôle to competition in price formation, which should eventually result in significantly lower charges for international calls, in a smaller margin between domestic and long distance calls, and in reduced variation in national tariffs for identical international communications.

[36] See OECD (1988), «The Telecommunications Industry: The Challenges of Structural Change», *Information Computer Communications*, 14, page 18.

[37] See Economic Commission for Europe, (1987), *The Telecommunications Industry: Growth and Structural Change*, United Nations, page 35.

[38] The list is not comprehensive because comprehensive data on the volume of international telecommunications traffic by origin and destination is neither collected nor reported on an internationally comparable basis. Countries report statistics on either the total number of outgoing calls, the total number of minutes circuits are used for outgoing traffic, or the total number of pulses sent. Some countries do not report anything at all. Information on traffic by industry or the type of traffic (voice, data, fax, telex, video) is not readily available. The same holds for usage data for private telecommunications lines, i.e., circuits owned by end-users or leased from a common carrier. Private or leased lines (including value-added networks or VANs) currently account for only a limited number of total circuits in use. However, on some routes they already comprise up to 15 per cent of capacity.

[39] Average annual growth rates based on volume data are very similar to those based on number of calls. Time series on the volume of traffic for 13 countries – including the United States, the Federal Republic of Germany, and Japan – also show an average annual growth rate of approximately 20 per cent. It is reasonable to conclude that statistics based on calls give a fairly accurate picture of both leading users of telecommunications services and average annual growth rates of total traffic.

Table 16
Outgoing international telephone calls for selected countries, 1979-88

(Millions and percentage)

	Number of calls		Average annual change
	1979	1988	1979-88
Major countries			
United States[a]	170	686	17
Germany, Fed. Rep.	217	600	12
United Kingdom	87	300[b]	15
Switzerland	72[b]	202	12
Italy	54	194	15
Canada	84	190	9
Netherlands	78	186	10
Belgium	57	144	11
Spain	45	135	13
Japan	10	129	33
Selected countries with high growth in the number of outgoing calls			
Thailand	0.2	12.6	58
China	1.2	45.3	50
Malaysia	0.5	11.1	43
Singapore	2.5	43.7	37
Saudi Arabia	4.0	68.8	37
Korea, Rep.	2.2	33.1	35
Hong Kong	5.3	70.2	33
Australia	6.3	85.1	29
Taiwan	6.5	50.8	26
Colombia	1.3	9.8	25

[a] Figures are likely to be substantially underestimated due to incomplete reporting.
[b] Estimates.
Sources: ITU (1990), *Yearbook of Public Telecommunications Statistics* and Siemens, *International Telephone Statistics*, 1983 and 1990.

communications traffic by major partner country for sixteen countries is given in Table 17. The Table is based on data covering those destinations in each of six regions which account for 70 to 80 per cent of the total volume of outgoing traffic of the sixteen countries. The Table demonstrates that many countries in the sample tend to communicate with other countries in the same region. Thus, West European countries talk predominantly to other European countries, and the same holds for the Asian and North American countries in the sample (with the exception of the United States). Intra-regional traffic accounts for almost 50 per cent of the total for the Asian countries in the sample, and for over 50 per cent for the European countries.

Very few of the sixteen countries, which include most of the major international telecommunications users, have significant «communications partners» in Latin America, the Middle East, or Africa. North America is relatively much more important for the Asian countries than it is for the European countries, especially if the United Kingdom is excluded (23 per cent as opposed to 8 per cent). It is also the most geographically diversified in terms of communications traffic of the six regions in the Table.

With declining real costs of information processing, storage and transmission, firms have an incentive to adopt over time more information-intensive design, manufacturing, marketing, and management structures. An example of this comes from the one-time technological back alley of the apparel industry:

> Apparel manufacturing now involves high-speed links between peoples of vastly different cultures and political systems, who interact through facsimile machines, computers and even high-definition television ... High-resolution computer images, integrated into private satellite transmission networks, now send fashion sketches between Far Eastern manufacturing centres and home offices in the United States.
>
> «Within 60 minutes of a customer order, we can send a visual representation of the style, shown on the store's favourite model, to Hong Kong», said [a United States executive]. «It comes out on ink-jet printers with a quality similar to a lithograph you might frame and put on your wall. And we can do it in about 16 million colours.»[40]

Perhaps it is no exaggeration to suggest that such new methods of organizing production can be expected to produce the kind of leap in productivity brought on by the introduction of the assembly line. Interacting teams of specialists in design, manufacturing, marketing, management and distribution, all located in least-cost venues, can pursue in a coordinated manner the objective of producing a product of high quality at a minimum cost. The declining importance of geographic distance brought on by advances in telecommunications and microelectronics makes this globalization of production possible. The opportunity for extending the gains from international specialization and division of labour are obvious.

In a discussion of the factors determining the pace of international economic integration, there is a strong complementarity between the subject

[40] *International Herald Tribune*, 15 May 1990, «For Apparel, New Look is Global».

Table 17
Destination of outgoing telecommunications traffic by major partner for selected countries, 1988

(Percentage distribution of minutes of traffic)

Origin \ Destination	Significant partners in							
	North America	Latin America	Asia	Western Europe	Middle East	Africa	n.e.s.	Total
United States	20.2	19.6[a]	11.5	19.8	1.4	*	27.5	100
Canada	74.2	1.5	1.8	10.1	0.4	*	12.0	100
Mexico	92.8	2.0	0.4	2.8	*	*	2.0	100
Australia	18.0	*	28.2	20.3	*	*	33.5	100
Japan	28.8	*	36.6	9.3	*	*	25.3	100
Hong Kong	15.0	*	54.0	5.9	*	*	25.2	100
Korea, Rep.	41.2	*	39.1	3.7	0.6	*	15.3	100
Singapore	13.0	*	58.2	6.8	*	*	22.1	100
Taiwan	29.0	*	56.6	3.3	*	*	11.2	100
Thailand	13.4	*	60.0	8.2	*	*	18.4	100
Switzerland	4.3	*	*	56.1	*	*	39.5	100
Netherlands	7.3	1.2	0.5	59.1	*	0.5	31.4	100
Italy	11.1	0.9	*	57.1	*	*	31.0	100
United Kingdom	25.7	*	4.2	35.8	*	1.4	32.9	100
France	7.9	0.4	0.6	50.5	1.0	8.1	31.6	100
Germany, Fed. Rep.	7.4	*	0.7	67.0	*	*	25.0	100
Total	**21.5**	**8.8**	**9.0**	**34.5**	**0.6**	**0.9**	**27.2**	**100**

[a] Of which 45 per cent to Mexico.
* No countries reported as a significant trading partner.
Source: G.C. Staple, «The Global Telecommunication Traffic Boom: A Quantitative Brief on Cross-Border Markets and Regulation», copyright 1990 by G.C. Staple and the International Institute of Communications, London; used with permission.

of foreign direct investment, and the examination of the impact of technological change on production, marketing and trade. Foreign direct investment, including cross border mergers and acquisitions, both responds to technology-induced changes in competitive advantage between markets, and is itself a mechanism for transferring technology between countries.

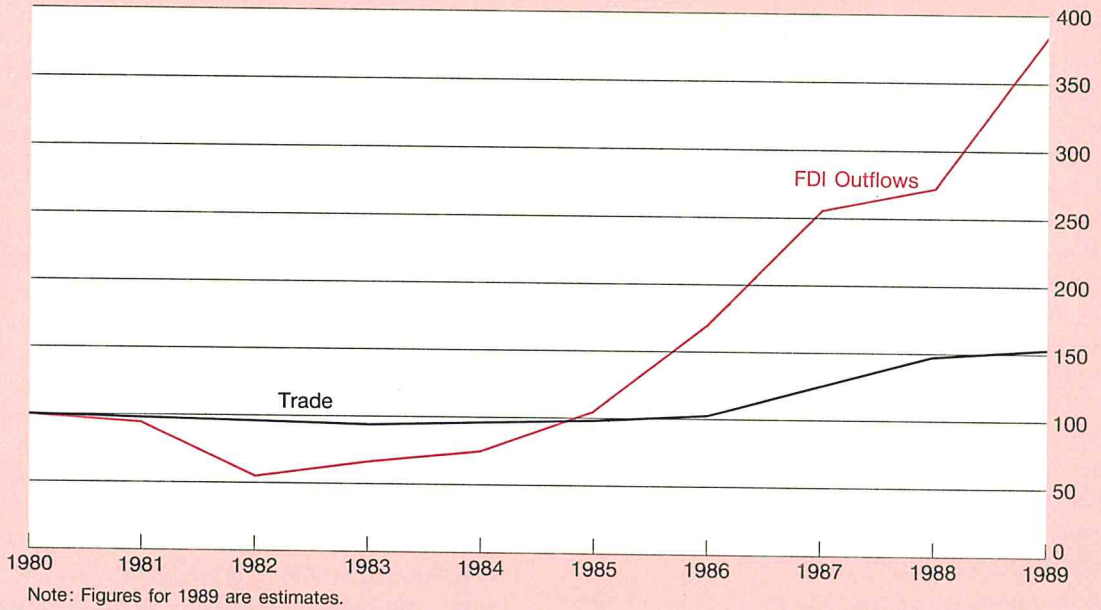
Foreign direct investment and global integration

Although there is nothing novel about the observation that important interlinkages exist between trade flows and foreign direct investment (FDI), the relationship took on added importance in the 1980s because of the accelerated growth of world FDI flows beginning in 1983. Chart 7 compares trends in world FDI flows and world merchandise exports in value terms over the period of 1980-89. During the slow growth and recession in the early 1980s, world FDI flows declined sharply. Between 1983 and 1989, in contrast, the value of world FDI flows expanded by an estimated average annual rate of 34 per cent, compared with an annual rate of growth of 9 per cent for world merchandise exports.

By the end of 1987 the world stock of outward FDI is estimated to have been more than one trillion dollars, nearly doubling in size since 1980. Although the 1989 figures are still fragmentary, preliminary estimates based on the eight major exporters of FDI indicate that the value of world FDI flows appears to have recovered from the sharp slowdown in 1988, expanding in value terms by some 40 per cent from $150 billion in 1988 to $215 billion in 1989.

Strong economic growth and institutional developments (including the deregulation and liberalization of financial markets in many countries), as well as a desire to avoid actual and potential trade barriers, were among the main factors behind the surge in FDI in the 1980s. Shifts in international competitiveness due to technological change – especially the reduction in the «economic» distance between countries – and the ongoing indus-

Chart 7
Developments in world FDI flows and merchandise trade, 1980-89
(Value index, 1980 = 100)



Note: Figures for 1989 are estimates.

trialization in many developing countries also played important rôles. Host governments, aware that FDI can be an important agent of change in the pattern of production and trade, have responded to the surge of FDI with an increased interest in the intentions of foreign investors regarding such issues as purchases of local inputs, the share of output sold abroad, the amount of research and development carried out in the foreign affiliate and transfers of technology from the home country.

The variety of possible motivations behind FDI draws attention to the point that increased FDI does not necessarily imply increased integration of national economies. To the extent that FDI is stimulated by such factors as shifts in comparative advantage, trade liberalization and the declining significance of national borders in firms' investment decisions, it does indicate increased economic integration. FDI which occurs in response to protectionist developments, in contrast, gives mixed signals – investment has become more global, but the share of world output which is traded is lower than it would be in the absence of the protectionist developments. Although progress in reducing the economic distance (natural barriers) between countries creates a fairly strong presumption that a large proportion of FDI falls into the former category, there are no definitive estimates of the relative importance of the two types of motivation for FDI.

Ten major source ('home') countries account for more than 90 per cent of the world stock of outward FDI, among which the United States is the world's largest home country of FDI, followed by the United Kingdom and Japan. Most of the leading home countries are also leading recipient ('host') countries of FDI, with the notable exception of Japan, in which inward FDI is very small. As for the geographic destination of FDI, the developing countries have declined in relative importance as host countries of FDI over the past decade. This reflects a sharp *absolute* decline in FDI inflows into the Middle East, and to a lesser extent, into Latin America. By contrast, FDI inflows into developing Asia and China have increased markedly over the past years, making this region the largest recipient of FDI among the

developing areas.[41] As is evident from statistics presented in earlier sections of this report, this was also the most dynamic area among the developing economies in terms of output and trade growth.

The impact of FDI on the pattern of world production and trade also depends in part on the sectors into which it flows. Appendix Table 6 shows the sectoral distribution of outward stocks of FDI for six leading home countries. The data reveal that the share of services in the outward stock of FDI has increased significantly over the past decade, whereas the mining and manufacturing sectors have lost in relative importance. Moreover, the relative shift in FDI from manufacturing to services is not just limited to FDI into the developed host countries. In the case of developing host countries too, the share of services rose sharply in the stock of outward FDI from the above leading home countries (with the exception of Canada).[42] This is partly due to increased investment in offshore banking and in 'flags of convenience' in developing countries.

From the perspective of the progressive globalization of economic activity, FDI raises a number of important questions. One, already mentioned, is the relative importance of the «comparative advantage» and «avoiding import barriers» motivations for FDI. Others include the relative importance of FDI among the different vehicles for international flows of technology, the importance of FDI in promoting exports from host countries, and the impact of FDI on the level of imports of goods and services into the host country from the home country. Unfortunately, the currently available empirical evidence, while often suggestive, does not provide convincing answers to these questions.

Conclusions

The preceding review of developments in production and trade in the 1980s revealed both a continuation of a number of fundamental trends in the world economy, and a considerable amount of change. Among the most important developments were:

- **The strong economic expansion from 1983 onward, when world merchandise trade and output grew at average annual rates of 6 per cent and 4 per cent, respectively.** For the most part, the strength of the expansion – particularly in trade – was centred in North America, Western Europe and Asia. The largest regional merchandise trade flows in 1989 – which also happened to be the fastest growing regional flows in the 1980s – involved trade between or within Western Europe, North America and Asia. Among the members of this group, several inter-regional trade flows were more dynamic than intra-regional trade – including in Western Europe, where the European Communities was undergoing a major enlargement. In the latter part of the century these three globally-oriented «growth centres» are not only producing four-fifths of the world's output of goods and services, but are the key sources of dynamism for the world economy.
- **Generally depressed prices and trade volumes of primary commodities, particularly fuels.** This had important effects on the product composition and geographic pattern of world trade. These developments, plus the strong growth in the value of manufactured exports over the decade, combined to boost the share of manufactures in world trade from just over 45 per cent to 57 per cent. Exports of travel (tourism) services, and of the group of services which includes telecommunications, banking, non-merchandise insurance, and other professional services, also expanded at above average rates.

In addition to these broad economic trends, there were important developments that reflect even more explicitly the capacity for growth and the degree of flexibility which exists in world markets:

- **The substantial increase in the share of production traded.** Stimulated by technological innovations which continued to reduce the economic distance between countries, trade expanded in real terms 50 per cent faster than output during 1983-89, with the margin of excess increasing as the expansion continued and higher on average than in the last decade. This is

[41] In its 1990 annual report, the International Finance Corporation notes that Mexico, Singapore and Thailand were the leading developing country recipients of FDI in 1989. Among other developing countries, those reporting increased amounts of FDI last year included Chile, Indonesia and Turkey.

[42] In the case of Canadian FDI in developing countries, the extraction sector became more important than the services sector in the 1980s (UNCTC (1988), *Transnational Corporations in World Development: Trends and Prospects)*.

unmistakable evidence of the relative openness of markets and of the ongoing integration of the world economy.

- **Considerable changes in the rankings of the twenty-five leading merchandise traders.** Nearly half of the 25 leading merchandise exporters in 1989, for example, had moved up 3 ranks or more since 1979, with six moving up 10 ranks or more. The rankings were, of course, influenced by the poor export performance of many of the larger petroleum producers during the years 1981-88, only a small part of which was recovered by the increase in earnings last year. But the extent to which newcomers, on the basis of strong export growth, have been able to move up the trade ladder in just one decade is an indication of the relative openness of markets. It also points to the importance of the most-favoured-nation principle in generalizing the benefits of trade liberalization and promoting world trade.
- **Marked changes in the product composition of countries' exports.** This testifies to the opportunities for adjusting to changing circumstances which the world market offers to countries. Among the merchandise exports from the developed countries, an average of 11 product groups – nearly one in six – dropped off the list of principal exports and 11 new groups took their place. Thus 22 product groups were involved in the changing composition of exports in the 1980s, even though the number of principal product groups remained constant (at 72). For the developing countries, the proportion of new product groups in their 1988 exports was even larger, ranging from double to triple the 15 per cent average for developed countries – a development which in some cases appears to be linked to increased inflows of foreign direct investment.
- **Numerous changes in the geographic pattern of world trade, as some markets declined and others gained in importance.** Eight markets (one in five) disappeared from the typical developed country's list of principal export markets, and four new ones were added. This meant that on average 12 important trading partners were involved in the decline from 40 to 36 principal export markets. Less comprehensive data for developing countries indicate an even larger degree of change in their lists of principal export markets, as they, in contrast to most developed countries, increased the number of important destinations.

Much has been written about the growing number of problems and challenges confronting the trading system. Yet it is clear that the flexibility of trading opportunities under the current rules and disciplines, which allowed important shifts to occur in the product composition and destinations of countries' exports of goods and services in response to changing market conditions in the 1980s, would have been much smaller in the absence of a multilateral trading system. An awareness of this capacity of the system – and of the likelihood that future technological advances, plus the shift to more market-oriented policies in a number of developing and formerly centrally planned economies, will contribute to even more rapid changes in market conditions in the future – lie behind the efforts of more than one hundred participants in the Uruguay Round to not only increase market access, but also strengthen the rules and disciplines.

In addition to this overall motivation, the developments reviewed above explain many of the specifics of the Round's agenda. To take just five examples: many developing countries are especially interested in the traditional market access issues at a time when manufactures account for a growing share of their foreign exchange earnings, and their share of world exports of manufactures has been steadily rising; great importance is being attached to progress in the negotiations on agriculture by a broad cross-section of countries, including many lower income countries where the agricultural sector is a vastly more important part of the national economy than in the high income countries; as the ongoing integration stimulates foreign direct investment, the countries which account for large shares of world FDI attach a high priority to developing multilateral disciplines on trade-related conditions often applied to FDI; as new technology has come to play a larger rôle in economic life, the question of foreign practices concerning the protection of property rights in marketable knowledge (such as computer software, pharmaceutical formulas and genetically engineered products) has become an important feature of international commercial relations; and, the continuing rise in the share of service activities in nearly every economy's GDP, and the growing importance of a variety of services in world trade

led to agreement to begin writing a set of multilateral rules and disciplines for trade-related policies in the services area.

An approach to economic growth and structural adjustment in which a multilateral, rule-based trading system plays a central rôle reflects a belief – amply supported by experience – that competition is the best path to rising living standards. This is reflected at the individual country level in a policy approach which recognizes that the less competition is distorted, the greater are the opportunities for adjustments that lead to economic growth. Within this policy framework, the task of fiscal and monetary policies is to maintain overall balance in the economy (for example, price level stability and a sustainable current account balance), thereby assuring an environment in which adjustments at the level of individual producers can take place relatively smoothly. At the same time, even under a system which emphasizes the importance of competition, it is necessary to recognize that countries may have certain domestic policy objectives which they wish to advance, or that situations may arise in which a government believes it is essential to intervene for the purpose of making the adjustment process less disruptive. The rules of the multilateral trading system, for the most part, provide options for countries in such situations.

As the integration of the world economy progresses, however, and the significance of national frontiers for economic decision-making declines, it is becoming more difficult to maintain the distinction between «purely domestic issues» and issues stemming from a country's participation in world markets for goods, services and capital. To put it somewhat differently, ongoing global integration means that countries are effectively living closer together, which in turn means they are increasingly exposed to – and therefore sensitive to – the domestic goals and policies of their trading partners.

The reduction in the economic distance between countries brought on by advances in telecommunications and microelectronics technologies need not always spell further advances in the integration of markets. Heightened foreign competition can mobilize import-competing interest groups who oppose it. In other words, the technological advances that have introduced powerful trade-expanding forces into the world economy may have the concomitant effect of stimulating and enhancing protectionist forces (the rise of European agricultural protectionism in the latter part of the 19th century corresponded closely to the completion of rail networks in Europe and North America and the introduction of iron cargo ships, both of which reduced the prices of wheat and other temperate zone agricultural products). This explains why the growing importance of trade in national economies and the pace of integration have stimulated efforts to ensure that government intervention in the adjustment process is genuinely short-term, and that it occurs only in well-defined and multilaterally sanctioned circumstances. Progress in these efforts will not only reduce distortions to competition, but also reduce the extent to which discretionary government policies are themselves a source of added uncertainty for firms, investors and consumers.

In an interdependent world, governments recognize that spillover effects are a two-way street – that they are compelled to take into account the effects of domestic policies on trading partners or risk becoming in turn the unintended (or intended) victim of policies introduced abroad. This is one reason why the rules of the multilateral trading system are of increasing importance in fostering a code of conduct in international economic relations. But, in launching the Uruguay Round, countries also recognized the importance of strengthening and renewing the multilateral trading system to assist governments in combating domestic protectionist pressures. That process has already resulted in a new surveillance activity – GATT's Trade Policy Review Mechanism – as well as enhanced procedures for dispute settlement.

Taken as a whole, the results of the Uruguay Round are expected to create a stronger basis for the world economy in the 1990s. The new decade promises to be one marked as distinctively as the 1980s by technological change and other pressures for adjustment. Indeed, while this report has briefly sketched some of the more important developments currently shaping the world economy, the future undoubtedly holds many others which cannot be anticipated. A multilateral trading system that facilitates adjustment to change through strengthened disciplines and meaningful commitments to rules reduces uncertainty, smooths the adjustment process and enhances the stimulus to economic growth from constant innovation.

Appendix
Technical notes

This Appendix covers definitions, methods and sources used in Volume I of *International Trade 1989-90*.

1. Composition of country groups

A. Country composition of the major country groups

Developed countries: North America, Western Europe, Japan, Australia, New Zealand and South Africa.

Developing economies: Latin America, Africa (excluding South Africa), Middle East and Asia (excluding Japan, Australia, New Zealand, China and other centrally planned economies in Asia).

Eastern trading area: Central and Eastern Europe and the USSR, China and other centrally planned economies in Asia.

For the purposes of this Report and for reasons of convenience, Western Europe as a whole is included in the group of the developed countries even though certain countries in that region have not reached an advanced stage of economic development.

B. Regions

North America: United States of America, Canada and other territories in North America n.e.s.

Latin America: Argentina, Bahamas, Barbados, Bermuda, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay, Venezuela and other countries and territories in Latin America n.e.s.

Western Europe: Austria, Belgium, Denmark, Federal Republic of Germany, Gibraltar, Finland, France, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, Yugoslavia, and other countries and territories in Western Europe n.e.s.

Central/Eastern Europe/USSR: Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania and the USSR.

Africa: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Côte d'Ivoire, Egypt, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Lesotho, Liberia, Libyan Arab Jamahiriya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Niger, Nigeria, Reunion, Rwanda, Sao Tome and Principe, Senegal,Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Togo, Tunisia, Uganda, United Republic of Tanzania, Zaire, Zambia, Zimbabwe and other countries and territories in Africa n.e.s.

Middle East: Bahrain, Cyprus, Iraq, Islamic Republic of Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates, Arab Republic of Yemen, Democratic Yemen, and other countries and territories in the Middle East n.e.s.

Asia: Afghanistan, Australia, Bangladesh, Bhutan, Brunei Darussalam, China, Democratic Kampuchea, Democratic People's Republic of Korea, Fiji, French Polynesia, Hong Kong, India, Indonesia, Japan, Kiribati, Lao People's Democratic Republic, Macau, Malaysia, Maldives, Mongolia, Nepal, New Caledonia, New Zealand, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Singapore, Solomon Islands, Sri Lanka, Taiwan, Thailand, Tonga, Tuvalu, Union of Myanmar, Vanuatu, Viet Nam and other countries and territories in Asia and the Pacific n.e.s.

C. Other country groups

ASEAN: Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand.

European Communities (EC): Belgium, Denmark, Federal Republic of Germany, France, Greece, Ireland, Italy, Luxembourg, Nether-

lands, Portugal, Spain, United Kingdom, (references to EC(10) exclude Portugal and Spain).

European Free Trade Association (EFTA): Austria, Finland, Iceland, Norway, Sweden, Switzerland.

Highly indebted countries: Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, Yugoslavia.

Least developed countries: Afghanistan, Bangladesh, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Malawi, Maldives, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Sierra Leone, Somalia, Sudan, Togo, Tuvalu, Uganda, Union of Myanmar, United Republic of Tanzania, Vanuatu, Arab Republic of Yemen, Democratic Yemen.

The designations used in this Report do not imply an expression of opinion by the Secretariat concerning either the status of any country, territory or area, or the delimitation of its frontiers.

2. Methods and definitions for merchandise trade

All product groups are defined in Revision 3 of the Standard International Trade Classification (SITC) introduced in 1988. Product data for earlier years reported in Revision 2 have been adjusted to the extent possible to make them comparable with more recent figures.

Unless otherwise stated, imports are the combined total of merchandise imports c.i.f. for domestic consumption and withdrawals of goods from bonded warehouses or free trade zones for domestic consumption. Unless otherwise stated, exports are the combined total of shipments of merchandise wholly or partly produced in the country and nationalized goods (re-exports of goods already included in imports as defined above).

A. Major product groups

Agricultural products: food and raw materials (SITC sections 0, 1, 2, 4 minus divisions 27, 28). Production in agriculture is defined as division 1 of the International Standard Industrial Classification (ISIC).

Mining products: ores and other minerals, fuels and non-ferrous metals (SITC section 3 and divisions 27, 28, 68). Production in the mining sector is defined as ISIC division 2.

Manufactures: manufactures (SITC sections 5, 6, 7, 8, minus division 68). Production in the manufacturing sector is defined as ISIC division 3.

B. Product groups

Food: food and live animals; beverages and tobacco; animal and vegetable oils, fats and waxes; oilseeds and oleaginous fruit (SITC sections 0, 1, 4 and division 22).

Raw materials: hides, skins and furskins, raw; crude rubber (including synthetic and reclaimed); cork and wood; pulp and waste paper; textile fibres and their wastes; crude animal and vegetable materials, n.e.s. (SITC divisions 21, 23, 24, 25, 26, 29).

Ores and other minerals: crude fertilizers (other than those classified in chemicals) and crude minerals; metalliferous ores and metal scrap (SITC divisions 27, 28).

Fuels: fuels (SITC section 3).

Non-ferrous metals: non-ferrous metals (SITC division 68).

Primary products: food; raw materials; ores; minerals; non-ferrous metals; fuels (SITC sections 0, 1, 2, 3, 4 and division 68).

Iron and steel: iron and steel (SITC division 67).

Chemicals: chemicals (SITC section 5).

Other semi-manufactures: leather, leather manufactures, n.e.s. and dressed furskins; rubber manufactures, n.e.s.; cork and wood manufactures (excluding furniture); paper, paperboard and articles of paper pulp, of paper or of paperboard; non-metallic mineral manufactures, n.e.s.; manufactures of metals, n.e.s. (SITC divisions 61, 62, 63, 64, 66, 69).

Machinery and transport equipment: power generating machinery; other non-electrical machinery; office machines and telecommunications equipment; electrical machinery and apparatus; automotive products; other transport equipment (SITC section 7).

Power generating machinery: power generating machinery and equipment minus internal combustion piston engines, and parts thereof, n.e.s. (SITC division 71 minus group 713).

Other non-electrical machinery: machinery specialized for particular industries; metalworking machinery; general industrial machinery and equipment, n.e.s., and machine parts, n.e.s. (SITC divisions 72, 73, 74).

Office machines and telecommunications equipment: office machines and automatic data processing machines; telecommunications and sound recording and reproducing apparatus and equipment; thermionic, cold cathode or photo-cathode valves and tubes (SITC divisions 75, 76 and group 776).

Electrical machinery and apparatus: electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof; minus thermionic, cold cathode or photo-cathode valves and tubes; minus electrical equipment, n.e.s., for internal combustion engines and vehicles, and parts thereof (SITC division 77 minus group 776 and minus subgroup 7783).

Automotive products: motor cars and other motor vehicles principally designed for the transport of persons (other than public transport type vehicles) including station wagons and racing cars; motor vehicles for the transport of goods and special purpose motor vehicles; road motor vehicles, n.e.s.; parts and accessories of motor vehicles and tractors; internal combustion piston engines for vehicles listed above; electrical equipment, n.e.s., for internal combustion engines and vehicles, and parts thereof (SITC groups 781, 782, 783, 784, and subgroups 7132, 7783).

Other transport equipment: other transport equipment (railway vehicles, aircraft, spacecraft, ships and boats, and associated parts and equipment); motorcycles and cycles, motorized and non-motorized; trailers and semi-trailers, other vehicles (not mechanically propelled), and specially designed and equipped transport containers; internal combustion piston engines for aircraft, and parts thereof n.e.s.; internal combustion piston engines, marine propulsion; internal combustion piston engines, n.e.s.; parts, n.e.s., for internal combustion piston engines listed above (SITC division 79, groups 785, 786, and subgroups 7131, 7133, 7138, 7139).

Textiles: textiles (SITC division 65).

Clothing: clothing (SITC division 84).

Other consumer goods: miscellaneous manufactured articles minus clothing and minus arms and ammunition (SITC section 8 minus division 84 and minus group 891).

Manufactures: iron and steel; chemicals; other semi-manufactures; machinery and transport equipment; textiles; clothing; other consumer goods (SITC sections 5, 6, 7, 8 minus division 68).

Other: commodities and transactions not classified elsewhere (including gold); arms and ammunition (SITC section 9 and group 891).

3. Methods and definitions for trade in commercial services

The statistics on international service transactions are compiled by the International Monetary Fund using a classification system recommended in its *Balance of Payments Manual* (1977). There is no international agreement on the definition of traded services. The following definitions are used throughout this report.

Commercial services: transportation, travel, other private services and income.

Transportation: shipment (freight, insurance and other distributive services); passenger services (passenger fares and related payments); port services, etc. (goods and services procured by carriers at port, and fees for charters of carriers).

Travel: goods and services (other than passenger services) acquired by travellers, defined as persons staying for less than one year in an economy of which they are not a resident.

Other private services and income: other private services, n.i.e. (communications, including telecommunications, advertising, non-merchandise insurance, brokerage and banking services, management, leasing, subscriptions to periodicals, processing and repair, merchanting, and professional and technical services); labour income, n.i.e. (wages and salaries earned by persons in an economy other than the one in which they reside by working for a resident of that economy); property income, n.i.e. (royalties and licence fees).

At the present time the only source of internationally comparable information on inter-

national service transactions is balance of payments statistics. For merchandise transactions, customs data are preferred to balance of payments data because in principle they capture all cross-border movements of merchandise, including exchanges involving parents and affiliates of multinational corporations where no associated payment takes place. In the case of non-merchandise current account transactions, there is no equivalent of customs data, as for the most part services and other non-merchandise transactions are not registered at the border because the exchanges are physically unobservable. Countries estimate the value of such transactions using either central banks' records of foreign exchange transactions, surveys of establishments, or both.

There is wide agreement that recorded figures on trade in services are biased downward for five principal reasons. First, with the exception of Hong Kong and Taiwan, comparable data on trade in services is not publicly available for certain important economies that are not members of the IMF. Second, some countries do not report statistics on specific service items. Examples include Greece and Indonesia for maritime transport of freight. Third, many services transactions simply are not registered. If central bank records are used, this is often the case if no financial intermediaries are employed. In the case of surveys, the coverage of trading establishments is often incomplete. A particularly serious problem is that services transmitted electronically are frequently unregistered, especially when the transactions are between affiliates and parent multinational firms. More generally, capturing affiliate-parent trade is very difficult, as often there will be no associated payment flow. Fourth, statistics may be reported on a net (exports minus imports) rather than a gross basis. A final source of downward bias is the misclassification of transactions. Transactions may be registered as factor income, remittances (transfers) or trade in merchandise rather than as trade in services.

The downward bias in the value figures caused by these various shortcomings in the data is hard to determine, in part because there are also instances where the value of reported trade in services is biased upward. Examples include merchanting and professional services. The former may include the value of the merchandise, while the latter may include operating and fixed costs instead of being confined to sales. It should also be kept in mind that expenditures recorded as travel and port services will in part be straightforward purchases of merchandise.

Despite these sources of upward bias, there is no doubt that statistics for broad categories of commercial services are subject to a significant overall downward bias. It is impossible to determine the extent to which the available statistics underestimate the actual level of trade in services.

4. General points

The *average annual percentage change* is the compound interest rate between two data points. Data for the base and end years are collected at the end of the stated calender year.

Commodity price movements are primarily described by indices based on spot markets. Price indices for commodities in food, beverages, agricultural raw materials, and metals (including minerals), as well as price indices for these aggregates are obtained from IMF, *International Financial Statistics*. Price indices for primary commodities and for non-ferrous metals are obtained from UNSO, *Monthly Bulletin of Statistics*. The dollar price of crude petroleum is the average import price for OECD countries reported in OECD, *Economic Outlook*.

The export unit value (average price) index for manufactures is a weighted average of national unit value indices (converted to dollars) for the major exporters and importers of manufactures. Weights are shares in world trade in manufactures for the previous year. This method of weighting has recently been adopted in order for the indices to more accurately reflect rapid change in the country and product composition of trade in manufactures.

The export unit value index for mining products is a weighted index of prices for major exporters and importers of crude petroleum, refined petroleum, natural gas and non-ferrous metals. Weights are trade values for the previous year, a method of weighting that more accurately reflects commodity price fluctuations. When data on export unit values are not available, spot market prices are used. A similar method is used to obtain an export unit value index for agricultural products.

A *volume* index for each major product group – mining and agricultural products, manufactures – is obtained by deflating its estimated world trade value by the relevant export unit value.

A volume index for each major country group – developed countries, developing economies, the Eastern trading area – is obtained by deflating its estimated exports by the relevant export unit value. Where possible, countries' export unit values are converted to dollars; in other cases, export unit values are estimated from the product composition of trade. Export unit values are weighted by each country's share of the major country group's exports for the previous year.

A volume index for world merchandise trade is obtained by weighting volume indices for major country groups by their shares in world trade for the previous year.

Indices for world production in agriculture, mining and manufacturing are estimated by combining indicators obtained from various national sources, and specialized publications. An index of agricultural production is obtained from FAO, *Monthly Bulletin of Agricultural Economics and Statistics*. Production indices for mining and manufacturing are obtained from various UNSO, IMF and OECD publications.

World commodity output is a weighted average of production indices for agriculture, mining and manufacturing. Weights are shares in 1980 value added converted to dollars at official exchange rates.

The gross domestic product (GDP) for an economy is the total value of goods and services produced. GDP figures for regions are estimated from constituent country data, converted at official exchange rates. Real GDP for an economy is nominal GDP deflated by a price index based in 1980. World real GDP is estimated as a weighted average of real GDP figures for countries, where weights are country shares in world nominal GDP for 1980. The main source for these data is the World Bank. Other sources for country data include UNSO, *National Accounts Statistics*, and IMF, *International Financial Statistics*. For Central and East European countries, and the USSR, data are obtained from the United Nation's ECE, *Economic Survey of Europe*.

5. Measures of changes in the product and geographical composition of trade

A country's product composition is the number of «principal» products in imports of developed countries from the country in question. This data set was chosen because it is the only internationally comparable data on the product composition of exports which covers most merchandise traders (133 countries). A product is defined as a three-digit category of the SITC of which there are 233 in Revision 2. A product is a «principal» one if the level of trade in that product is at least one-quarter of one per cent (.25%) of developed countries' imports from the country in question for the given year. Between the base and end years, «lost» products are those for which trade is no longer significant in the end year, even though there may continue to be trade in that product. Conversely, «new» products are those that are not significant in the base year, but are significant in the end year.

A similar method is applied to measures of a country's geographical pattern of trade. The data set, however, consists of all countries reporting relatively recent export and import data to the Comtrade database. These 39 countries are a much smaller group than that covered by the measure of product composition. While the measure treats large and small countries in the same fashion, countries with lower levels of trade are less likely to be significant trading partners of countries with much higher levels of trade, while the converse is not true.

6. Definition and measurement of foreign direct investment (FDI)

The statistics on foreign direct investment are compiled by the International Monetary Fund using a classification system recommended in its *Balance of Payments Manual* (1977). Foreign direct investment (FDI) «is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investor, the investor's purpose being to have an effective voice in the management of the enterprise» (p.136).

At the present time the only source of internationally comparable information on FDI is balance of payments statistics, based on central banks' records of foreign exchange transactions or

surveys. There are, however, various sources of measurement error. First, the demarcation line between FDI and portfolio investment is often hard to establish, because the former involves the pursuit of «an effective voice in the management of the enterprise» while the latter does not, even though both may involve a financial transaction of identical nature (for example, the purchase of voting shares). While any rule is arbitrary, countries have adopted a practice of identifying FDI by a minimum percentage of equity ownership, typically from 25 per cent to 10 per cent for single or associated foreign investors. In this regard, the shift from portfolio investment to FDI through incremental purchases of equity may not be captured.

Second, country practices differ in the treatment of reinvested earnings. The United States, the Federal Republic of Germany and the United Kingdom report reinvested earnings in FDI statistics, but France and Japan do not. Because the level of reinvested earnings is pro-cyclical, rising in the course of a economic expansion, cross-country comparisons of trends in FDI are affected. As with all value data, another factor in cross-country comparisons of trends are exchange rate fluctuations.

For a variety of reasons, stocks of FDI are particularly difficult to estimate. The standard practice applied by most countries is to simply sum annual data on flows to obtain a total. Comparability across countries is adversely affected by differences in practices on the compilation of these data. A more serious problem is that these data are based on the *book* value of the underlying assets – the original purchase price of the transaction – with possible adjustments for the effect of exchange rate changes. This data does not represent the current market value of these assets which is generally higher. It is not, however, possible to estimate the market value of several forms of FDI, and in particular the current value of fully owned foreign affiliates of multinational corporations. As a result, data on stocks of FDI are likely to substantially undervalue assets held abroad, with the exception of investments of more recent vintage.

More generally, balance of payments statistics on FDI do not give a complete picture of the economic role of foreign investment in the host country. Cross-border business activities, such as the licensing of technology and management expertise, which may form an integral part of the investment package are not captured in these data.

7. Sources

Most frequently used sources for data are

ADB, *Key Indicators of Developing Member Countries of ADB*
ECE, *Economic Survey of Europe*
Eurostat, *External Trade*
FAO, *Production Yearbook*
FAO, *Trade Yearbook*
IMF, *Balance of Payments Yearbook*
IMF, *International Financial Statistics*
OECD, *Main Economic Indicators*
OECD, *Statistics of Foreign Trade*
OECD, *National Accounts*
UNSO, *Comtrade database*
UNSO, *International Trade Statistics Yearbook*
UNSO, *Monthly Bulletin of Statistics*

These sources are supplemented by national publications.

In addition to the IMF's balance of payments statistics, data on services are obtained from the International Labour Office, International Telecommunications Union, Eurostat, the OECD, the World Bank, the United Nations Centre for Transnational Corporations (UNCTC), the UNSO and UNCTAD.

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Appendix tables

Appendix Table 1
Trade of developed countries with Central and Eastern Europe and the USSR, 1989

(Million dollars)

	A. IMPORTS FROM								
	World	USSR	Central/Eastern Europe						
			Total	Bulgaria	Czecho-slovakia	German Dem.Rep.	Hungary	Poland	Romania
Developed countries	2219154	25180	21871	802	4067	2870	4448	6011	3673
Western Europe	1361320	21257	19207	674	3743	2582	3882	5355	2971
EC	1165602	16533	15154	597	2829	1763	2887	4301	2777
Other	195718	4724	4053	77	914	819	995	1054	194
United States	493006	782	1190	67	95	158	361	423	86
Canada	113966	99	604	10	59	34	38	75	388
Japan	210847	3005	738	45	130	83	148	130	202
	B. EXPORTS TO								
	World	USSR	Central/Eastern Europe						
			Total	Bulgaria	Czecho-slovakia	German Dem.Rep.	Hungary	Poland	Romania
Developed countries	2108465	27770	20808	2372	3562	3070	4584	6054	1169
Western Europe	1316974	19027	18635	2009	3389	2767	4347	5289	834
EC	1129653	13642	14212	1606	2571	1753	3250	4280	752
Other	187321	5385	4423	403	818	1014	1097	1009	82
United States	363634	4271	1021	181	54	94	122	414	156
Canada	116003	581	181	11	12	85	6	32	35
Japan	275175	3082	673	164	56	195	108	200	50

Note: Figures for developed countries, (EC (12), EFTA (6), North America and developed Asia) do not include trade between the Federal Republic of Germany and the German Democratic Republic.

Appendix Table 2
Trends in prices of selected primary products, 1970-89

(Index, 1980=100)

			Peak	
	1970	1989	Value	Year
Food	38	89	100	1980
Wheat	36	98	104	1974
Maize	46	89	108	1983
Rice	33	74	125	1974
Beef	47	93	105	1979
Oilseeds and oils	43	83	111	1984
Oil cake	40	95	100	1980
Fish meal	39	81	100	1980
Sugar	19	65	100	1980
Bananas	44	146	146	1989
Beverages	32	61	149	1977
Coffee	31	61	152	1977
Cocoa	26	48	146	1977
Tea	49	90	155	1984
Agricultural raw materials	30	113	113	1989
Cotton	32	95	100	1980
Wool	31	131	159	1988
Rubber	29	68	100	1980
Hides and skins	28	196	196	1989
Logs	23	115	119	1988
Minerals and metals	45	119	119	1989
Crude petroleum	5	59	101	1981
Manufactures	*34*	*120*	*121*	*1988*

Note: All indices are based on United States dollar prices.

Appendix Table 3
Shares of the regions in world exports, 1980 and 1988

(Percentage based on *value* data)

	North America		Latin America		Western Europe		Central/ Eastern Europe/ USSR		Africa		Middle East		Asia	
	1980	1988	1980	1988	1980	1988	1980	1988	1980	1988	1980	1988	1980	1988
Merchandise	14	15	6	4	40	44	8	8	6	3	10	3	16	23
Commercial services*	12	17	5	4	62	55	...	...	4	3	3	2	13	18
Agricultural products	22	20	11	10	35	41	6	5	6	4	1	1	19	19
Mining products	7	10	10	10	17	24	8	17	14	10	35	18	9	11
Manufactures	16	14	2	2	54	49	7	6	1	1	1	1	19	27
Transportation*	11	16	5	4	58	52	...	...	5	4	3	2	18	22
Travel*	14	19	8	6	60	53	...	...	4	3	4	2	10	17
Other private services and income*	10	17	4	4	69	59	...	...	3	2	2	2	11	16

* Excludes Central/Eastern Europe/USSR.

Notes: 1. The commercial services figures used in preparing this table do not include the adjustment for the discrepancy in the shipment data (see note to Table 1).

2. In 1981, 1984 and 1986-88, the United States improved its survey methods for trade in commercial services, which led to upward revision in the totals for each category.

Appendix Table 4
Product composition of merchandise trade by region, 1980 and 1988

(Percentage share based on *value* data)

	Exports			Imports (f.o.b.)	
	1980	1988		1980	1988
North America					
	23	18	Agricultural products	10	7
	13	9	Mining products	35	11
	59	66	Manufactures	52	78
Latin America					
	31	31	Agricultural products	12	12
	50	28	Mining products	28	16
	18	39	Manufactures	58	69
Western Europe					
	13	12	Agricultural products	15	14
	12	7	Mining products	28	11
	73	79	Manufactures	55	73
Central/Eastern Europe/USSR					
	11	9	Agricultural products	20	14
	31	28	Mining products	18	20
	51	55	Manufactures	59	65
Africa					
	14	20	Agricultural products	17	17
	67	50	Mining products	10	8
	7	18	Manufactures	72	71
Middle East					
	1	4	Agricultural products	16	17
	93	78	Mining products	9	5
	5	18	Manufactures	73	74
Asia					
	18	11	Agricultural products	18	16
	15	6	Mining products	37	16
	65	81	Manufactures	44	64

Note: Shares do not add up to 100 because of exports and imports of products n.e.s.

Appendix Table 5
Product composition of trade in commercial services by region, 1980 and 1988

(Percentage share based on *value* data)

	Exports			Imports	
	1980	1988		1980	1988
North America					
	37	27	Transportation	43	32
	32	35	Travel	37	45
	31	38	O.P.S.	20	24
Latin America					
	32	25	Transportation	45	41
	41	44	Travel	33	32
	27	33	O.P.S.	22	31
Western Europe					
	35	28	Transportation	37	31
	25	30	Travel	26	30
	40	42	O.P.S.	36	39
Africa					
	47	38	Transportation	48	49
	26	35	Travel	15	19
	27	31	O.P.S.	36	34
Middle East					
	39	27	Transportation	51	32
	35	28	Travel	29	21
	26	45	O.P.S.	20	47
Asia					
	50	34	Transportation	54	37
	19	30	Travel	16	30
	30	35	O.P.S.	30	35

Note: O.P.S. refers to «other private services and income».

Appendix Table 6
Sectoral distribution of outward stock of FDI in selected countries, 1975, 1985 and 1988

(Percentage)

	Extractive			Manufacturing			Services[a]			Other		
Home country	1975	1985	1988	1975	1985	1988	1975	1985	1988	1975	1985	1988
Canada (1987)	21	19	13	51	46	43	28	35	44	–	–	–
Germany, Fed. Rep. (1976)	4	4	2	48	43	43	42	48	48	6	5	7
Japan	28	16	8	32	29	27	36	52	62	4	3	3
Netherlands (1984)[b]	46	55	...	39	22	...	15	22	...	0	0	...
United Kingdom (1974 and 1984)[c]	11	33	...	60	32	...	29	35	...	–	–	...
United States	26	23	18	45	38	41	24	34	36	5	5	5

[a] For Canada, the Federal Republic of Germany, and the United Kingdom, agriculture is included in services.
[b] The extractive sector includes chemicals in addition to mining.
[c] For 1974, oil companies, banks and insurance companies are excluded.
Source: UNCTC (1988) and national sources.

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