GATT International Trade 87-88

General Agreement on Tariffs and Trade

Volume I

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(June 1988)

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International Trade 87-88

Volume I

General Agreement on Tariffs and Trade

Geneva 1988

From this year the GATT Secretariat is revising the content and schedule of its annual report on world trade. *International Trade 1987/88* will appear in two volumes. Volume II will be devoted primarily to statistical tables and charts. 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 50 Swiss francs.

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See Volume II for notes on definitions and methodology, and detailed sources for the data in the tables and charts.

Abbreviations and symbols

BLEU:	Belgium-Luxembourg Economic Union
CMEA:	Council for Mutual Economic Assistance
ECE:	Economic Commission for Europe
ECLAC:	Economic Commission for Latin America and the Caribbean
ECU:	European Currency Unit
EEC, EC:	European Economic Community, European Communities
EFTA:	European Free Trade Association
ESCAP:	Economic and Social Commission for Asia and the Pacific
FAO:	Food and Agriculture Organisation of the United Nations
GDP:	Gross Domestic Product
GNP:	Gross National Product
IMF:	International Monetary Fund
LAIA:	Latin American Integration Association
OECD:	Organisation for Economic Co-operation and Development
OPEC:	Organization of Petroleum Exporting Countries
SDRs:	Special Drawing Rights
SITC:	Standard International Trade Classification
UNCTAD:	United Nations Conference on Trade and Development

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

The following symbols have been used throughout this publication:

...	not available
0	nil or negligible
-	not applicable
( )	provisional figure, subject to revision
$	United States dollars
Q1, Q2 ...	1st quarter, 2nd quarter
I, II ...	1st half-year, 2nd half-year
1978/79	crop or fiscal year

Unless stated otherwise, the values are expressed in US dollars and the metric system is used throughout. Billion means one thousand million. Statistics for the last year given have to be considered as provisional.

Unless otherwise indicated, all trade figures for groups of countries include intra-trade.

10 September 1988
Closing Date

The report in brief

The merchandise trade developments reviewed in the first section of this report are generally encouraging. Over the past eighteen months the expansion of trade has been well above the average thus far in the 1980s, and it seems likely that the figure for 1988 as a whole will surpass the 5 per cent trade volume growth recorded in 1987.

An estimated 5½ per cent rise in the volume of exports of ***manufactures*** *last year returned this sector to its traditional rôle as the most dynamic category of merchandise trade. While agricultural output declined for the first time since 1950, the volume of trade in* ***agricultural products*** *increased by 4½ per cent, its best performance since 1981. Trade in* ***mining products*** *was up 1 per cent.*

Among the other factual developments highlighted in the first section are:

- *Led by a continued strong expansion of trade in manufactures, the* ***value*** *of world merchandise exports increased in 1987 by an estimated 17 per cent to a record $2,490 billion.*

- *The fast growing sectors of world trade during 1987 included electronic products and chemicals, which accounted for 12 per cent and 13½ per cent, respectively, of world trade in manufactures.*

- *Manufactured imports into developed countries continued to expand rapidly, with those countries purchasing more than 70 per cent of world imports of manufactures. But several developing economies were also strong importers.*

- *In the first months of 1988, the merchandise trade deficit of the United States began to decline, the merchandise trade surplus of the Federal Republic of Germany showed little change and the surplus of Japan decreased.*

- *Merchandise exports from 15 heavily indebted developing countries, which had dropped below $100 billion in 1986, rose an estimated 10 per cent in 1987. Their combined imports, roughly stable in the period 1984–1986, increased by an estimated 7 per cent. As a result, their merchandise trade surplus widened modestly to about $20 billion.*

- *For the period 1982–87, 26 out of 32 economies showing rapid export growth also showed rapid import growth, lending further support to the claim that dynamic exporters tend to be dynamic importers.*

Statistics on nearly two decades of export growth reveal that the top performers in international trade in the 1970s and 1980s include small economies and large economies, industrial countries and developing countries, and economies located on each of the continents. Despite the problems that have plagued the world economy since the 1970s, access to the world market has helped a broad cross section of countries move up the development ladder.

Turning to more general economic developments, it is evident that since the early 1970s the world has witnessed an economic environment characterized by a mixture of positive developments and unresolved problems. Despite some worrisome features in the current situation, the positive developments in the world economy currently outweigh the negative elements. In the trade area, the depressing effects of large changes in petroleum prices and exchange rates between 1985 and 1987 appear to be giving way to the trade stimulating effects as adjustments progress, particularly in countries and firms that benefited from lower energy prices and more competitive exchange rates. Other positive elements include the relative strength of economic growth in the major industrial countries, the increased stability of exchange rates in the first half of 1988, and continued progress in reducing the merchandise trade imbalances of the United States and Japan.

Reaction to these positive developments is tempered by an awareness that there are some worrisome problems. Despite the progress noted above, questions of how and when the large current account imbalances of the three leading trading nations and the third world debt problem will be resolved continue to cast a cloud of uncertainty over the outlook for the world economy (the latter problem having not been helped by recent increases in interest rates and a weakness in petroleum prices). Other concerns include protectionist pressures, the seemingly chronic unemployment in many countries and fears of a resurgence of inflation. The expansion of world merchandise trade and output thus far in the 1980s continues to fall short of the growth recorded in the 1960s and 1970s, and in a variety of sectors serious trade policy problems remain to be resolved. One such sector is agriculture.

Trade in agriculture

While the value of world trade in agriculture increased from $28 billion in 1950 to $340 billion last year, agriculture's share of world merchandise trade declined almost continuously over that period from 46 per cent to 13½ per cent. This long-term decline reflects both lagging growth in trade volume and a tendency for world market prices for agricultural goods to fall relative to those for other merchandise.

The postwar expansion of trade in agriculture was driven by a number of positive factors – such as reduced transport costs, improved techniques of processing and storage, productivity increases in developed and developing countries and some limited dismantling of trade barriers in the framework of GATT. However, increases in exports from some countries have also been achieved through the use of subsidies. Export subsidization has often been the natural second stage of a process which starts with high-cost over-production encouraged by import restrictions designed to benefit domestic farmers. Both actions – the introduction of import restrictions and the granting of export subsidies – reduce export opportunities for efficient producers.

These policies are a significant factor behind the fact that over the past two decades the share of agricultural production which is traded internationally has risen much less than that for manufactures – indeed, that it generally declined between 1980 and 1986. Last year's reversal of this downward trend failed to push the share of agriculture traded internationally above its 1980 level.

With agricultural trade continuing to be affected by subsidies, import restrictions and market sharing arrangements, last year's increase in the volume of trade in agriculture and the pick-up in many agricultural prices since the beginning of 1987 did nothing to reduce the urgent need for major reform in trade-related agricultural policies.

Challenges for trade policy

While policy making is inevitably influenced by short-term considerations, it is important for decisions on trade policies to take into account to the maximum extent possible the underlying factors and trends influencing the longer-term evolution of the world economy. Among the factors that generate pressure for change, two in particular – new technologies and diverging population trends – are influencing the future of world trade in important ways.

Increasing use of microelectronics and other new technologies in production, organization, industrial design and marketing is transforming the economic landscape at a rapid rate. Coupled with the competitive search for profitable investment projects, the new technologies are promoting the ***globalization of markets*** *and greatly increasing the scope for international trade. One consequence is that the costs of non-tariff barriers to trade, in particular quantitative restrictions, will be rising in tandem with the ongoing globalization of markets even if the level of non-tariff barriers remains constant.*

The resulting loss of economic efficiency would be particularly damaging at a time when the challenges posed by worldwide population trends make higher rates of economic growth in the world economy more important than ever. Population projections by the United Nations indicate that the industrial countries as a group are facing a future with close to zero population growth, a gradually ageing population and a steady increase in the ratio of retired people to active workers. The same population statistics point to an increase in the population and labour force in developing areas of about 1.4 billion and 600 million, respectively, over the next two decades.

These figures suggest that for many goods and services the greatest potential for dynamic market growth in the coming decades will be in the developing areas. Furthermore, the combination of high rates of labour force growth in the developing areas and little or no indigenous labour force growth in industrial countries is likely to affect the relative competitiveness of a broad range of industries. Although the exact outcome of these various developments is impossible to predict, there is little doubt that the coming years will see continuing, perhaps even stronger pressures for adjustment in the patterns of output and trade in the world economy.

The pressures for change in the world economy pose direct challenges for trade policy – in particular how to assist early and continuous adjustment – at a time when growing interconnections between markets are changing the way trade policies are defined. With international trade accounting for a steadily larger share of national income in most countries, and with the dramatic evidence in recent years of the extent to which trade flows can be influenced by a country's exchange rate policy, monetary policy, and fiscal policy (through the impact on the current account balance), the traditional distinctions between different policy areas are becoming more and more blurred.

However we choose to define trade policy in these changing circumstances, one thing is clear. In many countries trade policy is becoming the single most important resource allocation policy, and as such is rapidly joining monetary and fiscal policies in the front rank of national economic policies. This explains why business and market confidence are increasingly influenced by perceived trends in trade policies and in commercial policy relations between countries.

The current multilateral trade negotiations can facilitate structural adjustment by coupling reductions in the levels of protection with increased market access abroad, and by reducing business uncertainty through improvements in the functioning of the trading system. The stimulus this would give to flexibility, investment and growth is precisely what is needed to deal with the challenges posed by technological innovation and worldwide demographic trends.

I. Developments in world merchandise trade

The *volume* of world merchandise trade expanded by an estimated 5 per cent in 1987, well above the rate of expansion in the two preceding years.[1] Five consecutive years of growth have brought the volume of world merchandise trade to a record level, one-quarter above the 1982 recession level (compared with an increase of one-fifth in merchandise output).[2] Statistics available for the first half of 1988 suggest that the volume of world merchandise trade has been growing at a faster rate than last year.

The *value* of world merchandise exports increased by an estimated 17 per cent in 1987 to a record $2,490 billion. This increase is primarily the result of four effects: (i) the previously mentioned 5 per cent increase in the volume of world merchandise exports; (ii) increases in the world market dollar prices of petroleum and several non-petroleum primary commodities; (iii) a valuation effect caused by the continued appreciation of several major currencies against the dollar; and, finally, (iv) the impact on dollar prices of the underlying national inflation rates.

The combination of a 5 per cent increase in the volume of world merchandise trade, and a 17 per cent increase in value, calls attention to the frequently wide differences between volume developments and value developments.[3] 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 debt servicing capacity. In the following discussion, volume developments are considered first (pp. 1–11), followed by an analysis of trends in the value of world merchandise trade (pp. 11–22).[4]

Trade volume

Accelerating trade growth occurred against the background of a steady 3 per cent annual growth in world output in each of the last three

[1] Part I of this Report is an updated and extended version of the GATT Secretariat's first assessment of world merchandise trade developments in 1987, published earlier this year (GATT Press Release GATT/1432, 29 February 1988).

[2] In the recovery from the 1975 recession, these marks were passed in about four years. It should be kept in mind that this earlier recovery was accompanied by a return to double-digit inflation in the industrial countries, and thus clearly was not sustainable. Though moderately slower, the recovery from the 1982 recession has coincided with an average inflation rate in the industrial countries under 5 per cent (however, some concern has been voiced recently about a possible pick-up in the inflation in some industrial countries, including the United States and the United Kingdom).

[3] Most statistics on merchandise trade flows are value figures, typically expressed in US dollars when the purpose is to aggregate or compare the trade of two or more countries. In some cases, it is also possible to estimate year-to-year changes in the volume of merchandise trade, by adjusting the value figures for estimated changes in dollar unit values. However, this is necessarily an imprecise process (especially during periods of large inflation differentials between the major countries, or when there are large changes in exchange rates or in the relative prices of major products), and the resulting volume estimates are useful primarily as a rough guide to year-to-year changes.

[4] The data in the charts and tables are GATT Secretariat estimates based on data from the United Nations Statistical Office, the Food and Agriculture Organization, the International Monetary Fund, the World Bank, the Organization for Economic Co-operation and Development, the Bank for International Settlements, the Statistical Office of the European Communities, various international commodity trade and output statistics, and national publications.

Chart 1
Volume of world merchandise trade and output, 1980–87
(Percentage change over preceding year)



years (Chart 1). The 2 percentage points excess of trade over output growth last year was close to the average annual margin in the 1960s.

Trade volume by major product group

As is evident from Table 1, there were important changes in the pattern of merchandise trade growth by major product group in the past two years:[5]

- In 1987, manufactures resumed their traditional rôle as the most dynamic category of merchandise trade. The estimated 5½ per

[5] As in the past, this Report deals with trade in merchandise – that is, trade in goods. However, countries' current account balances also include payments and receipts for factor services (that is, interest and profits on capital, and labour earnings) and for non-factor services (banking, insurance, tourism and so forth). Available statistics suggest that for the world as a whole about 70 per cent of current account transactions involve merchandise, with the remaining 30 per cent being divided more or less evenly between factor services and non-factor services. A general indication of the relative importance of trade in services for selected countries is available in tables in Volume II of *International Trade 1987/88*.

It is important to keep in mind that the available statistics on international services transactions have many short-

cent gain not only represents accelerated growth from the preceding year, but it also exceeds the average annual increase in the volume of trade in manufactures thus far in the 1980s.

- The volume of trade in agricultural products turned in the best performance since 1981. It increased almost in line with the expansion of total world merchandise trade, staging a substantial recovery from the marginal decline recorded in 1986.
- In contrast, trade in mining products, the fastest growing product category in volume terms in 1986, increased only 1 per cent last year.

While the trade performance of the major product groups continued to vary in 1987, the differences were less pronounced than in 1986.

In contrast to the estimated 4½ per cent growth in the volume of world trade in *agricultural products,* world agricultural output declined for the first time since 1950, by an estimated 3 per cent. This occurred against the background of high levels of world stocks for major agricultural products. These developments, as well as longer-term trends in agricultural trade, are analysed in more detail in Part II below.

In the past two years the volume of trade in *mining products* has been heavily influenced by sharp swings in the price of petroleum (petroleum and petroleum products account for about 60 per cent of the value of world trade in mining products, and other fuels, whose prices are closely linked to the price of petroleum, for another 18 per cent). A decline in the world market price of petroleum of almost 50 per cent between the first and the third quarter of 1986 stimulated petroleum consumption and, more importantly, induced stock-building as well as a substitution of imported petroleum for domestically produced fuels in many countries. These trends were slowed or reversed when the OECD import price of crude petroleum increased from $11½ per barrel in the third quarter of 1986 to $17 per barrel in the first quarter of 1987. This coincided with the depreciation of the dollar, which meant that in a number of countries such as Japan and those in Western Europe, the impact of the rise in the dollar price of petroleum was mitigated by an appreciation of the domestic currency against the dollar. In the United States, and in countries whose currencies closely follow the dollar, the higher cost of fuels was readily apparent.

World crude oil prices remained broadly stable during 1987, close to OPEC's target price of $18 a barrel set late in 1986. Energy and oil consumption and trade rose moderately in 1987. Industrial countries' stocks of crude oil remained very large relative to consumption and imports. The «excess» supply of crude in world markets increased further as OPEC deliveries exceeded the agreed quotas, and as non-OPEC countries' output and deliveries rose in a generally weak world market (Box 1). These factors, coupled with a mild winter in Western Europe, triggered a softening of oil prices during much of the first six months in 1988.

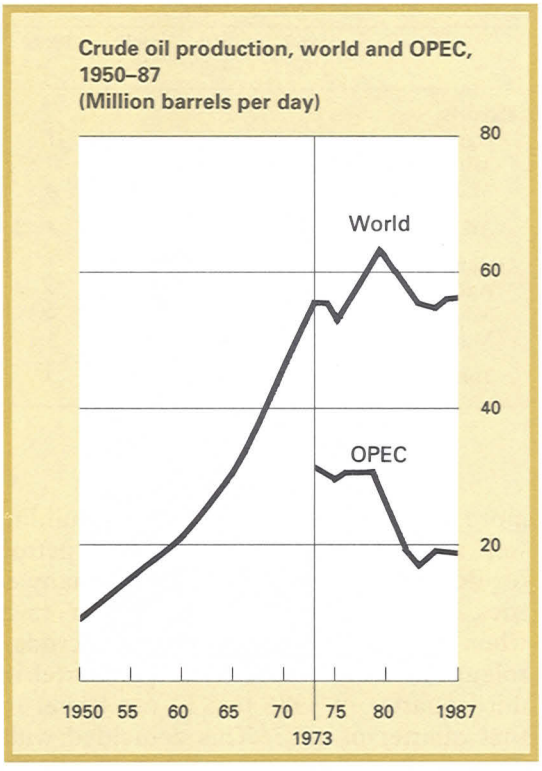
Table 1
Growth in the volume of world merchandise exports and output by major product group, 1960–87

(Average annual percentage change)

	1960–1970	1970–1980	1980–1987	1986	1987
Exports					
Agriculture	4	3½	1½	–1	4½
Mining	7	1½	–1½	7½	1
Manufacturing	10½	7	4½	4	5½
All merchandise	**8½**	**5**	**3**	**4**	**5**
Output					
Agriculture	2½	2	2	1	–3
Mining	5½	3	–1	4½	½
Manufacturing	7½	4½	3	3½	4½
Total output	**6**	**4**	**2½**	**3**	**3**

comings that make them far less comprehensive and reliable than data on merchandise trade. The United Nations Statistical Office, the International Monetary Fund, the OECD and other international organizations, as well as national bodies, are working to improve the methodology and practice of recording statistics on trade in services. Improving the basic source material is, however, a long-term exercise. Attempts are also being made to consolidate and re-organize existing information to provide a clearer picture in the short term of the value and structure of international services transactions.

Box 1 – The petroleum market before and after 1973



When a group of producers gets together to agree to restrict output in order to raise prices, the price increase often sets in motion changes that ultimately undermine their ability to control prices. The actions of the members of OPEC beginning in 1973 were no exception.

The sharp price increases at the end of 1973, and again in 1979–80, set in motion two major changes:

- A dramatic break in the growth of world consumption and production of petroleum. From 1950 to 1973 production expanded more rapidly than world GDP. In 1987, in contrast, world production of petroleum was only marginally above the 1973 level, while world GDP had increased by nearly 50 per cent. This consumption effect is the result of both a switch to non-petroleum fuels and energy conservation in response to the increase in the relative price of energy.
- An increase in petroleum production outside OPEC. The higher price stimulated production from known fields *and* stimulated the search for new fields in many areas, including the North Sea and the Gulf of Mexico.

More or less stagnant world demand for petroleum, coupled with increased output from non-OPEC producers, had a predictable impact on OPEC's share of world petroleum production – it declined from 55 per cent in 1973 to about 35 per cent last year.

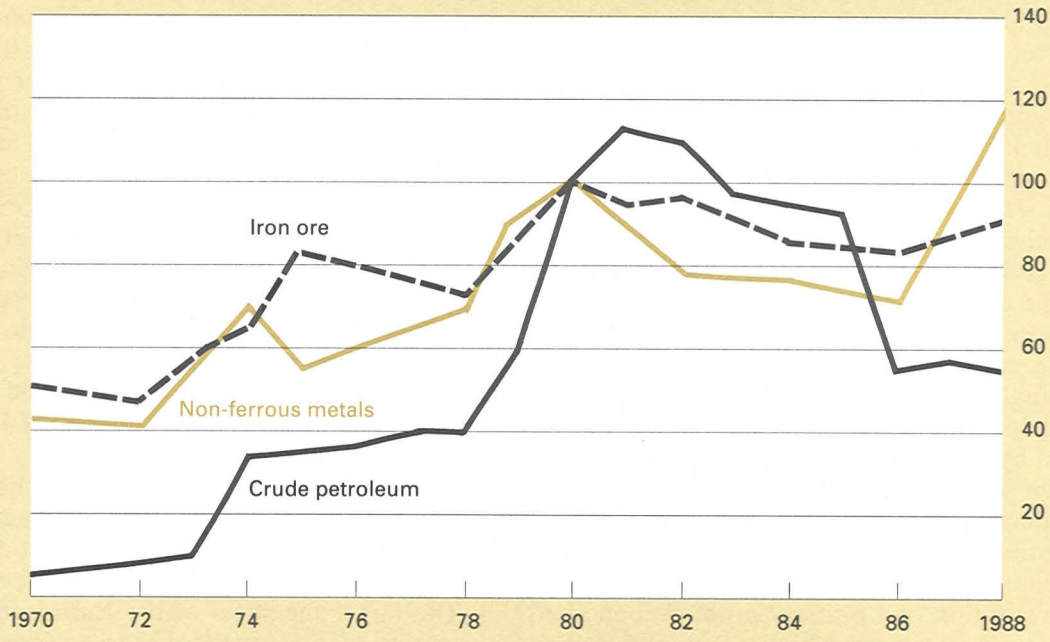
As far as trade is concerned, the members of OPEC have always accounted for a larger share of world trade than of world output because some of the major non-OPEC producers – such as the United States and the USSR – are also major consumers. Over the period 1973–87, OPEC's share of the quantity of world exports of petroleum and petroleum products declined form nearly 75 per cent to around 45 per cent. This dramatic fall in market share is the main reason behind recent attempts by OPEC to forge links with major non-OPEC petroleum traders.

The volume of world trade in non-fuel mining products – essentially minerals and non-ferrous metals – increased somewhat more than trade in fuels in 1987. This helped to bring about a recovery in world market dollar prices in 1987 and the first months of 1988 (Chart 2).[6] Because the dollar's exchange rate was depreciating over this period, prices expressed in yen and West European currencies increased less.

World trade in *manufactures,* which accounts for more than two-thirds of world merchandise trade, expanded by an estimated 5½ per cent in volume terms last year. This was a substantial acceleration from the 4 per cent increase recorded in 1986, and the driving force behind last year's acceleration of total world merchandise trade volume. World production of manufactures turned in nearly as impressive a performance as did trade in manufactures,

[6] A variety of factors has contributed to the recent rise in primary commodity prices shown in Chart 2. They include the depreciation of the US dollar as well as strong demand growth in North America and several economies in Asia. Whether the rise in commodity prices also signals the revival of inflationary expectations in the world economy remains an open question.

Chart 2
World market dollar prices for crude petroleum, iron ore and non-ferrous metals, 1970–88 (Indices, 1980 = 100)



Note: Data for 1988 refer to the first quarter.

with last year's 4½ per cent production increase a full percentage point above the 1986 increase.

The volume of manufactured imports into the developed countries continued to expand more rapidly than total world trade in manufactures. With developed countries purchasing 70 per cent of world imports of manufactures, it is therefore clear that they remained the key source of strength for trade in manufactures last year. Import performance by individual industrial countries, however, changed markedly between 1986 and 1987 (Table 2). Sharply smaller increases in the volume of imports of manufactured goods were reported by the United States, while Norway's very strong import growth in 1986 was followed by an estimated 4½ per cent decline last year. Particularly strong accelerations of import growth occurred in Finland, Italy, Sweden and the United Kingdom.

Table 2
Volume of trade in manufactures by selected countries, 1986 and 1987

(Percentage change over preceding year)

Exports			Imports	
1986	1987		1986	1987
–½	½	Japan	24½	17½
3½	4	Italy	6½	15
3	8	United Kingdom	5½	10
6	2	Canada	7½	9½
–1	2½	France	9½	9½
2½	3	Finland	6	9
2½	3	Germany, Fed. Rep.	8½	8½
2	1½	Switzerland	11	8½
–1	7½	Netherlands	4½	8
1½	½	Austria	6½	7
4	6	Belgium-Luxembourg	10	7
4	–1	Sweden	2½	7
7½	16	United States	13½	6
1½	4	Denmark	10½	–1
–4	3½	Norway	15	–4½

One important factor behind the faster growth in the volume of world trade in manufactures was the rapid economic growth in a number of Asian developing economies. These economies have become not only significant sellers but also significant buyers of manufactures on world markets. For example, the seven largest exporters of manufactures among the developing economies in Asia, as a group, accounted for 10 per cent of world exports and 8 per cent of world imports of manufactures in 1987. The accelerated growth of imports of manufactures into these economies contributed substantially to last year's faster growth in the volume of world trade in manufactures. Meanwhile, ongoing industrialization in other developing areas has set them on the path of expanding exports *and* imports of manufactures.[7]

World trade in manufactures was also affected by the impact of price increases for petroleum and certain other commodities on import demand, in particular in the net exporters of primary commodities. Many economies which are specialized in exporting fuels or one of several non-fuel primary products benefited from price increases which often outweighed any decline in export volume by a wide margin. In consequence, their foreign exchange situation either began to turn around last year, or at least did not deteriorate to the same extent as in 1986, allowing them to avoid a repeat of the sharp 1986 cutbacks of imports of manufactures.

Information currently available for world trade by major product group suggests very heterogeneous volume developments last year, as is evident from the following examples:

- The volume of trade in *electronic products,* currently accounting for about 12 per cent of world trade in manufactures, increased more than twice as fast as total world trade in manufactures last year.
- World trade in *chemicals,* currently accounting for about 13½ per cent of world trade in manufactures, also out-performed total trade in manufactures last year, though by a small margin only.
- Trade in *automotive products,* a marginally larger product group than chemicals, expanded less than the volume of total trade in manufactures for the second year in a row. Accelerated growth in import volume in Western Europe contrasted with a decline of imports into the United States (North America and Western Europe together purchase 85 per cent of the automotive products traded internationally).
- Key developments last year in *textiles* trade – currently about 4½ per cent of world trade in manufactures – included another year of very strong export volume growth from Hong Kong, the Republic of Korea and Taiwan.[8] In contrast, textile exports from Japan continued to decline, and there was evidence of an improvement in the growth of textile exports from several major West European countries. On the import side, continued growth in the volume of imports into Japan, the Federal Republic of Germany, France and the United Kingdom contrasted with a marked slowdown in the growth of imports into the United States.
- Contrasting developments also characterized world trade in *clothing* (a product group similar in size to textiles). Import volume into Japan increased by around 30 per cent. The larger members of the European Community also recorded a marked increase in the volume of their clothing imports, while that of the United States slowed down to 6½ per cent. These three areas combined account for about 75 per cent of world imports of clothing.
- The volume of world trade in *steel* (about 5 per cent of world trade in manufactures) is estimated to have declined marginally last year. Export volume was up over 30 per cent in the United Kingdom and the United States, and up 10 per cent in Canada. These gains were more than offset, however, by declines in the volume of steel exports from Japan, Spain and Australia in the range of 7 to 12 per cent. As in the cases of textiles and clothing, trade in steel remained heavily distorted by a network of voluntary export restraint agreements. Steel producers continued to respond to intense domestic competition (and the remaining international competi-

[7] See GATT Press Releases GATT/1409, 23 March 1987, p.5, and GATT/1419, 25 September 1987, pp.3–6 and 25–27.

[8] Export volume increased for textiles at around 20 per cent in the case of Taiwan and the Republic of Korea and around 40 per cent in the case of Hong Kong.

tion) by streamlining production and upgrading product quality, including a further shift to production of specialty steel. Last year, the world export volume of specialty steel rose by an estimated 7½ per cent, while that of ordinary steel fell by an estimated 1½ per cent. Exports of specialty steel, primarily from suppliers located in industrial countries, now account for about one-fifth of the *value* of world trade in iron and steel, excluding the Eastern trading area.

Across all product groups, exchange rate developments since 1985 have tended to improve the price competitiveness – both abroad and at home – of producers in North America, as well as in several economies in Asia and Latin America, while weakening the price competitiveness of producers in several other areas, including Japan and many West European countries. Generally speaking, such shifts in international price competitiveness will have their greatest impact on the more standardized products or product groups – that is, on products for which quality differences and other sources of brand differentiation are less pronounced.

Trade volume by area

Turning to regional developments, the figures in Table 3 reveal that the growth of import demand in the developed countries remained the strongest force in the expansion of the volume of world merchandise trade, even though its growth slowed down from 8½ per cent in 1986 to 6 per cent last year. Despite this slowdown, the momentum in world merchandise trade accelerated last year because of the sharp turnaround in the import demand of the developing areas, from a substantial decline in 1986 to an increase in import volume of 3 per cent last year. The volume of imports into the Eastern trading area declined marginally, continuing a trend already evident in 1986.

Although the expansion in the volume of exports from the developing areas slowed down in 1987, the developing areas' exports are estimated to have out-performed (on a volume basis) those of both the industrial countries and the Eastern trading area. On both the import and the export side, trade expansion in 1987 was more balanced across the three major areas than in the preceding year.

Table 3
Growth in the volume of world merchandise trade by major area, 1986 and 1987

(Percentage change over preceding year)

Exports			Imports	
1986	1987		1986	1987
2½	5	Developed countries	8½	6
9	6	Developing areas	–5	3
5½	2½	Eastern trading area	–2½	–1
4	**5**	**World**	**4**	**5**

Note: The Eastern trading area is composed of the East European countries, the USSR, China and other centrally planned economies in Asia.

Highly aggregated data such as those in Table 3 often conceal large differences in trade performance at the level of individual economies or groups of economies, and last year was no exception. As may be seen from the estimates in Table 4, for example, increases in exports and imports of several developing Asian economies ranged from 6 to 32 per cent on a volume basis in 1987. This represented a further acceleration of what was already a dynamic export and import performance in the preceding year. Expanding volumes of exports were also reported by some of the heavily indebted countries on the list, notably Colombia, Brazil and Mexico. For each of these countries, export volume increased last year much more rapidly than the volume of total world merchandise trade. In contrast, two other heavily indebted countries on the list – Peru and Argentina – recorded further, substantial declines in their export volumes. Finally, the combined export volume of the members of OPEC somewhat declined in 1987, largely in response to the sharp recovery in petroleum prices noted above. Their imports are also estimated to have declined on a volume basis, but at a less steep rate than in 1986.

Eight of the developing economies included in Table 4 recorded increases exceeding 10 per cent in the volume of merchandise exports last year. Leaving aside the three which have serious debt service problems (Colombia, Brazil and Mexico), it is evident that in virtually every instance the strong export performance was coupled with a strong increase in import volume.

Table 4
Growth in the volume of world merchandise trade by selected economies and economic groups, 1986 and 1987

(Percentage change over preceding year)

Export volume			Import volume	
1986	1987		1986	1987
14½	32	Hong Kong[a]	13	32
16½	6½	Philippines	20	30½
16	17½	Thailand	0	30½
25½	14½	Taiwan	29	30
6½	11	Portugal[b]	17½	24
2½	5½	Chile[c]	15	22½
–4	7½	Spain	16½	22
12	24	Korea, Rep. of	8	21
3	22½	Turkey[b]	15½	16½
13½	19	Singapore[a]	9	14
–8	–12	Argentina[c]	17½	12
7½	8½	Malaysia	4	12
10½	11	Israel	16½	10
2	2½	Italy	4½	10
–½	–10	Peru[c]	38	10
–½	½	Japan	9½	9½
4½	6½	Canada	8	9
3½	6	United Kingdom	6	7½
–½	3½	France	7½	7½
8	6½	Belgium-Luxembourg	10½	7½
4	19	Ireland	3	7
4½	4	Netherlands	4½	7
½	1½	Switzerland	8	6
6	15	United States[d]	13½	6
1½	3	Germany, Fed. Rep.	6	5½
–18	15	Brazil[c]	15	2½
1	11	Mexico	–13	2½
26	26½	Colombia[c]	3	2½
9	2½	USSR	–5	–1
2½	13½	Norway	15	–2
1½	2½	Denmark	8½	–2½
10	–2	OPEC	–20	–12

[a] Includes substantial re-exports and imports for re-exports.
[b] Volume of exports and imports of goods and services, national accounts statistics.
[c] ECLAC estimates.
[d] Data are from national accounts statistics.

Notable differences are also observable among the developed countries, with last year's export performance ranging from volume increases of 13 per cent or more (Norway, the United States, Ireland) to a stagnation in export volume (Japan). On the import side, the differences were even more pronounced. Import volume expanded particularly rapidly in Portugal and Spain, the new members of the European Community, while it declined in Norway and Denmark.

Differences in the performance of exports and imports among the developed countries were widely expected because of the large movements in exchange rates over the past three years. For an exchange rate change to affect a country's overall imports and exports, it must of course be a change in the real effective exchange rate. That is, in the case of a depreciation, the depreciation must be against the currencies of the country's main trading partners, and the depreciation must exceed the difference between the domestic inflation rate and the inflation rates in the trading partners. Allowing time for the effects of a change in the real effective exchange rate to work themselves out, a depreciation is assumed to stimulate the volume of a country's exports, while an appreciation is expected to have the opposite effect.

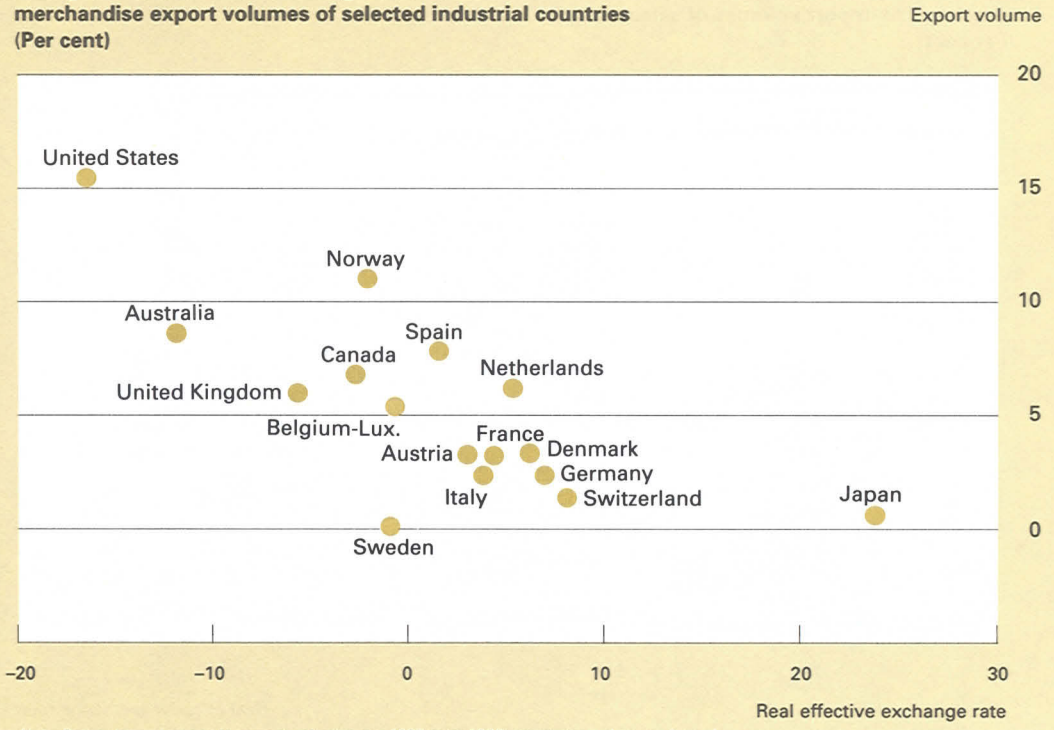
Indeed, the data in Chart 3 suggest that recent changes in real effective exchange rates have had these effects.[9] In general, the countries in Chart 3 which experienced a real effective exchange rate depreciation in 1986 reported a much stronger export performance in 1987 (in volume terms) than did countries whose real effective exchange rate appreciated.[10]

Conversely, a depreciation of the real effective exchange rate is assumed to dampen import volume because it increases the price competitiveness of domestic producers vis-à-vis

[9] For each country, the change in the real effective exchange rate reflects, on a trade-weighted basis, the movement of its currency against eighteen other industrial countries' and twenty-two developing areas' currencies, adjusted for differences in inflation between the home country and those same trading partners. Data are taken from Morgan Guaranty Trust Company, *World Financial Markets*. Chart 3 presents data for all industrial countries for which real effective exchange rates were available from this source.

[10] To put it somewhat more technically, if a regression line were fitted to the observations in Chart 3, it would have a negative slope; this indicates that, for the countries and time period covered in the Chart, a depreciation in the real effective exchange rate was associated with an increase in export volume in the following year. Plotting the data on changes in export volume for 1987 over 1986 against the changes in the real effective exchange rates for the same period fails to reveal any systematic negative (or positive) relationship.

Chart 3
Changes in real effective exchange rates and in merchandise export volumes of selected industrial countries (Per cent)



Note: Percentage changes in export volumes are 1987 over 1986; percentage changes in real effective exchange rates are 1986 over 1985. As far as changes in real effective exchange rates are concerned, a negative percentage change represents a depreciation and a positive percentage change represents an appreciation.

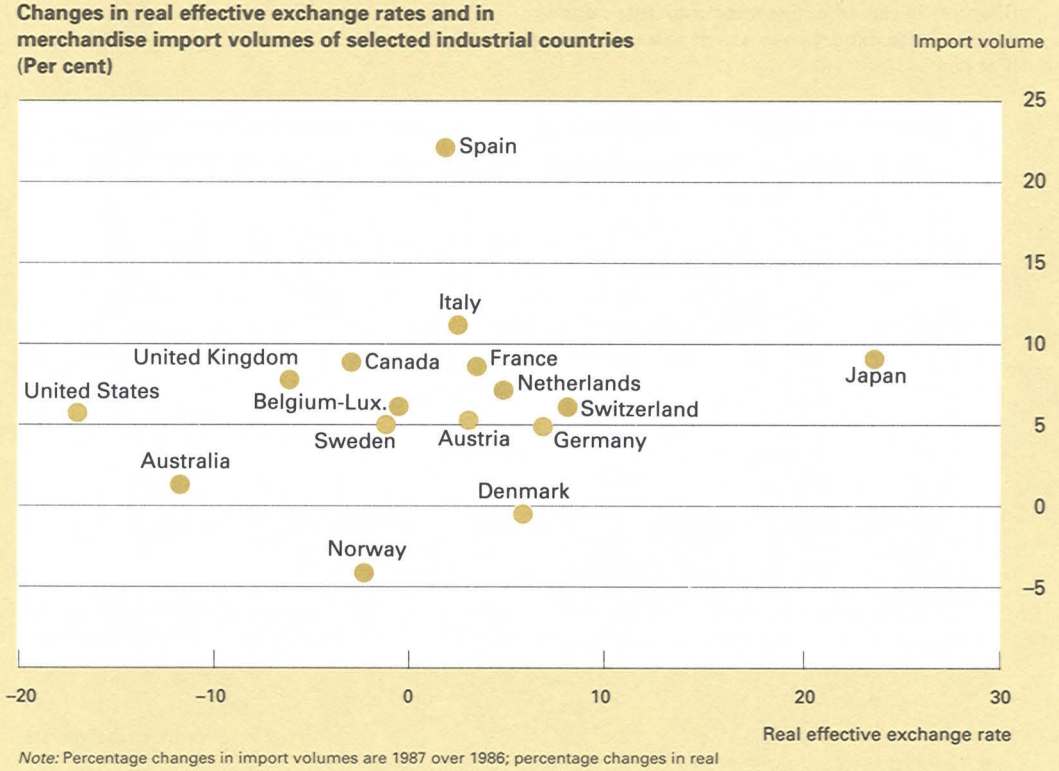
foreign firms in the home market. However, as is evident from Chart 4, recent experience fails to reveal any readily apparent relationship between real effective exchange rates and import volumes. For example, the import volume of countries with appreciating currencies such as the Federal Republic of Germany, Switzerland and the Netherlands increased less than in countries with depreciating currencies such as Canada and the United Kingdom.[11]

There are a variety of reasons which could explain the absence of a straightforward relationship between real effective exchange rates and import volumes. In particular, if a country whose real effective exchange rate has depreciated also experiences a strong expansion of domestic expenditure on consumption and investment, import demand is likely to remain strong despite the improvement in the competitiveness of domestic against foreign producers on the home market. An expansion of exports of products which depend heavily on imported inputs could have a similar effect. Both factors appear to have been playing a rôle in recent United States import behaviour. The opposite case would hold in a country whose real effective exchange rate appreciated at a time of weak domestic demand, Denmark being a case in point.[12]

[11] If a regression line were fitted to the observations in Chart 4, it would be more or less horizontal. This indicates that, for the countries and time period covered in the Chart, the effects of changes in real effective exchange rates on the volume of imports were dominated by other factors. The same picture emerges if the changes in import volumes are plotted against the changes in real effective exchange rates for 1987 over 1986.

[12] In Denmark, the volume of private consumption dropped by 1½ per cent and the volume of gross fixed capital formation by 7 per cent in 1987. The corresponding figures for 1986 are *increases* of 4 and 18 per cent, respectively.

Chart 4
Changes in real effective exchange rates and in merchandise import volumes of selected industrial countries (Per cent)



Note: Percentage changes in import volumes are 1987 over 1986; percentage changes in real effective exchange rates are 1986 over 1985. As far as changes in real effective exchange rates are concerned, a negative percentage change represents a depreciation and a positive percentage change represents an appreciation.

Other factors obviously could be at work. However, the evidence in Chart 4 – as well as figures for imports of manufactures of selected industrial countries (Table 2) and the trade performance of several of the developing economies mentioned above – strongly suggests that in many countries demand conditions dominated the effects of changes in real exchange rates as far as import volume is concerned.[13]

These observations support the view that the exchange rate mechanism on its own is often not sufficient to bring about the changes in trade volumes needed to reduce a current account imbalance. Because this mechanism can be frustrated, particularly on the import side, by trends in domestic expenditure, orderly adjustment requires that exchange rate changes be supported by appropriate fiscal policies.[14]

[13] As far as export performance is concerned, it is clear that, in addition to the real effective exchange rate, the level of world demand is a key determinant. This is not to deny, of course, that export volume can be affected by a variety of other factors, including the level of domestic economic activity.

[14] As has been stressed in previous GATT Secretariat reports on trade developments, a country's current account *balance* is determined by the relationship between national expenditure and national output – or, which amounts to the same thing, between investment and savings (a country's current account balance can, of course, be influenced by external factors, such as a large decline in the world market price of a key export product; this does not, however, alter the essential point that the current account balance reflects the difference between national savings and national investment). The only way a particular action, such as an exchange rate change, can have a lasting impact on the current account balance is by altering the difference between national expenditure and national output (between investment and savings). Whether an exchange rate change *by itself* is likely to have such an effect is the subject of continuing debate among economists. For a more detailed explanation, see pp. 15–22 of GATT Press Release 1409, 23 March 1987.

Table 5
Merchandise trade volume in the United States, Japan and the Federal Republic of Germany, 1985–87

(Percentage change over corresponding period of previous year)

		United States		Japan		Germany, Fed. Rep.	
		Exports	Imports	Exports	Imports	Exports	Imports
1985		2.1	5.3	4.6	0.4	5.9	4.2
1986		5.8	13.5	–0.6	9.5	1.3	6.1
1987		14.9	5.8	0.3	9.3	2.9	5.4
1987	Q1	9.8	9.0	1.2	7.0	–1.7	2.3
	Q2	13.6	3.9	–2.1	5.6	1.9	4.3
	Q3	17.4	3.1	–0.4	9.6	3.0	5.9
	Q4	18.4	6.8	2.9	13.6	6.2	7.4
1988	Q1	25.5	9.8	2.6	21.4	–2.0	3.5

Note: The quarterly figures for the United States and the Federal Republic of Germany are seasonally adjusted. The figures for the United States are derived from values and unit values on a *National Accounts* basis. All Japanese data are revised to reflect the new base year (1985). Figures for the first quarter of 1988 are preliminary estimates.

Adjustment of trade volume in three major countries

A closer inspection of the adjustment of merchandise trade volumes in the three leading trading nations over the past two years tends to confirm the notion that there is no simple and direct relationship between exchange rate changes alone and changes in trade volume. For example, as may be seen in Table 5,

- in the fourth quarter of 1987 and the first quarter of 1988 import growth picked up in the United States despite the further depreciation of the dollar; and
- in the Federal Republic of Germany, import volume increased less in 1987 than in 1986, even though the D-Mark had been appreciating, in real effective terms, since March 1985 (note also that the increase in the volume of imports into the Federal Republic of Germany in 1987 was marginally *smaller* than the corresponding figure for the United States).

That being said, it is true that the long period of dollar depreciation has been followed by a turnaround in the volume figures. Last year saw a sharp increase in the growth in the volume of exports from the United States, and a similarly sharp decline in the growth of import volume. Japan's export volume stagnated in 1987 for the second consecutive year, while import volume increased by more than 9 per cent.[15]

In the first quarter of 1988, trade volume developments in the three countries moved even further in the direction of reduced trade imbalances.

Trade value

Trade value by product group

All major product groups participated in the expansion of the dollar value of world merchandise trade last year, albeit at widely differing rates (Table 6). Only manufactures recorded above-average growth in trade value. Although the increase in the value of trade in mining products was somewhat below the increase for total merchandise trade, it was the first year-to-year increase for this product group since 1981 (the gain being due primarily to the recovery of petroleum prices).

When the final draft of this Report was prepared, detailed data for world trade in individual product groups in 1987 were still scarce. However, several notable developments were already apparent:

[15] If the volume of imports into Japan in 1986 is adjusted for a special purchase of gold, the 1986 growth is somewhat below that of 1987.

Table 6
Value of world merchandise exports by major product group, 1986 and 1987

Billion dollars			Percentage change over preceding year	
1986	1987		1986	1987
300	340	Agriculture	11	14½
335	365	Mining	–21	9
1450	1735	Manufacturing	20½	19½
2130	**2490**	**All merchandise**[a]	10	17

[a] Includes products and merchandise transactions not elsewhere specified.

- Preliminary estimates for 1987 indicate an increase of more than 20 per cent in the dollar value of world exports of *electronic products* (excluding the exports of Eastern Europe and the USSR). Partly supported by real effective depreciations of their currencies, a number of developing economies in Asia experienced particularly strong export growth, up to twice the rate for total world exports of electronic products on average. The dollar value of North American exports of electronic products increased by about 20 per cent, marking a strong recovery from the poor 1986 performance. In contrast, the growth in the dollar value of exports of electronic products from Japan slowed down to 12 per cent in 1987.
- The dollar value of world trade in *chemicals* also expanded more rapidly than total world merchandise trade in 1987. Led by Western Europe's trade performance, exports and imports of chemicals gained about 20 per cent in dollar value in the industrial countries. Currently, these countries, as a group, account for more than 70 per cent of world imports and for almost 90 per cent of world exports of chemicals.
- For the second year in a row, the dollar values of world trade in *textiles* as well as in *clothing* increased sharply.
- Trade in *automotive products* expanded about in line with the value of total world merchandise trade, with import performance differing widely among the various regions of the world economy. Western Europe's dollar value of imports of automotive products rose by almost one-third. Imports into the United States increased by only 7 per cent, that is less than half the global rise.
- World trade in *iron and steel* increased moderately in dollar value, largely reflecting the valuation effect of exchange rate changes in Western Europe and the strong volume performance of North American suppliers noted above.

Generally speaking, these developments are consistent with the medium-term trends for individual product groups shown in Table 7. It is clear that the commodity pattern of world merchandise trade has been changing rapidly in the 1980s. A strong expansion in the dollar value of trade for a variety of manufactures

Table 7
World merchandise exports by product group, 1980–87

(Percentage share and average annual percentage change in *value*)

Share in world merchandise exports	Product group	Average annual percentage change
1987		1980–1987
6.1	Office and telecommunication equipment	15
3.3	Clothing	10½
9.5	Road motor vehicles	9
3.4	Household appliances	8½
6.0	Other consumer goods (furniture, leather goods, etc.)	8½
11.9	Other machinery and transport equipment	6
9.3	Chemicals	6
3.2	Textiles	5½
5.3	Other semi-manufactures (manuf. of wood, paper and rubber)	5
8.5	Machinery for specialized industry	4
	World merchandise exports	**3½**
3.6	Raw materials (crude rubber, wood, etc.)	2½
10.1	Food	2
3.3	Iron and steel	1
1.9	Non-ferrous metals	–1½
1.5	Ores and minerals	–2
11.4	Fuels	–7

Note: Share of individual product groups in world merchandise exports do not add up to 100 per cent because of products not specified in Table 7.

contrasts with stagnation or decline in the dollar value of trade in primary commodities and in iron and steel.

Trade value by area

In 1987, the dollar value of world merchandise trade increased in each of the three major trading areas. Imports of the developed countries and exports from the developing areas recorded above-average gains in value last year. In the below-average category are the imports of the developing areas, and the trade of the Eastern trading area (Table 8).

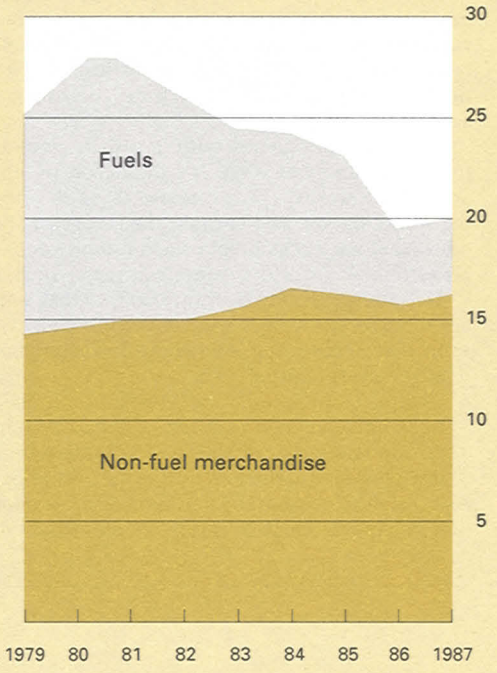
Table 8
Value of world merchandise trade by area, 1987

Billion dollars (f.o.b.)			Percentage change over 1986	
Exports	Imports		Exports	Imports
1740	1775	Developed countries	17	19
490	475	Developing areas	19	14½
260	240	Eastern trading area	12½	7½
2490	**2490**	**World**	**17**	**17**

Imports into the *developed countries* were the fastest growing imports in dollar terms in 1987. This was largely due to the trade performance of Western Europe and Japan. In both cases the strength of import growth was the result not only of exchange rate changes and price developments but also of increased volumes. The dollar value of merchandise imports into the developed countries increased more than that of their exports, causing their combined merchandise trade balance (on a f.o.b.-f.o.b. basis) to shift from rough balance to a modest deficit ($35 billion) last year.

Following an absolute decline in 1986, exports from the *developing areas* were the fastest growing exports in dollar terms in 1987. Just as sharply lower oil prices and a decline in non-fuel commodity prices had caused the decrease in the value of exports in 1986, the recovery of many of these prices in 1987 accounts in part for the rise in export values last year. The most important factor in last year's gain, however, was a further strong increase of exports of non-fuel merchandise from the developing areas.

Chart 5
Share of developing areas in world merchandise exports, 1979–87
(Per cent)



Since its historic peak in 1980, the share of developing areas in world merchandise exports has been on a declining trend. As is evident from Chart 5, this development can be traced entirely to declining earnings from trade in fuels. This has tended to mask the fact that the dollar value of the developing areas' exports of non-fuel merchandise expanded on average more rapidly than total world merchandise trade.[16] Increasing export diversification is one of the prominent features accompanying the success of developing areas in increasing their share in world markets for non-fuel merchandise (Box 2). Last year the developing countries increased their share of world merchandise exports for the first time in seven years. This was

[16] The share of non-fuel merchandise exports from developing areas in total world non-fuel merchandise exports also increased trendwise, from 14 per cent in 1979 to 15½ per cent last year.

Box 2 – Growing export diversification in developing areas

The diversification of production and trade is a natural response to changes on both the supply side and the demand side as economies develop. For example, improvements in the transport and communication infrastructure at home multiply the range of natural resources which can be exploited efficiently. Also, as an economy becomes richer, increased resources are available for educating and training the labour force which, in turn, broadens the basis for processing natural resources and engaging in a wide range of other manufacturing activities and services. At the same time, consumers demand an ever-expanding range of products as household incomes grow.

An open multilateral trading system gives an additional stimulus to this diversification of production and trade in a variety of ways. It reduces constraints on the demand side by offering producers access to consumers around the world. This promotes diversification because of the enormous spectrum of products demanded in the world market, and because the large size of that market allows competitive producers to capture scale economies that are not available when production is only for the domestic market. A well functioning trading system also stimulates world economic growth which, in turn, enlarges market opportunities.

It is not surprising, therefore, to find that a majority of the developing areas listed in the accompanying Table are reporting growing export diversification:

- In 1986, eighteen of the twenty developing areas exported a broader range of commodities (at the three-digit SITC level) than in 1970.
- Except for Indonesia and Mexico (both major petroleum exporters), the index of commodity concentration of exports declined between 1970 and 1986 in all developing areas shown in the Table. It is true that exports remain relatively concentrated in some countries, but this is the result of special circumstances – for example, in Colombia (coffee) as well as in several petroleum exporting countries.

As a result of these trends, a number of developing areas are moving into the range of commodity diversification in exports which is typical of industrial countries.

made possible by a combination of continued growth in exports of non-fuel merchandise and an increase in fuel exports in line with the increase in world merchandise exports.

While exports from the members of OPEC showed a sharp improvement between 1986 and 1987, the seven largest exporters among the developing areas in Asia (excluding Indonesia), as a group, continued to report particularly high rates of trade expansion – imports as well as exports. Last year's gain brought the aggregate exports of the seven economies to a level 75 per cent above OPEC's exports and 50 per cent ahead of the combined exports of the other non-OPEC developing areas.

The developing areas' aggregate imports also recovered strongly in 1987. Although import growth remained below the expansion of total world trade, it came much closer to the world average than it has since 1982. The developing areas' combined trade balance (on a f.o.b.-f.o.b. basis) shifted from a small deficit in 1986 to a small surplus in 1987.

The value of the *Eastern trading area's* trade increased at a rate well below the world average in 1987. This was particularly true of imports, reflecting the continued adjustment to debt service requirements and lower export revenues from fuels. Exports from China increased about 27 per cent in dollar terms in 1987 while imports remained nearly unchanged, with the result that its trade deficit narrowed sharply. There was an increase in the growth in the combined dollar value of exports from the USSR and Eastern Europe. This included a marked slowdown in the growth of the dollar value of their intra-area trade, resulting from both moderate economic growth in 1987 and a smaller appreciation of their currencies vis-à-vis the US dollar than had occurred in 1986.

A more detailed picture of trade developments among the three major trading groups is presented in Table 9. As is apparent from the right hand column in the Table, last year's growth in the dollar value of world merchandise trade largely reflects the fact that the dollar value of merchandise imports into the developed countries from each of the three major groups – including intra-developed country

Box 2 (cont'd) – Export diversification in selected economies, 1970 and 1986

Number of commodities exported			Index of commodity concentration in exports	
1970	1986		1970	1986
76	93	Venezuela	66	65
76	44	Algeria	65	54
135	155	Mexico	12	52
48	121	Indonesia	37	50
103	115	Colombia	62	49
87	87	Egypt	44	41
149	157	Norway	16	35
64	104	Chile	75	32
108	128	Hong Kong	34	31
131	161	Malaysia	37	28
116	132	Israel	31	25
78	127	Philippines	32	25
91	105	Pakistan	26	24
167	165	Canada	18	23
120	148	New Zealand	37	21
145	154	Finland	26	21
159	171	Singapore	30	21
166	165	Japan	13	21
168	174	Australia	19	18
135	152	Argentina	22	17
139	165	Ireland	17	16
122	158	Korea, Rep.	27	16
85	146	Turkey	33	16
178	179	United Kingdom	10	15
170	173	Sweden	14	15
92	148	Thailand	26	15
147	148	Portugal	12	14
173	174	Netherlands	8	14
178	180	Germany, Fed. Rep.	13	14
132	161	Taiwan	16	13
112	147	Greece	16	13
143	163	Brazil	33	12
162	172	Spain	11	12
165	164	Switzerland	14	12
176	177	Belgium-Luxembourg	10	12
180	179	United States	10	11
170	178	Italy	11	10
159	161	Yugoslavia	10	9
171	171	Denmark	10	9
181	181	France	9	9

Note: (1) The number of commodities exported refers to the number of three-digit SITC items in which an economy reported exports worth more than $50,000 in 1970 or $100,000 in 1986 or more than 0.3 per cent of the economy's total exports. The maximum number of three-digit SITC items is 182. (2) The index of commodity concentration ranges between 100 (total exports of an economy are concentrated in one three-digit SITC item) and 0 (the value of total exports of an economy is equally distributed across the 182 three-digit SITC items). (3) Figures for industrial countries and a few developing areas refer to the years 1970 and 1984.

Table 9
The pattern of merchandise trade of the three main country groups, 1980–87

(Percentage)

Share in value of world trade	Importing area	Exporting area	Average annual change in export value	
1987			1980–87	1987
55.0	**Developed countries**	Developed countries	6	18½
13.5		Developing areas	–2½	20½
2.8		Eastern trading area	2½	20½
71.3		**World**	**3½**	**19**
12.3	**Developing areas**	Developed countries	½	14½
4.8		Developing areas	–1	15
2.1		Eastern trading area	6	14½
19.2		**World**	**½**	**14½**
2.6	**Eastern trading area**	Developed countries	½	2
1.4		Developing areas	5½	17
5.5		Eastern trading area	6	8
9.5		**World**	**4½**	**7½**
69.9	**World**	Developed countries	4½	17
19.7		Developing areas	–2	19
10.4		Eastern trading area	5	12½
100		**World**	**3**	**17**

trade – recorded increases ranging from 18½ to 20½ per cent. In 1987, for the first time since the 1970s, imports into the developed countries accounted for more than 70 cents out of each dollar of sales in the world market (71.3 cents, to be precise).

Trade among developing areas accounted for 4.8 per cent of world merchandise trade last year (roughly the same as the 5.5 per cent share of intra-trade among the members of the Eastern trading area). With a growth rate of 15 per cent, this was marginally less dynamic than trade among developed countries (up 18½ per cent). This trade performance contrasts sharply with earlier developments in the 1980s. From 1981 to 1986, the dollar value of merchandise trade among developing areas declined year after year, and in 1986 it was down by more than one-quarter from the 1981 peak.

The developed countries remain, by a large margin, the most important market for the exports of developing areas. Again with reference to Table 9, imports into the developed countries from developing areas were equivalent to 13.5 per cent of world merchandise trade last year; mutual trade among developing areas accounted for 4.8 per cent of world trade, and imports into the Eastern trading area from developing areas accounted for 1.4 per cent, of world merchandise trade. Thus in 1987 the developing areas sold more than two-thirds of all their merchandise exports to the developed countries. Trade among developing areas accounted for another quarter of their dollar earnings from merchandise exports, and the developing areas' merchandise exports to the Eastern trading area for the remaining 7 per cent.

It is important to keep in mind that the developing areas remain important customers for the developed countries, even though the dollar value of merchandise exports from the developed countries to the developing areas barely increased between 1980 and 1987 ($294 billion versus $307 billion). Last year, trade with developing areas accounted for nearly 18 cents out of each dollar which the developed countries earned from merchandise exports.[17]

[17] The figures in the bottom left-hand corner of Table 9 indicate that the developed countries' total exports (to the world) accounted for 69.9 per cent of world trade last year; their exports to developing areas accounted for 12.3 per cent of world trade; 12.3 divided by 69.9 yields 17.5 per cent as the share of exports to developing areas in the developed countries' total exports.

At its peak in 1981, the corresponding figure was 26 cents.

Among the reasons behind this relative decline of the developing areas as markets for merchandise exports from the developed countries, two factors stand out. One is that the petroleum exporting countries responded to sharply declining dollar earnings from fuel exports by sharp cutbacks in merchandise imports (most of which originate in the developed countries).[18] The other is that since 1981 import contraction has been a prominent feature of the trade adjustment in most of the heavily indebted developing countries (some countries, such as Ecuador, Mexico, Nigeria and Venezuela, were hit by both problems).

In the case of the fifteen heavily indebted developing countries considered in the next section, the combined impact of these two effects was a cumulative reduction in imports of nearly $310 billion over the period 1982–87 (relative to the 1981 level of imports). Of this total, about one-third can be traced to reduced earnings from petroleum exports, and two-thirds traced to debt-service problems.

Fifteen heavily indebted countries

Merchandise exports from fifteen heavily indebted developing countries, which had dropped to just below $100 billion in 1986, rose an estimated 10 per cent in 1987.[19] Their combined imports, roughly stable in the period 1984–86, increased an estimated 7 per cent. Although these increases were well short of the 17 per cent increase in total world trade, they compare favourably with the 1986 performance, when merchandise imports and exports declined by 1 and 15 per cent, respectively (Chart 6).

The expansion of their combined exports in 1987 can be traced to three main factors: the sharp recovery in world petroleum prices, which favoured the oil-exporters in the group; modestly higher metal prices, which helped to increase export earnings in countries such as Chile and Peru; and the outstanding performance of exports of manufactures from Brazil (mainly transport equipment) and Mexico. Since export growth was limited to seven countries while the value of imports increased for most of them, the majority of the heavily indebted countries recorded higher merchandise trade deficits or lower surpluses last year (Table 10).

According to IMF estimates, for the heavily indebted countries as a group two widely observed debt indicators developed positively in 1987:[20]

- The ratio of external (year-end) debt to the dollar value of their exports of goods and services, which had sharply increased in every but one year (1984) since 1980, declined from its peak of 344 per cent in 1986 to 329 per cent last year.
- At the same time, the ratio of interest payments on total external debt to the dollar value of exports of goods and services, which had remained close to its peak after

Table 10
Trade adjustment in fifteen heavily indebted countries, 1987

Export and import expansion	Export contraction and import expansion
Brazil, Chile, Mexico, Morocco*, Peru*, Philippines*, Venezuela	Argentina*, Bolivia*, Colombia*, Ecuador*, Uruguay*, Yugoslavia*
Export and import contraction	
Côte d'Ivoire*, Nigeria	

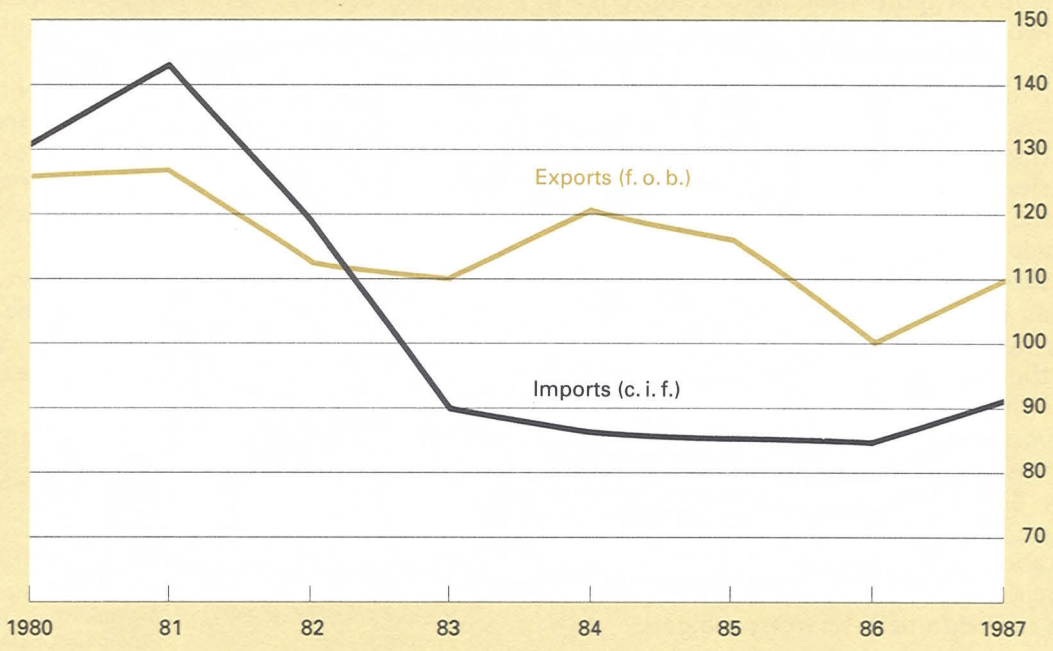
Note: An «*» indicates an increased merchandise trade deficit, or a reduced surplus. All other countries in the Table experienced a reduced merchandise trade deficit or an increased surplus.

[18] Merchandise imports into the members of OPEC, as a group, declined from an estimated $157 billion in 1981 to an estimated $91 billion in 1986. It was only last year that the level of merchandise imports into OPEC stabilized at an estimated $93 billion. Merchandise exports from OPEC, as a group, declined from an estimated $281 billion to an estimated $125 billion between 1981 and 1987. Export earnings had peaked in 1980 ($304 billion). Thereafter, they fell year after year until 1986 ($114 billion).

[19] The fifteen countries are: Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela and Yugoslavia.

[20] See *IMF Survey,* June 1988. See also Bank for International Settlements, *58th Annual Report,* Basle, 13th June 1988, pp. 67–9 and 132–8, *World Bank News,* Vol.VII, No.3, January 1988, and *World Debt Tables,* 1987–88 Edition.

Chart 6
Merchandise trade of fifteen heavily indebted countries, 1980–87
(Billion dollars)



jumping from 16 per cent in 1980 to 30½ per cent in 1982, dropped from 28 per cent in 1986 to 22 per cent last year. Unilateral suspensions of interest payments were one factor in this development, however.

At the same time, the ratio of external debt to gross domestic product for the fifteen countries as a group increased between 1986 and 1987, from 46½ per cent to 48½ per cent. In part, this reflects a further rise in external indebtedness. For another, it mirrors the fact that, despite expanding exports of the fifteen countries as a group, in several of the heavily indebted countries there was a slowdown in economic growth last year.

Economic development in many other countries remains handicapped by heavy external debt burdens. In particular, for Sub-Saharan Africa (excluding Nigeria) the ratio of total external debt to the dollar value of exports of goods and services further increased last year to 325 per cent (an average figure which conceals large differences among the individual countries of the region, however). A modest increase in the dollar value of exports of goods and services, coupled with large-scale rescheduling of payments, resulted in a decline of the ratio of interest payments to exports of goods and services from 12½ per cent in 1986 to 10½ per cent last year.

Trade by geographic region

All major regions of the world economy recorded an increase in the dollar value of merchandise exports last year. However, marked differences in trade expansion are evident in Table 11:

- The dollar values of merchandise exports from Western Europe and Asia each jumped by nearly 20 per cent in 1987. These two regions combined currently account for more than two-thirds of world merchandise exports.

- The remaining five regions reported below average increases in the dollar value of their merchandise exports last year, with rates of growth ranging from 8 per cent (Africa) to 13 per cent (North America).

As noted above, several of the figures shown in Table 11 are inflated by valuation effects of recent exchange rate changes. This is particularly true for the 1987 growth rates of merchandise exports from Western Europe and, to a lesser extent, from Asia, and Eastern Europe and the USSR.

From a medium-term perspective, Asia emerges as the most dynamic exporting region of the world economy. In 1987, the dollar value of its merchandise exports was more than 70 per cent above its 1980 level (as compared to an increase of a little less than 25 per cent for total world merchandise trade on average). At the other extreme, despite its 1987 growth, the dollar value of merchandise exports from the Middle East was almost 60 per cent below its 1980 level last year.

Table 11
Merchandise exports by geographic region, 1980–87

(Percentage)

Share in value of world trade in 1987	Region	Average annual change in value	
		1980–1987	1987
45.5	Western Europe	5	20½
22.4	Asia	8½	19
13.5	North America	3	12
3.4	Middle East	–12½	12
8.6	Eastern Europe and the USSR	4½	10
4.1	Latin America	–1	9½
2.5	Africa	–7	8
100	**World**	**3**	**17**

Table 12
Leading exporters and importers by share in world merchandise trade, 1987

(Billion dollars and per cent)

	Exports (f.o.b.)			Imports (c.i.f.)	
	Value	Share		Value	Share
World	**2490**	**100.0**	**World**	**2590**	**100.0**
Germany, Fed. Rep.	294	11.8	United States	424	16.4
United States	253	10.2	Germany, Fed. Rep.	228	8.8
Japan	231	9.3	France	158	6.1
France	148	5.9	United Kingdom	154	5.9
United Kingdom	131	5.3	Japan	151	5.9
Italy	116	4.7	Italy	125	4.9
USSR	108	4.3	USSR[a]	95	3.7
Canada	97	3.9	Canada	92	3.6
Netherlands	92	3.7	Netherlands	91	3.5
Belgium-Luxembourg	84	3.4	Belgium-Luxembourg	83	3.2
Taiwan	54	2.2	Switzerland	51	2.0
Hong Kong[b]	48	1.9	Spain	49	1.9
Korea, Rep. of	47	1.9	Hong Kong[b]	48	1.9
Switzerland	46	1.8	China	43	1.7
Sweden	45	1.8	Korea, Rep. of	41	1.6
China	40	1.6	Sweden	41	1.6
Spain	34	1.4	Taiwan	35	1.4
Singapore[b]	29	1.2	Austria	33	1.3
German Dem. Rep.	27	1.1	Singapore[b]	33	1.3
Austria	27	1.1	Australia	29	1.1
Total of above	**1951**	**78.4**	**Total of above**	**2004**	**77.4**

[a] Imports f.o.b.
[b] Includes substantial re-exports and imports for re-export.

Leading exporters and importers

The 17 per cent gain in the dollar value of world merchandise trade last year was also widespread at the level of individual countries. All the leading economies in world merchandise trade shown in Table 12 reported increases in the value of their merchandise exports and imports in 1987. So did many other countries.

While trade expanded at different rates, changes in world market shares and in the ranking of the leading exporters and importers remained limited in 1987. Most countries in Western Europe increased their shares in the value of world exports and imports, as did the major developing exporters (and importers) of manufactures in Asia. Japan's share in world exports declined in 1987 while that of imports stagnated. Despite the recovery of oil and commodity prices in 1987, the shares of many countries exporting mainly primary commodities continued to decline.

The ranking of economies changes substantially when the leading exporters and importers are defined in dynamic terms. This is apparent from Table 13, in which a selected group of economies is ranked by the average annual rates of growth in the dollar value of their exports between 1970 and 1987 (longer-term growth). In addition, the Table gives figures on the medium-term growth of trade since the 1982 recession and on the short-term growth (1986 to 1987). Because these growth rates are based on *value* data, they are affected by world inflation (especially the longer term figures in Table 13) and by exchange rate changes (especially the shorter term figures in the Table). Keeping this in mind, three points stand out:

- None of the ten largest exporters or importers in terms of trade value in 1987 (Table 12) is among the top ten exporters and importers when economies are ranked on the basis of longer-term merchandise trade growth (Table 13).
- Trade dynamics cut across any simple classification in terms of size, stage of development or geography. Among the economies showing well above average long-term trade growth there are small as well as large ones, there are industrial countries as well as developing areas, and there are economies located in Asia, the Middle East, Africa, Western Europe, North America and Latin America.[21]
- The data in Table 13 confirm the notion emphasized previously in these pages that dynamic exporters tend to be dynamic importers. For example, seventeen of the thirty economies reporting above average export growth between 1970 and 1987 also report above average import growth for this period. For the period 1982 to 1987, the evidence is even more striking, with twenty-six out of thirty two economies showing rapid export and import growth.

On the whole, the figures in Table 13 indicate that – despite the problems that have plagued the world economy since the early 1970s – access to the world market has helped many countries move-up the development ladder. And since the dynamic exporters tend to spend the foreign exchange they earn, this interaction in the world market helps to spread their dynamism to other trading nations.

Current account balances in major industrial countries

Despite the merchandise trade volume developments in the three leading trading nations discussed above, the large 1986 current account imbalances of these countries grew even larger last year:

- The United States current account deficit reached a new peak of $161 billion.
- The current account surpluses of Japan and the Federal Republic of Germany further increased to $87 billion and $45 billion, respectively.

The United Kingdom, France and Italy reported a turnaround in their current account balances. For the three countries combined, the swing was $14 billion, from a surplus of $6 billion in 1986 to a deficit of $8 billion last year. Canada reported a small increase in its current account deficit (Table 14).

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[21] There is no doubt that more developing areas would appear in the top half of Table 13 if more of them were included in the sample. The issue of data availability aside, the sample of developing areas was limited to the large traders among them because small changes in small trade flows may produce very large percentage changes of merchandise trade.

Table 13
Growth of merchandise trade value for selected economies, 1970–87

(Average annual percentage change)

Exports (f.o.b.)				Imports (c.i.f.)		
1970–1987	1982–1987	1986–1987		1970–1987	1982–1987	1986–1987
26.8	16.7	36.2	Korea, Rep. of	19.5	11.1	29.9
23.5	19.2	34.6	Taiwan	20.1	12.8	42.8
19.0	18.2	36.8	Hong Kong[a]	18.0	15.5	37.0
18.7	6.7	27.5	Singapore[a]	16.4	2.9	27.6
18.3	12.1	27.1	Turkey	16.8	8.5	20.3
18.2	12.6	26.9	China	18.9	18.1	0.5
17.9	10.9	32.7	Thailand	14.5	8.7	41.3
17.2	–5.8	11.3	Indonesia	16.5	–4.4	25.5
17.2	–0.3	28.6	Mexico	10.2	–3.4	6.1
16.9	14.7	26.5	Ireland	13.3	7.0	17.5
16.9	10.6	24.9	Spain	14.7	9.2	39.3
15.7	10.8	9.8	Japan	13.0	2.8	18.4
15.6	1.5	21.5	Tunisia	14.5	–2.3	5.2
15.0	9.8	17.6	Israel	12.0	7.0	34.4
14.9	–1.0	–7.0	Ecuador	12.6	0.6	13.4
14.9	8.3	29.2	Malaysia	13.8	0.5	17.3
14.8	11.7	23.3	Pakistan	13.0	1.3	8.3
14.3	17.1	26.5	Portugal	13.5	7.0	39.1
14.2	5.4	17.3	Brazil	10.9	–4.7	6.6
14.2	11.7	20.7	Austria	14.0	10.9	21.9
14.0	14.9	24.8	Iceland	14.6	10.9	41.5
14.0	6.7	5.3	Greece	11.3	3.7	5.7
13.8	–22.9	7.0	Saudi Arabia	22.0	–12.5	8.8
13.8	11.8	21.5	Switzerland	13.0	12.0	23.4
13.7	4.3	18.9	Norway	11.2	7.9	11.6
13.7	9.6	19.2	Italy	13.3	7.5	25.8
13.6	8.9	22.4	Finland	12.6	8.1	29.1
13.5	10.8	20.9	Germany, Fed. Rep.	12.7	8.0	19.5
13.4	4.4	10.7	USSR[b]	13.0	4.3	7.9
13.2	8.9	18.8	France	13.2	6.5	22.5
13.0	6.9	14.8	Netherlands	12.0	7.4	20.8
12.9	6.9	13.9	Bulgaria[b]	13.8	7.1	9.6
12.7	10.7	20.4	Denmark	10.9	8.8	11.4
12.4	6.7	14.4	Hungary	12.0	7.5	12.7
12.4	9.9	22.1	Belgium-Luxembourg	12.4	7.4	21.2
11.9	2.1	10.4	Yugoslavia	9.1	–1.3	7.2
11.9	6.2	22.4	United Kingdom	12.2	9.1	25.0
11.7	10.7	19.5	Sweden	10.9	8.1	24.5
11.5	8.7	–7.9	Colombia	10.1	–4.5	12.6
11.1	7.8	12.3	Czechoslovakia [b]	11.4	8.3	10.5
11.1	4.6	8.8	German Dem. Rep.[b]	10.6	4.2	8.0
11.0	5.3	22.4	New Zealand	10.9	4.7	20.0
10.9	3.1	13.0	United States	14.5	10.7	9.6
10.9	6.4	7.6	Canada	11.6	9.6	8.2
10.7	–10.5	–14.1	Nigeria	9.6	–23.2	–29.6
10.7	3.9	19.4	India	12.9	2.3	7.7
10.6	3.8	17.2	Australia	10.9	1.9	12.3
10.6	5.5	10.0	Morocco	11.1	–1.0	7.8
10.4	2.5	17.6	Philippines	10.6	–3.7	27.0
10.1	3.1	9.3	Uruguay	9.9	0.6	31.3
13.0	**6.1**	**17.0**	**World**	**13.2**	**6.2**	**17.0**

[a] Includes substantial re-exports and imports for re-exports.
[b] Imports, f.o.b.

Table 14
Current account balances of major industrial countries, 1985–87

(Billion dollars)

	1986	1987
Japan		
Trade balance	92.8	96.4
Invisibles, net	–7.0	–9.7
Current balance	**85.8**	**86.7**
Germany, Fed. Rep.		
Trade balance	55.7	70.2
Invisibles, net	–15.9	–25.0
Current balance	**39.8**	**45.2**
Italy		
Trade balance	4.5	0.2
Invisibles, net	–1.7	–1.0
Current balance	**2.8**	**–0.8**
United Kingdom		
Trade balance	–12.4	–16.3
Invisibles, net	12.4	13.0
Current balance	**0.0**	**–3.3**
France		
Trade balance	–2.4	–9.0
Invisibles, net	5.4	4.5
Current balance	**3.0**	**–4.5**
Canada		
Trade balance	8.1	8.8
Invisibles, net	–14.8	–16.0
Current balance	**–6.7**	**–7.2**
United States		
Trade balance	–144.3	–159.2
Invisibles, net	2.8	–1.5
Current balance	**–141.5**	**–160.7**

Except for Canada, these changes in current account balances were dominated by the movements in merchandise trade balances last year. In Japan and, even more so, in the Federal Republic of Germany, increasing surpluses on the merchandise trade account more than offset increasing deficits on the invisibles account, that is on the account for non-factor services, investment income and private and official transfers. In the four other countries, the decline in the merchandise trade surplus (Italy) or the increase in the merchandise trade deficits were by far larger, in terms of dollar value, than the changes on the invisibles account. Indeed, in the United States the invisibles account moved in parallel with the merchandise trade account, turning the balance on invisibles into deficit for the first time in 17 years. This development reflects a decline in net investment income from $21 billion in 1986 to $14½ billion last year.

Merchandise trade developments in the first months of 1988 signal fundamental changes. In particular, the merchandise trade deficit of the United States began to decline, the merchandise trade surplus of the Federal Republic of Germany stagnated and the surplus of Japan decreased.[22] These developments suggest that a process of reducing the large current account imbalances of the three leading trading nations is finally under way.

Outlook

The most striking feature of the world economy in the past twelve months has been its unexpected resiliency. A year ago there was not only general concern over the outlook for economic growth, but also a fear that at any moment the world economy might plunge into a vicious circle of dollar depreciation, inflation and recession. Then came the October stock market crash, followed by another round of scaling back the forecasts.

Early in 1988 signs that the world economy might be out-performing the forecasts began appearing, and by March the major public and private forecasters were revising upward their predictions of future growth rates. The sources of this renewed optimism are not hard to find. The most important, of course, is the relative strength of economic growth. Table 15 compares the recent economic performance of seven major industrial countries with their year earlier, pre-stock market crash performance. In five of the seven countries, the growth in GDP

[22] In the United States, the merchandise trade deficit for the first five months was $58 billion, down from $69 billion for the same period in 1987. The corresponding figures for the surpluses of Japan are $27½ billion and $33½ billion, and for the Federal Republic of Germany (January through April) $20½ billion and $20 billion (it is noteworthy that, in terms of domestic currency, the merchandise trade surplus for the first four months in 1988 is DM 34½ billion, down from DM 36½ billion in the corresponding period in 1987).

Table 15
Growth in the major industrial countries, 1986/87 and 1987/88

(Average of latest three months available compared with average of immediately preceding three months, at annual percentage rate of change)

	Real GDP		Industrial production	
	October through December		January through March	
	1986	1987	1987	1988
Japan	2½	7½	6	13
Canada	0	6½	6½	2
United States	1½	5	3	4
Germany, Fed. Rep	–½	3	–6	2
United Kingdom	12	4	3	–3
France	1½	2	½	4
Italy	1½	2½	½	13

during October–December 1987 (over July–September 1987) was stronger – in some cases, substantially stronger – than the growth in October–December 1986. In five of the seven, the increase in industrial production during January–March 1988 was greater than the increase in January–March 1987.[23] Most current projections anticipate that output growth this year and next will be very close to the 3 per cent recorded in 1987 – not spectacular, but much better than was being forecast as recently as six months ago.

Second, there is the strength of world trade. Previous issues of this Report have noted the asymmetric response to the sizeable changes in real exchange rates and energy prices which occurred between 1985 and 1987.[24] Adjustments to changes in these key relative prices appear to have occurred sooner in countries and firms which were hurt, than in those which benefited from more competitive exchange rates and lower energy prices. Trade growth in the second half of last year – strong enough to push the growth in world merchandise trade for 1987 as a whole a full percentage point above the increase in 1986 – suggests that the trade-depressing effects of the large changes in exchange rates and petroleum prices have been giving way to the trade stimulating effects.

There are, in addition, other positive elements in the current situation. One is the relative stability of the major exchange rates in the first half of 1988. While the strengthening of the dollar in late June disturbed this pattern, it was generally interpreted positively. For example, it was seen as confirming predictions that private capital inflows are likely to finance a much larger proportion of the United States current account deficit in 1988 than in 1987, and as pointing to an easing of upward pressure on dollar interest rates.[25] Another one is indications that the merchandise trade imbalances of the United States and Japan are beginning to decline. The optimism over recent trade balance developments is being reinforced by figures showing the strength of domestic demand in Japan and an increase in personal saving in the United States, as well as progress in reducing the United States budget deficit, all of which point in the direction of continued reductions in the imbalances.[26] Finally there are signs of continuing (if modest) progress in dealing with the third world debt problem. These include the measures agreed to at the Toronto Summit to assist heavily indebted

[23] The above observations do not necessarily imply, of course, that the sharp declines of share prices in the world's main financial markets, in October last year and once again in January 1988, have left no mark on the growth of world output and trade. First, there is the possibility that, in the absence of these shocks, the recent growth of output and trade could have been even higher. Second, adverse impacts on consumer spending and investment activity could still emerge later this year. However, available information supports the view that these events, on their own, are unlikely to have a major growth-retarding effect on world output and trade.

The seven major industrial countries shown in Table 15, as a group, currently account for more than half of total world merchandise imports and for roughly two-thirds of world gross domestic product, excluding output of the USSR and the smaller East European countries.

[24] See *GATT Press Releases* 1409, 23 March 1987, p.5, and 1419, 25 September 1987, pp. 3–6 and 25–27.

[25] Regarding the continued foreign financing of the US current account deficit, the previously mentioned figures on the trend in net interest payments to foreigners should be kept in mind. That is, inflows of net capital create a future debt-service obligation which enters as a minus in the current account balance.

[26] If the relationship between changes in real exchange rates and changes in export volume depicted in Chart 3 continues to hold, the United States should experience another substantial increase in export volume in 1988.

countries in Africa, Brazil's recent agreement with its creditors, and the banks' continued additions to their loan loss reserves.

Reaction to these positive developments is tempered by an awareness that there are some worrisome problems. Despite the progress noted above, questions of how and when the third world debt problem and the large current account imbalances of the three leading trading nations will be resolved continue to cast a cloud of uncertainty over the outlook for the world economy. So does the seemingly chronic unemployment in many countries. Recurring fears of a possible resurgence of inflation – resulting, for example, from exchange rate depreciation or high levels of capacity utilization – and protectionist pressures are two more reasons why recent upward revisions in forecasts of economic growth have often been coupled with warnings against complacency. One way of viewing these problems is that they explain much of the difference between the 3 per cent economic growth being forecast for 1988 and 1989, and the 6 per cent annual rate of world economic growth recorded in the 1960s.

Since the early 1970s, the world has witnessed an economic environment characterized by a mixture of good and bad elements, of positive developments and unresolved problems. What changes is the balance between these forces. At the present moment, the good developments outweigh the negative elements. One of the most encouraging factors in the current situation is the outlook for world merchandise trade, which appears headed for a year of real growth in excess of 5 per cent.

II.
Trade trends in agriculture

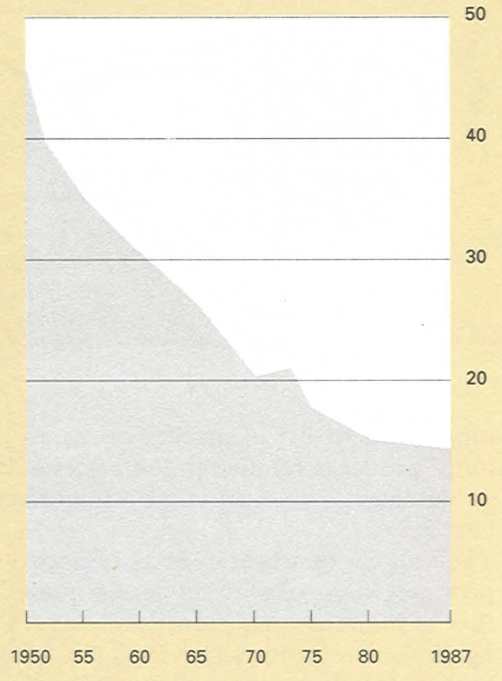
From the viewpoint of the world trading system, agriculture's two most distinctive features are its declining share of world merchandise trade – from 46 per cent in 1950 to 13½ per cent last year – and the increasing amount of commercial policy friction generated by countries' agricultural policies. These two features are not, of course, independent. If agriculture had been a dynamic sector of world trade, countries' agricultural policies probably would have been of less concern to their neighbours.

An exhaustive analysis of the forces behind these two distinctive features of agriculture would be a major undertaking. The purpose of this section is much more modest, namely to review available statistics to see what insights they offer on the general nature of the evolution of world trade in agricultural products, primarily during the past twenty years.

Total world trade in agriculture

The nearly uninterrrupted decline since 1950 in agriculture's share of world merchandise trade occurred in the context of growing world markets for both agricultural products and other merchandise. On average, the dollar value of world exports of agricultural products increased 7 per cent a year, and that of total merchandise by 10½ per cent a year, between 1950 and 1987.[1] In other words, agricultural trade was not declining absolutely; it increased from $28 billion in 1950 to $340 billion last year. Rather, the situation depicted in Chart 7 reflects the fact that trade in agriculture was growing much more slowly than the rest of world merchandise trade – a development explained in part by greater scope for product innovation and differentiation, as well as greater opportunities for relocating production, which are inherent in manufacturing.

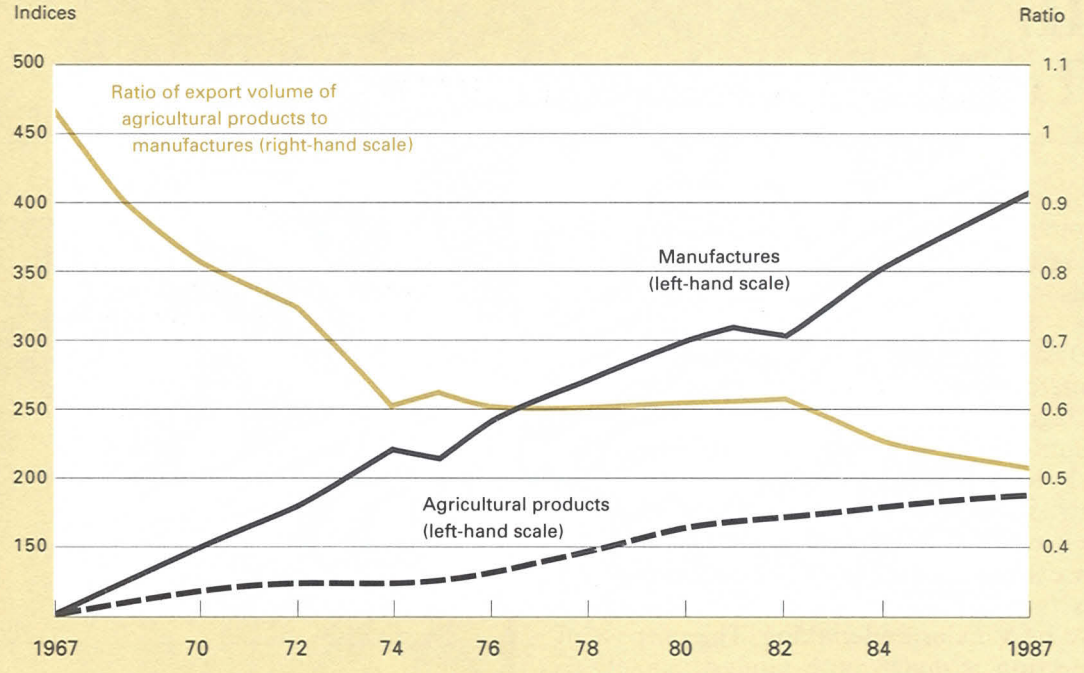
Chart 7
Share of agriculture in the value of world merchandise trade, 1950–87
(Percentage)



This long-term decline in the share of agriculture in the dollar value of world merchandise exports reflects both lagging growth of trade volume in agriculture (Chart 8), and a de-

[1] The downward trend of the share of agriculture in world trade is also evident when fuels are excluded from merchandise trade. For the years 1967, 1980 and 1987, for example, the shares of agriculture in world merchandise trade, excluding fuels, were 27, 20 and 15 per cent respectively.

Chart 8
World export volume of agricultural products and manufactures, 1967–87
(Indices, 1967 = 100, and ratio)



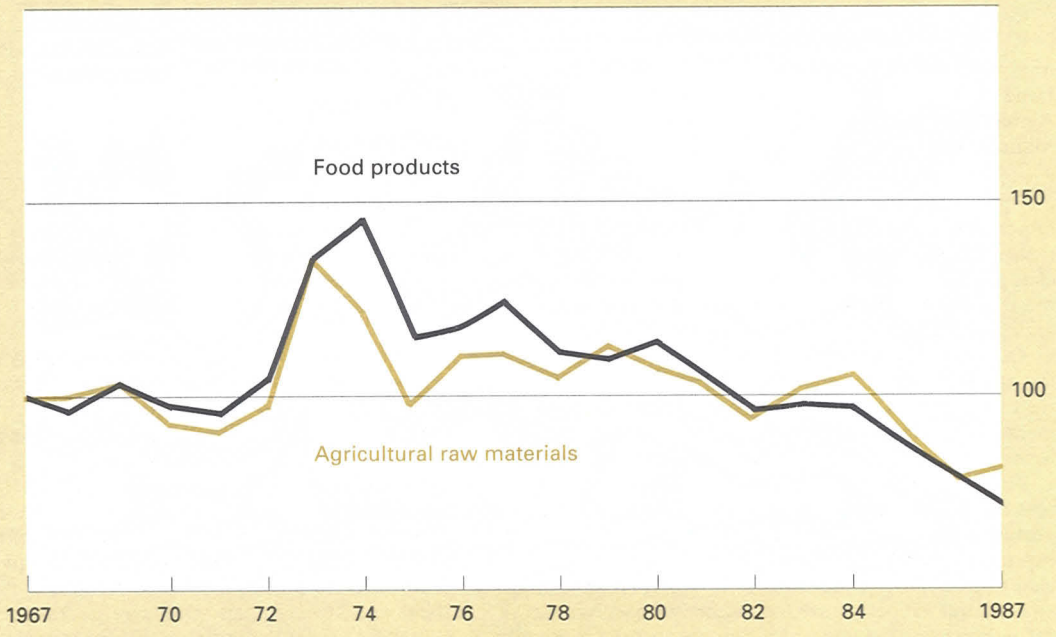
clining trend in world market prices for agricultural products relative to the prices of other merchandise, in particular manufactures (Chart 9):

- The volume of world exports of agricultural products grew distinctly less rapidly than that of manufactures from 1967 to 1974 and, again, in the years since 1983. In between, both trade flows expanded at almost equal rates, notably at 3½ versus 4 per cent annually.
- World market dollar prices for agricultural raw materials and food developed by and large in line with the unit values of world exports of manufacturers between the late 1960s and the beginning of the 1980s. There were substantial fluctuations around this trend, however, due partly to a greater degree of price instability on world markets for agricultural products as compared to those of manufactures (Box 3). Since 1981, the prices of agricultural products have tended to decline relative to export unit values of manufactures (Chart 9).
- Despite a pick-up of world market prices for agricultural products in the course of 1987, for the year as a whole the relative prices for agricultural raw materials and food were down by 7½ and 16 per cent, respectively, from their 1981 levels and remained at historically low levels.[2]

In volume terms, world trade in agriculture expanded last year at about the same rate as total world merchandise trade. However, the post-1981 decline in the prices of food products relative to manufactures – which presumably was one factor behind the volume increase –

[2] See E.R. Grilli and M.C. Yang, Primary Commodity Prices, Manufactured Goods Prices, and the Terms of Trade of Developing Countries: What the Long Run Shows, *The World Bank Economic Review*, Vol.2, No.1, January 1988, pp. 1–47. IMF, *Primary Commodities Market Developments and Outlook*, May 1987, Appendix.

Chart 9
World market prices for agricultural raw materials and food relative to manufactures, 1967–87
(Indices, 1967 = 100)



continued last year, causing a further decline in agriculture's share of the value of total merchandise trade (the relative prices of agricultural raw materials, in contrast, increased somewhat).

As in the case of manufactures, an increasing share of world agricultural production has been traded internationally over the past twenty years. This is evident from the fact that in 1987 the ratio of the volume of agricultural trade to the volume of agricultural production was 21 per cent above its 1967 level. But it is also apparent from Chart 10 that in the case of agriculture this trend took a much less steep path than that of manufactures and, indeed, that the ratio generally declined between 1980 and 1986. In 1987, the ratio of trade volume to world output of agricultural products was still slightly below its 1980 level.[3]

The growing internationalization of output prior to the 1980s indicates that trade creating factors outweighed trade suppressing factors in agriculture. This does not mean, however, that export expansion was driven only by countries which enjoy a comparative advantage in agricultural production and trade.

Apart from the demand and supply factors mentioned above, trade growth relative to output growth was stimulated by the decline in international transport and communication costs, improved techniques of processing and storage and a dismantling of trade barriers in certain

[3] Based on a sample of food products which covers more than four-fifths of total world trade in food, FAO estimates indicate that the share of world food output which was exported rose virtually every year during the 1970s. After 1981, world food output has kept rising while the *volume* of world food exports has shown a declining trend. In consequence, the share of world food production traded internationally declined sharply in the 1980s. More generally, these developments took place at a time when world agricultural production increased much less rapidly than world production of manufactures.

Box 3 – Instability of agricultural exports

	Instability Indices for World Exports			
	1967–80		1980–87	
	Value	Prices	Value	Prices
Food	9.2	13.9	6.6	6.7
Agricultural raw materials	10.4	12.2	10.6	8.3
Manufactures	6.7	7.0	9.0	8.4

Apart from being less dynamic, agricultural trade is also believed to be more volatile, largely because of the importance of weather for production and the fact that a low proportion of output is traded internationally. Agricultural prices are generally considered particularly volatile because of a relatively slow response of supply to changes in demand (and vice versa) and of a strong element of speculation in commodity trade, associated with the uncertainty about future supply. A comparison of the figures in the above Table suggests that such a generalization appears not to be always correct.*

During the period 1967–80 the values and prices of world exports of food and agricultural raw materials were less stable than those of world exports of manufactures. The picture changes in 1980–87 when the instability on world agricultural markets became similar to (agricultural raw materials) or less than (food) that on the world market for manufactures. The relatively stable behaviour of export values and prices in agriculture during the latter period coincided with the depressed agricultural markets in the first half of the 1980s.

The calculations refer to very broad product groups and it is certain that the volatility differs substantially across markets for individual products (whether agricultural commodities or manufactured goods). It is also important to keep in mind that several developing countries rely on a few commodities for a large share of their export receipts. The prices of these commodities can vary extensively during a short time period as a result of a change in weather conditions or in policy. Recent examples of this are the substantial rise in the prices of rice and natural rubber as a consequence of bad weather in Thailand and Malaysia, and the large fluctuations in coffee prices as the news of a drought in 1985 in Brazil was followed later by the inability of exporters to allocate export quotas in early 1987. In view of the importance for developing countries of a steady inflow of foreign exchange, it is encouraging to note that the export structure of many developing countries is becoming more diversified.

* An instability index measures the unexpected changes in a variable. A commonly employed index is the average proportionate deviation of the actual value of a variable from its trend value. Prices refer to dollar export prices in the case of food and agricultural raw materials and to dollar unit values in the case of manufactures.

areas of trade in agriculture in the context of past multilateral trade negotiations.[4]

Another important trade-creating factor was the development of agricultural production in developing areas. For example, as a consequence of such technological advances as the «green revolution», some developing areas gained or increased exportable surpluses of agricultural products. Furthermore, given the weight of agriculture in total output and employment of most developing areas (Table 16), expansion of agricultural production generates substantial employment and income growth, both in the agricultural sector and elsewhere in the economy, frequently benefiting low-income groups. Empirical estimates suggest that low-income households in developing areas spent about 60 per cent or more of increases in income on food. This is one of the reasons be-

[4] In some instances, protection of a particular agricultural commodity may induce imports of substitute commodities, as users shift to substitutes and domestic producers of substitutes shift into the more lucrative production of the newly protected commodity. For example, protecting cereals in the European Community led to a rapid increase in imports of cereal substitutes (see Bureau of Agricultural Economics, *Agricultural Policies in the European Community,* Australian Government Publishing Services, Canberra, 1985). Similar evidence is available for other areas, both developed and developing.

Chart 10
Ratio of world export volume to world output, agricultural products and manufactures, 1967–87 (Indices, 1967 = 100)

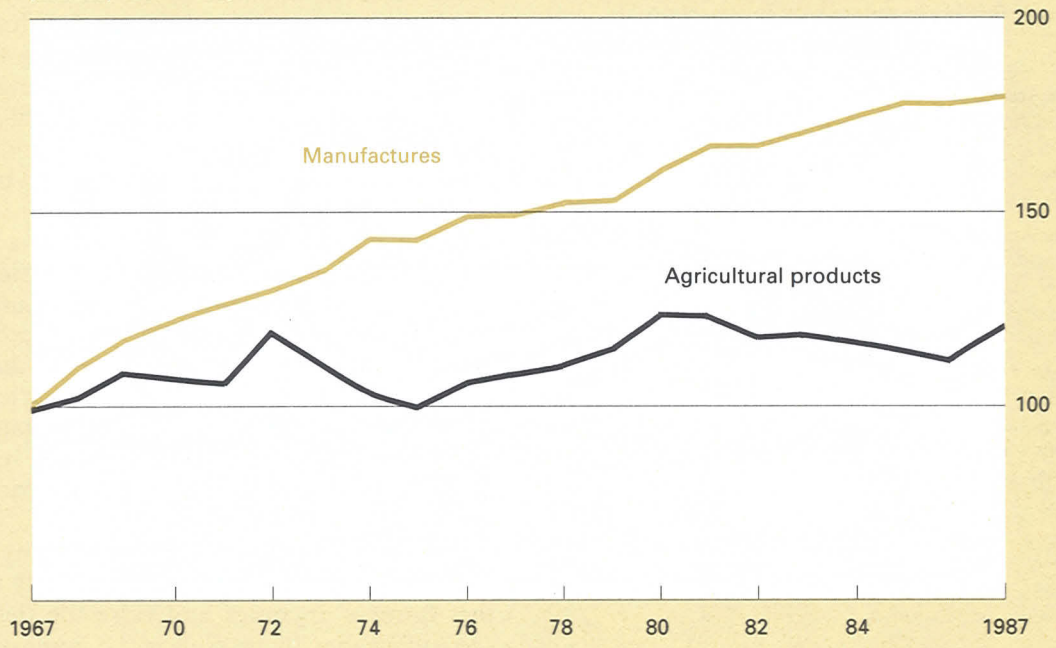


Table 16
Share of agriculture in gross domestic product and labour force in developing areas and industrial countries, 1965 and 1985

(Percentage)

	Share of agriculture in			
	gross domestic product		labour force	
	1965	1985	1965	1985
Developing areas	29	20	70	62
Industrial countries	5	3	14	7

Note: World Bank estimates.

hind the fact that, while the immediate effect of accelerated agricultural production in developing areas appears to be greater self-sufficiency, the historical record shows that above-average growth of agricultural production has been accompanied in several developing areas by even more rapid growth of food consumption and thus accelerated import growth (Table 17).[5]

In addition, mention must be made of the impact of agricultural policies on trade and production. For example, other things being equal, increasing resort to export subsidies, including subsidized export credits, might artificially boost the volume of world trade in agricultural products. Aside from the very questionable merits of such an increase in trade volume, it is clear that other things were not

[5] See International Food Policy Research Institute, *Food Policy Statement,* No. 6, December 1986, p. 2.

In contrast to the developing countries, output growth in agriculture in the industrial countries did not trigger an even more rapid growth of food consumption (i) because agriculture is of minor importance in terms of income and employment generation and (ii) since per capita food consumption in the industrial countries is already relatively high, additional income is largely spent on other items. Consequently, the increasing degree of self-sufficiency or excess supply of a number of major agricultural products in several industrial countries led to problems of growing stocks and subsidized exports.

Table 17
Output and import volume of agricultural products, excluding fisheries and forestry products, of selected developing areas, 1967–86

(Average annual percentage change in *volume*)

	Output	Imports
Saudi Arabia	9½	14
Libyan Arab Jamahiriya	5½	9½
Brunei	5	6
Indonesia	4½	9
Korea, Rep. of	4½	12½
Syrian Arab Republic	4½	5
Thailand	4½	7
Iran	4	14½
Venezuela	4	5½
Pakistan	3½	4½
Tunisia	3½	5½
Benin	3½	4
Singapore	3½	4½
Solomon Islands	3½	4
Bolivia	3	5
Mexico	3	15½
Rwanda	3	11
Brazil	3	5½
Sudan	3	4½
Kenya	3	4½
Papua New Guinea	3	6
Panama	3	6½
Liberia	3	4
Colombia	3	8½
Algeria	3	8½
World	**2½**	**4**

equal. The increasing resort to export subsidies for agricultural products often has been the second stage of a process that began either with trade-restricting increases in barriers to imports, or the granting of production subsidies.[6] In other words, higher import barriers or production subsidies initially reduce trade and stimulate high cost production, part of which is unloaded in the world market with the aid of export subsidies. At the same time, subsidized exports tend to displace exports of efficient producers of agricultural products in third markets. For a variety of agricultural products, the production incentives created by higher trade barriers and production subsidies were such that, in combination with export subsidies, they turned previous net importers into net exporters. Examples include the United States, China and the European Community for such products as refined sugar, cotton, wheat, cheese, butter, bovine meat, pig meat, and wine.[7]

These various policies have led to lower and more volatile world market prices for many agricultural products, which in turn has had a negative impact on the incentives facing farmers in many countries, including many developing countries. While this has not necessarily led to absolute declines in agricultural production, there is little doubt that it has acted to limit increases in output.[8]

More generally, as is stressed in a recent study, policy-related distortions in agricultural production and trade have an important negative impact on the rate of world economic growth.[9] Quite aside from the issue of the *direct* impact of such policies on world agricultural trade, there is no doubt that their negative impact on worldwide economic growth restrains the growth of all trade, including agricultural trade.

Current protectionist policies in many industrial countries were designed primarily to protect farmers' incomes and raise the degree of self-sufficiency by insulating the domestic market from developments on international mar-

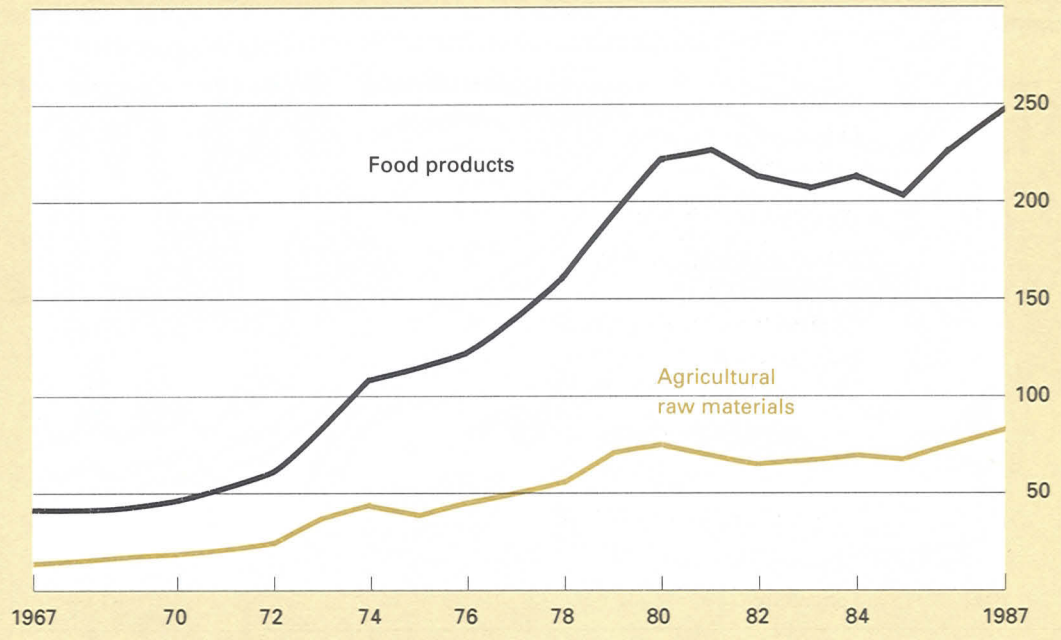
[6] It is important to note that the costs of policy related trade distortions are much higher than the budgetary costs of support and sales would suggest. For recent analysis, see, for example, *Macroeconomic Consequences of Farm Support Policies,* Centre for International Economics, Canberra 1988 and "Agricultural Reform – A Long Row to Hoe", *The OECD Observer,* 152, June/July 1988, pp. 16–19.

[7] In contrast, an inadequate response of domestic supply to the rise of food demand in developing Africa, the USSR, and some other areas converted them into net importers of several products of which they were earlier net exporters. This holds, for example, for maize and bovine meat in the case of developing Africa and for wheat and bovine meat in the case of the USSR. In several developing areas, import demand for agricultural products was boosted by the combination of (i) a relatively slow growth of per capita food supply, and (ii) subsidized food consumption at home (Egypt being a case in point).

[8] Regarding the negative impact on agricultural production in developing countries see, for example, L.A. Winters, «The Economic Consequences of Agricultural Support: A Survey», *OECD Economic Studies* (Paris), No. 9, Autumn 1987; and *Agricultural Price Policies,* Food and Agriculture Organization (Rome), 1987.

[9] See the first of the two references in footnote No. 1.

Chart 11
Value of world trade in agricultural raw materials and food, 1967–87
(Billion dollars)



kets.[10] The presence of these policies, and their increasing restrictiveness, appears to be one of the reasons why the ratio of world agricultural trade to world agricultural output has been out-performed by such a wide margin by the corresponding ratio for manufactures.

Major product groups

Food products currently account for three quarters of all agricultural products traded internationally, and agricultural raw materials for the remaining one-quarter. During the 1970s the dollar *value* of world food exports grew somewhat faster than that of agricultural raw materials. Both product groups fell on hard times in the first half of the 1980s, after which the dollar value of trade in these product groups recovered (Chart 11).

While trade restrictions have been a major constraint on the growth of world trade in food, trade in agricultural raw materials has been restrained primarily by two quite different factors. One is a long-term tendency for the raw material intensity of world economic growth to decline. This has resulted both from technological advances in production and sto-

[10] Efforts to achieve self-sufficiency in food began to intensify in the mid-1970s when, in a generally inflationary environment, world market prices for agricultural products rose sharply under the impact of bad harvests, the first oil price shock and the United States soyabeans export embargo of 1974. This experience nourished concerns of a persistent worldwide food shortage.

Attempts to maintain farmers' incomes frequently take the form of price support policies, backed-up by import restrictions. Price support policies have generally subsidized large farmers more than smaller ones because payments are linked to the level of output and not to shortfalls in income. Price support policies also lead to a rise in land values and thus result in windfall gains for owners of land and income losses for those renting property. In addition, artificially high product prices encourage production whatever the market conditions and thus add to the budgetary costs of keeping stocks of agricultural products.

Table 18
World agricultural exports by product group, 1967–86

(Percentage share and average annual percentage change in *value*)

Share in world exports of agriculture in 1986	Product group	Average annual percentage change	
		1967–80	1980–86
7.8	Agricultural products not elsewhere specified *	13	6
7.4	Fish and fish preparations	23½	4½
3.1	Crude materials	15	4
7.5	Tropical beverages	13	3
4.5	Beverages, excluding tropical	15½	2½
11.4	Fruits and vegetables	13	2½
3.4	Tobacco and tobacco products	12	2½
2.1	Hides and skins	11½	2½
	Total world merchandise exports	**18½**	**1**
5.1	Dairy products	15½	0
10.2	Meat and meat preparations	14	0
3.3	Pulp	15½	–1
8.3	Oilseeds, fats, oils, oilcakes and meals	15	–2½
6.2	Wood	15½	–3
4.0	Natural fibres	8½	–4
11.4	Cereals and cereal preparations	14	–5½
1.1	Rubber	13	–6
3.4	Sugar	17	–7
100	Agriculture	14½	0

* Includes such products as chocolate products n.e.s., cocoa products, coffee extracts, edible products and preparations n.e.s., spices and sugar confectionary.

Note: Individual shares do not add up to 100 per cent because of roundings.

rage, and from shifts in world demand towards higher qualities for any given product (a move which usually does not involve a greater input of raw materials) and towards products and services which use relatively little or no agricultural raw materials as inputs.

Second, there has been substitution of synthetic and other materials for agricultural raw materials in many areas, ranging across inputs into such industries as textiles and clothing (synthetic fibres for cotton and wool), tyres (synthetic for natural rubber), footwear (synthetic materials for hides and skins) and construction (steel, concrete or plastics for wood).[11] Shifts in consumer preferences since the early 1980s back to natural fibres and materials, as well as the increase in input prices for petroleum-based synthetics during 1979–85, slowed down the pace and, in some areas, indeed reversed the process of substitution. More recently, with the decline of petroleum prices since late 1985, synthetics have regained a measure of competitiveness vis-à-vis several agricultural raw materials.

Mention should also be made of the fact that statistics on trade in agricultural raw materials are affected by the progress in many countries towards increased domestic processing of these commodities, with the result that they show up in production and trade statistics for manufactures rather than for agriculture.[12]

[11] Substitution also occurs for a variety of food items, for example, in case of tropical beverages versus soft drinks. For a study of substitution of some agricultural commodities see FAO, *Agricultural Raw Materials: Competition With Synthetic Substitutes,* FAO Economic and Social Development Paper 48, 1984.

[12] See for example, United Nations, *UNCTAD Commodity Yearbook 1987,* pp. 74–75.

Trade developments by major product groups, in terms of the dollar *value* of exports, are shown in Table 18. It is evident that in the 1980s the dollar value of exports of eight product groups expanded on average more rapidly than that of total world merchandise trade. These product groups encompass both food items and agricultural raw materials, and they accounted in the aggregate for a little less than half of world agricultural exports in 1986 (the last year for which a consistent set of figures at this level of detail are currently available).[13] The dollar value of exports of the remaining nine product groups on the list either stagnated between 1980 and 1986 (meat and dairy products) or declined, in some cases substantially.

This growth pattern is quite different from the experience in the 1970s when, boosted by accelerating inflation in the world economy, the dollar value of exports of all seventeen agricultural product groups increased. In the 1970s, however, there was only one product group, fish and fish preparations, whose dollar value of exports expanded more rapidly than that of world merchandise exports (this product group has continued to do very well in the 1980s).[14]

Estimates of the dollar value of world exports of selected agricultural products are available for 1987 (Table 19). Increases of trade value over the previous year in the range of 24 to 65 per cent were recorded for natural rubber, palm oil, soyabean meal, soyabean oil and cotton. The dollar values of world trade of maize and coffee declined sharply between 1986 and 1987. For most products in Table 19, the dollar value of world exports last year was lower than in 1984 – a development which helps explain the sharp drop in the share of these seventeen products in total agricultural trade.

Table 19
World exports of selected agricultural products, 1984–87

(Billion dollars and percentage)

	1984	1985	1986	1987
	Billion dollars			
Wheat	18.2	15.3	13.0	13.7
Coffee	10.6	10.8	14.2	10.0
Sugar	10.1	8.9	9.4	9.8
Cotton	7.0	6.1	5.2	8.6
Soybeans	7.2	5.5	5.6	6.0
Soybean meal	4.3	3.6	4.1	5.4
Maize	10.3	8.8	6.8	4.9
Tobacco	4.1	4.1	3.9	3.9
Natural rubber	3.5	2.7	2.9	3.6
Rice	3.8	3.1	3.0	3.2
Cocoa beans	2.6	2.6	2.7	2.7
Hardwood logs	2.1	2.1	2.2	2.4
Hard sawnwood	2.5	2.3	2.3	2.4
Palm oil	2.9	2.6	1.8	2.3
Cocoa products	1.8	2.0	2.0	2.0
Soybean oil	2.9	2.3	1.2	1.6
Tea	**2.5**	**2.1**	**1.7**	**1.5**
Total value of above products	96.4	84.9	82.0	84.0
	Per cent			
Share of above products in world trade in agriculture	34.4	31.7	27.4	25.8

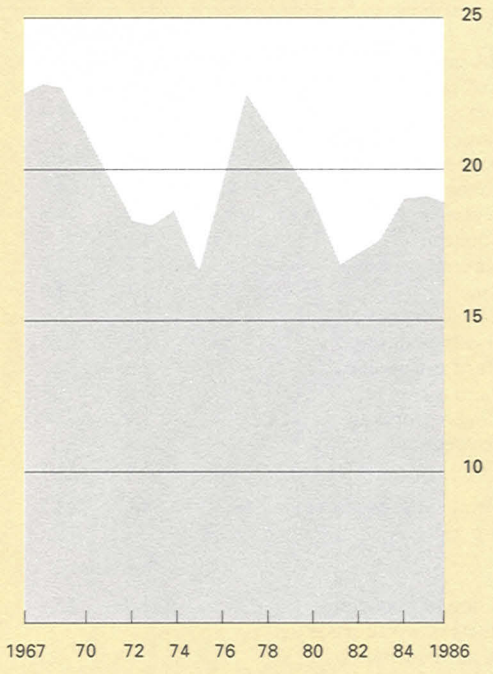
An interesting development is also observable when world agricultural trade is divided into tropical products and non-tropical products. As is evident from Chart 12, the share of world trade in tropical products, broadly defined, declined gradually between 1967 and 1986. A major exception to this trend occurred around 1977 when the prices for tropical beverages increased dramatically, largely because of a sharp decline in output due to bad weather. Furthermore, not all tropical products belong in the group of less dynamic agricultural exports.[15]

[13] For information on recent developments in individual markets, see, for example, GATT, *The World Market for Dairy Products*, 1987; GATT, *The International Markets for Meat*, 1987/88, and various issues of *Agra Europe*.

[14] In absolute terms, the spread of growth rates of the dollar value of exports was higher in the period 1967 to 1980 (with 23½ per cent annual growth in the case of fish and 8½ per cent in the case of cotton and other natural fibres) than in the period 1980–86 (with 6 per cent annual growth in the case of agricultural products not elsewhere specified and a 7 per cent annual decline in the case of sugar).

[15] The share of those tropical products which are exported primarily by developing areas (for the definition of the tropical products used in these calculations see appendix table in Volume II) followed a similar pattern.

Chart 12
Share of tropical products in the value of world exports of agricultural products, 1967–86 (Percentage)



From yet another perspective, it is important to note that world trade in agriculture shows a trend towards more processing prior to export. As is apparent from Chart 13, the share of unprocessed products in world exports of agriculture declined from 47 per cent in 1967 to 35 per cent in 1986.

Processed products now account for about one-quarter of world trade in agricultural products. The strongest trade performance among the four categories of agricultural products, however, is that of «miscellaneous products», which currently accounts for almost one-fifth of world trade in agricultural products; it includes such dynamic trade items as fishery products and cut flowers.

Trade by country and area

As is evident from the individual country statistics in Table 20, the developed countries continue to dominate world trade in agricultural products.

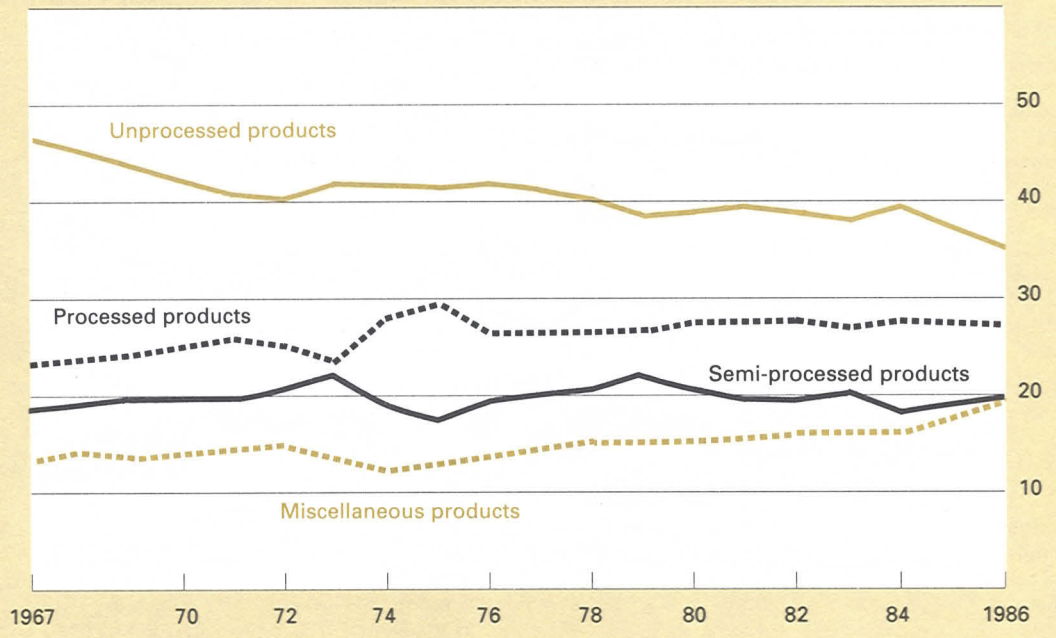
The importance of the developed countries in the world market for agricultural exports and imports is also evident. However, the share of these countries, as a group, in world agricultural markets has changed substantially over the past twenty years:

- Between the late 1960s and around 1980, the dollar value of agricultural *exports* from the developed countries expanded more rapidly than that from other origins. Thereafter, the share of these countries in world exports fluctuated around 65 per cent.
- The share of the developed countries in world *imports* of agricultural products tended to decline between the late 1960s and the early 1980s. Since 1981, and in particular in 1986, this trend was partly reversed.

From the late 1960s to the early 1980s, the industrial countries switched from being a large net-importing region to a net-exporting region of agricultural products (Chart 14). In 1985 and particularly in 1986, the dollar value of their imports of agricultural products exceeded that of their exports again, reflecting (i) concurrent growth in the dollar value of agricultural imports, and a fall in exports, in the United States (1985 and 1986), (ii) a strong increase in the dollar value of imports into Japan (1986), and (iii) a strong increase in the dollar value of exports of agricultural products, but an even stronger increase in that of imports into the European Community (1986). These developments reflect differences in the composition of agricultural trade as between the European Community and the United States, as well as the depreciation of the US dollar which boosted the dollar value of both Japan's trade and intra-EC trade.[16]

[16] In the 1980s, developments differed for food and agricultural raw materials. In the developed countries, the increase in the share of their imports of agricultural products was evident for both food and agricultural raw materials. In 1986, the United States became a net importer of food for the first time since the late 1950s. The reduction in the developed countries' share in world exports of agricultural

Chart 13
Value of world exports of agricultural products by stage of processing, 1967–86
(Percentage share)



In contrast to the industrial countries, the share of developing areas in world exports of agricultural products tended to decline over the longer-term, while their share in world imports tended to increase. Nonetheless, the developing areas as a group remained a substantial net exporter of agricultural products. The Eastern trading area became a net importer of agricultural products due to a combination of lagging growth in the dollar value of their exports and high import growth.

As Appendix Tables V and VI make clear, the longer-term trend towards the developed countries accounting for a larger share of world agricultural exports and a smaller share of world agricultural imports has been a rather pervasive phenomenon, affecting a broad range of agricultural products. Against this general trend, the developed countries' share in world exports of crude materials, fishery products and wood pulp has tended to decline, while their share in world imports of fishery products has tended to increase.

It is important to keep two things in mind. First, the dollar values of agricultural trade flows are affected by the valuation effects of changes in exchange rates. For example, the 1986 dollar value of intra-European Community trade is inflated by the fact that West European currencies appreciated against the US dollar and, because trade within the European Community accounted for more than half of the Community's agricultural imports and for

commodities was mainly due to a decline in the corresponding shares for food. The share of developed countries in world exports of agricultural raw materials actually increased for most of the years during the 1980s. This is mirrored in a fall in the developing areas' shares in world exports of agricultural raw materials exports. See also GATT, *International Trade 1986/87*, pp. 32–4.

Table 20
Major exporters and importers of agricultural products, 1967 and 1987

(Percentages)

Exporters	Share in value of world exports of agricultural products		Importers	Share in value of world imports of agricultural products	
	1967	1987		1967	1987
United States	14.4	11.6	Japan	8.1	10.4
France	4.2	7.7	United States	11.7	10.0
Netherlands	4.2	7.2	Germany, Fed. Rep.	9.6	9.7
Canada	5.5	5.6	Italy	5.9	6.9
Germany, Fed. Rep.	1.6	5.0	United Kingdom	12.4	6.4
United Kingdom	2.1	3.3	France	5.7	6.1
Australia	4.5	2.9	USSR	3.5	5.3[a]
Belgium-Luxembourg	1.5	2.9	Netherlands	3.2	4.4
Brazil	2.7	2.7[a]	Belgium-Luxembourg	2.6	3.1
China	1.8	2.6	Spain	1.6	2.1
Denmark	2.5	2.6	Canada	2.0	1.9
Italy	2.0	2.5	Korea, Rep. of	0.5	1.6
Spain	1.3	2.0	China	1.1	1.5
Malaysia	1.4	2.0	Taiwan	0.3	1.4
USSR	1.0	1.8[a]	Switzerland	1.5	1.3
Argentina	2.6	1.6[a]	Egypt	0.7	1.3[a]
Thailand	1.0	1.5	Denmark	1.1	1.1
New Zealand	1.8	1.5	Saudi Arabia	0.3	1.1[a]
Ireland	0.9	1.4	Sweden	1.3	1.0
Cuba	1.3	1.4[a]	Hong Kong[c]	1.0	1.0
Sweden	1.8	1.3	Austria	0.7	0.8
Indonesia	0.7	1.1	Greece	0.5	0.8
Taiwan	0.5	1.0	Algeria	0.4	0.7[a]
Finland	1.0	0.9	German Dem. Rep.	1.4	0.7[a]
India	1.3	0.9[b]	Czechoslovakia	1.3	0.7
Total of above	**64**	**75**	**Total of above**	**78**	**81**

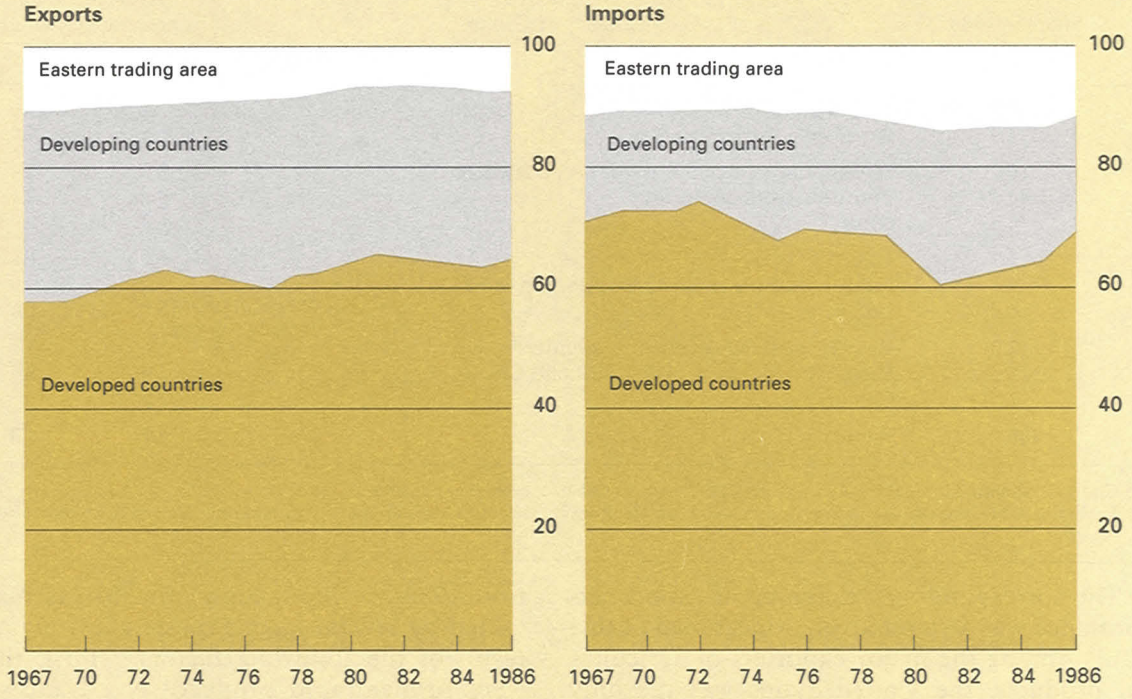
[a] Secretariat estimate.
[b] 1986.
[c] Retained imports.
Note: In 1987 the European Community (12) had a share of 35.7 per cent in world exports and of 42 per cent of world imports of agricultural products. The corresponding figures excluding intra-EEC trade were 10 per cent and 18.1 per cent.

more than two-thirds of its exports, this development alone is an important factor behind the increase in the dollar value of the total agricultural exports and imports of the European Community in 1986.

Second, a number of individual countries continue to depend on exports of agricultural products for a substantial share of their foreign exchange earnings. Countries for which agriculture accounts for one-half or more of earnings from merchandise exports include not only many of the small trading nations, but also such countries as Côte d'Ivoire, Argentina, New Zealand, Colombia and Thailand (if the cut-off point is one-third or more of export earnings, Australia, Malaysia and Denmark can be added to this list).

Figures on longer-term developments in import *volume* by selected areas are given in Table 21. The figures, which are based on estimates of the Food and Agriculture Organization, exclude fishery and forestry products (that is about 15 per cent of total world trade in agriculture). The first point to note is that Table 21 documents once again the sharp slowdown of world trade in agricultural products in the 1980s relative to the 1970s already evident from Table 1. Second, the ranking of the indi-

Chart 14
Share of major regions in world exports and imports of agricultural products, 1967–86
(Percentage)



vidual areas by import performance changed markedly between these two periods.

In the 1970s world trade in agricultural products was fuelled by rapidly expanding import demand in four countries or groups of countries – OPEC, the USSR, the heavily indebted developing countries and China. Their combined share in world imports of agricultural products almost doubled between 1967 and 1980, from 10 to 19 per cent.

Between 1980 and 1986, import demand for agricultural products slackened in all areas, except for the United States and the residual group of developing areas shown in Table 21. Indeed, in the heavily indebted countries, the USSR and China (as well as other countries of the Eastern trading area) import volumes of agricultural products declined absolutely, and in one other group which recorded dynamic performance in the 1970s, namely the members of OPEC, the slowdown of import growth was particularly strong. Above average rates of import growth between 1980 and 1986 were recorded in the United States, developing Africa (excluding heavily indebted countries and OPEC members), other developing areas, the European Communities (including intra-EC trade) and Japan.[17] It should be kept in mind that these are volume developments, and that therefore the figures are not affected by exchange rate changes to the same extent as value figures (in particular, there is no «valuation effect» from exchange rate changes).

[17] The figures on the average performance during the period 1980–86 conceal substantial annual fluctuations. For example, particularly large differences in import performance were reported for the USSR, ranging from an increase of 31 per cent in import volume in 1981 to a decline of 29½ per cent in 1986. Also, the import performance of the various regions varied substantially as between individual agricultural products (Appendix Tables II and VII).

Table 21
Import volume of agricultural products, excluding fishery and forestry products; selected countries and groups of countries, 1967–86

(Percentage share and average annual percentage change)

Share in 1986	Country or Group	Average annual percentage change	
		1967–80	1980–86
9.2	United States	1.1	5.6
2.9	Developing Africa[b]	5.5	4.8
10.2	Developing areas, excl. areas spec. elsewhere	3.7	3.4
40.7	European Community (10)	4.2	2.1
6.3	OPEC	14.3	1.9
7.3	Japan	5.2	1.8
9.7	Industrial countries, excl. EC, US, Japan	3.4	0.9
6.2	USSR	12.4	–1.6
3.2	Heavily indebted developing countries[a]	8.8	–3.7
3.3	Eastern trading area, excl. USSR and China	5.4	–6.4
1.0	China	8.5	–7.7
100	**World**	**5.5**	**1.0**

[a] Countries identified in Table 10, excluding OPEC members (that is, excluding Ecuador, Nigeria, Venezuela).
[b] Excluding OPEC members and heavily indebted countries (that is, excluding Algeria, Côte d'Ivoire, Gabon, Libyan Arab Jamahiriya, Nigeria).

The corresponding weakening of export performance was also relatively widespread (Table 22).[18] Among the major exporters of agricultural products, the United States was the only one to experience an absolute decline in exports in the more recent period. The list of depressed exports included such major products as cotton, maize and wheat.

The export performance of the European Community remained relatively strong between 1980 and 1986, in particular for such products as tobacco, wheat, barley, maize, pig meat and fresh bovine meat. However, the development of trade volume differed widely as between trade within the Community and trade with third countries. The figures shown in Table 23 partly reflect the effects of the enlargement of the EC, since beginning with 1982 the data for intra-trade include Greece, and beginning with 1986 they also include Portugal and Spain (correspondingly, the respective trade flows are excluded from trade with third countries). However, these effects were not strong enough to change the general trends shown in Table 23.[19]

Despite increasing stocks (Chart 15) and downward pressure on world market prices for many agricultural products during the period 1980–86, production growth was maintained by several large exporters, mainly as a result of the following factors.[20] First, there were further rapid productivity advances in agriculture related to the development of new

[18] Exceptions were (i) China which recorded sharply accelerated export growth, (ii) the «other» developing areas which experienced a moderate pick-up, and (iii) the USSR where export volume stagnated between 1980 and 1986, following a period of substantial decline in the 1970s.

[19] See *Agra Europe*, 20 May 1988, E/6. The sharp 1986 decline of export volume in trade with third countries largely resulted from a sharp drop of grain and grain products, and of milk and milk products.

[20] Many factors contributed to the slowdown in world import demand, in particular in the markets for individual agricultural products, which in turn contributed to the downward pressure on prices. In the face of high real interest rates and falling prices, firms reduced inventories of such products as natural rubber. High interest rates also lowered housing demand in some important countries such as Japan, thus affecting imports of wood products. The fall in price of petroleum-based substitutes also resulted in lower demand for many agricultural raw materials. For some products such as jute, there were wide fluctuations in prices and buyers experienced periods of scarcity when contracts could not be fulfilled. The ensuing uncertainty, along with the cost-effectiveness of substitutes, is believed to be an important factor in shifting demand towards synthetic fibres.

Table 22
Export volume of agricultural products, excluding fishery and forestry products; selected countries and groups of countries, 1967–86

(Percentage share and average annual percentage change)

Share in 1986	Country or Group	Average annual percentage change	
		1967–80	1980–86
2.5	China	2.9	14.1
38.0	European Community (10)	7.9	5.3
12.9	Developing areas, excl. areas spec. elsewhere	3.8	4.5
13.4	Industrial countries, excl. EC, US and Japan	5.3	2.9
11.0	Heavily indebted developing countries[a]	4.7	2.5
3.0	Eastern trading area, excl. China and USSR	1.7	0.2
1.8	OPEC	0.3	0.1
1.1	USSR	–7.5	–0.1
3.5	Developing Africa[b]	–1.0	–1.4
12.4	United States	8.3	–6.5
0.4	Japan	11.2	–11.2
100	**World**	**5.5**	**1.0**

[a] Countries identified in Table 10, excluding OPEC members (that is excluding Ecuador, Nigeria, Venezuela).
[b] Excluding OPEC members and heavily indebted countries (that is, excluding Algeria, Côte d'Ivoire, Gabon, Libyan Arab Jamahiriya, Nigeria).

seeds, increasing use of fertilizers and pesticides, increasing mechanization, improvements in the rural infrastructure and so forth. Second, trade restrictions, price support policies (both nationally and through international commodity agreements) and subsidization in several countries for a variety of agricultural products effectively delinked farmers'

Table 23
Trade in agriculture of the European Communities: Intra-trade versus trade with third countries, 1980–86

(Volume indices, 1980 = 100)

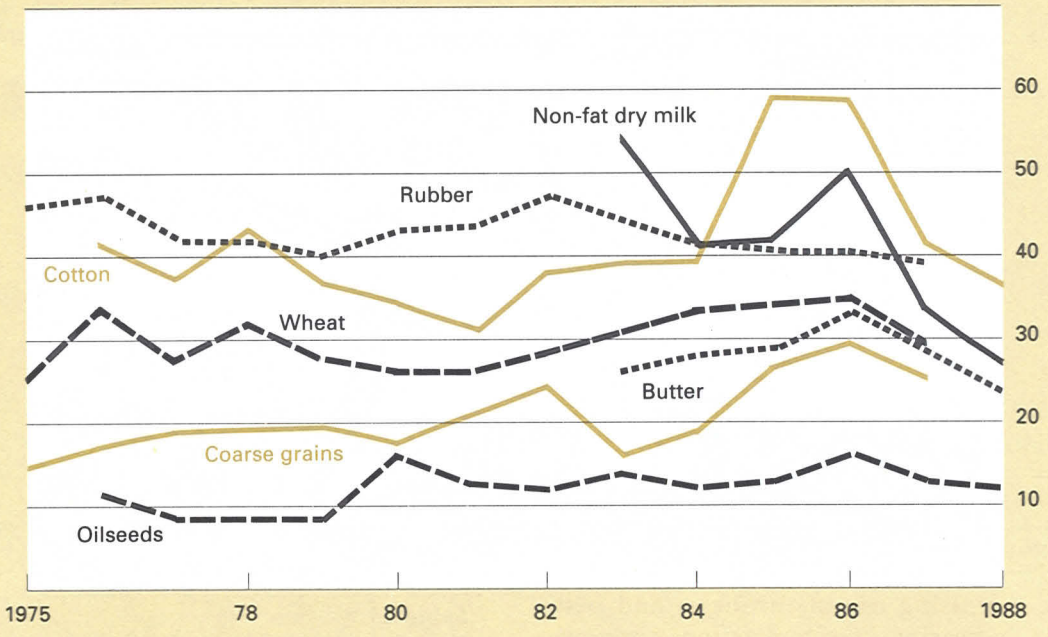
	Export volume		Import volume	
	Intra-trade	Trade with third countries	Intra-trade	Trade with third countries
1980	100	100	100	100
1981	105	129	101	96
1982	110	118	109	98
1983	113	132	114	93
1984	119	141	117	94
1985	127	149	131	97
1986	136	134	139	93

Note: (i) Trade in agriculture, including forestry and fisheries products.
(ii) 1980–81 EC(9), 1982–85 EC(10), 1986 EC(12).

For some other products, demand was reduced because of a link with another product. For instance, the demand for animal feed meals was reduced because of a reduction in cattle herds (in the United States, the cattle herd recently reached its lowest level since 1961). Supply side factors have also played a rôle. For example, some countries implemented policies to increase the domestic consumption of a commodity and reduce its export supply. An example of this is recent cotton exports from China; production of cotton in China was also lowered in 1987 as a result of withdrawing incentives for production. In other cases, exports of certain agricultural products such as saw logs and veneer logs were reduced because they were processed domestically into manufactures in an effort to gain the benefits of selling higher value-added products. Overall exports of forest products were also curtailed because of efforts of some exporting countries to preserve their forests, as well as bad weather in certain years hampering transportation of the commodity. Bad weather in a few countries such as the Philippines (palm oil) and Bangladesh (jute), which account for a large share of world exports of these commodities, have also curtailed supply and hence the trade in these commodities.

It should be noted that in times of relatively abundant supply, such as in the recent past, the actual transaction price is frequently lower than the registered market prices because of the offer of easier credit conditions on the part of suppliers, counter-trade deals and so forth.

Chart 15
World stock-to-consumption ratios for selected agricultural commodities, 1975–88
(Per cent)



Note: Data for 1988 are forecasts.

production decisions from world market incentives. Third, in some of the major exporting countries where world market prices do affect production decisions, the effect of declining dollar prices on world markets on the domestic currency prices for producers was offset by currency depreciation against the US dollar in the first half of the 1980s.

A situation of high levels of stocks and high production brought to the fore the problem of controlling one or both. Thus the 1980s have witnessed attempts to curb production in several countries, as well as aggressive marketing of many products through overt and covert subsidization.

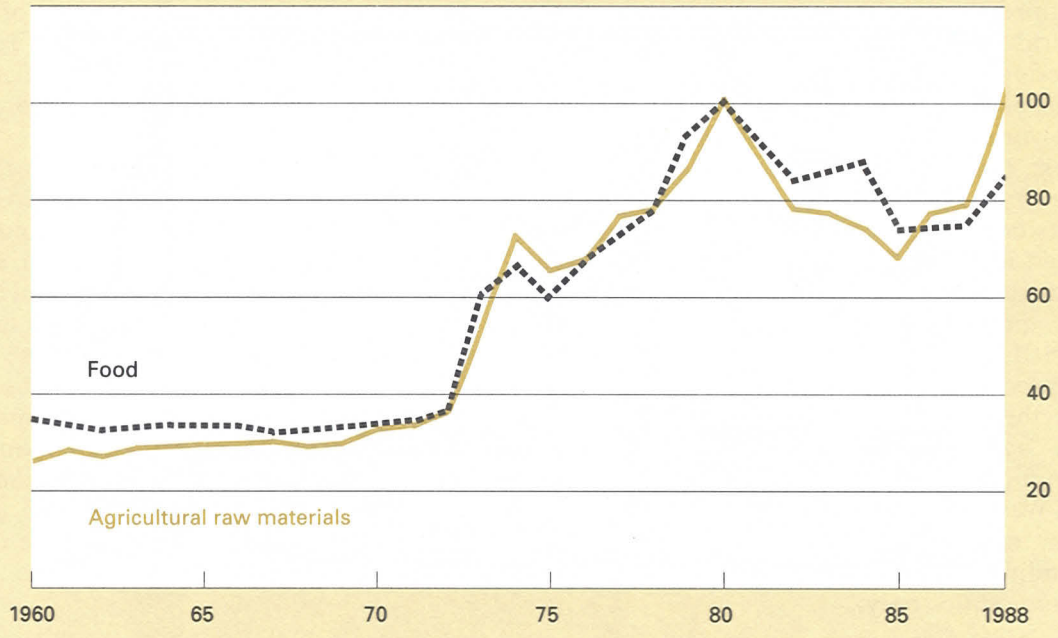
Recent developments

A striking feature of world market developments over the past eighteen months has been the pick-up in prices of many agricultural commodities. World market dollar prices of agricultural commodities, roughly stable throughout the 1960s before rapidly increasing in the 1970s in a generally inflationary environment, had been on a declining trend through much of the 1980s. In mid-1985, despite the ongoing recovery in the industrial countries, United Nations' export price indices ranged from more than one-quarter (agricultural raw materials) to one-third (food) below their 1980 levels. In the first quarter of 1988 those same indices showed world market dollar prices of agricultural raw materials and food up by 32 and 30 per cent, respectively, from the 1985 trough (Chart 16).[21]

Several factors contributed to this recovery in world market prices for agricultural commodities. Among the more important ones were:

[21] The behaviour of individual prices varied considerably, of course. For example, in the most recent period the prices of some products – including tea and cocoa – actually declined.

Chart 16
World market dollar prices of agricultural products, 1960–88
(Indices, 1980 = 100)



Note: Data for 1988 refer to the first quarter.

- Strong economic growth in a number of East Asian developing areas and China, which rank among the largest importers of agricultural products in the world economy (see Table 20). The recent easing of the foreign exchange situation in several petroleum exporting countries which are large net importers of agricultural products, as well as the improved export performance last year in a number of heavily indebted countries, also contributed to strengthening world demand for agricultural products. It should be recalled, in this regard, that the demand for food – which accounts for three-quarters of world trade in agriculture – responds much more strongly to income growth in the developing areas than in the industrial countries. Another factor was the substantial increase in food imports into the USSR.
- At the same time, as was noted at the beginning of this Report, world output of agricultural products declined last year. The depressed level of world market prices for several agricultural products prior to 1987 discouraged production in a number of exporting countries, for example palm oil production in Malaysia, and wheat production in Australia and Canada.[22] Wheat output also fell sharply in the USSR. In some other areas, adverse weather conditions ranging from droughts in India and parts of Africa to floods in Bangladesh, led to a fall in agricultural production. Another factor behind the reduced output last year was the shift in agricultural policies in major producing areas, in particular lower support prices and supply control measures implemented for

[22] In some countries, internal transport problems are decreasing world market supply and increasing import demand. Examples include the supply of soyabeans from Brazil and demand for imported maize in China. Problems in the transport and distribution system which adversely affects export performance have also been identified in some developed countries such as Australia.

such products as cereals (for example, in the United States and Japan) and dairy products (for example, in the United States, the European Community and other countries in Western Europe).[23]

- A third element in the recent recovery of the world market dollar prices for agricultural products has been the persistent depreciation of the US dollar. This affects the index of world market dollar prices in two ways. First, there is a valuation effect which raises the prices of agricultural products traded outside the dollar area when they are translated into US dollars. Second, to the extent that domestic producer or consumer prices for individual agricultural products are affected by changes in the exchange rate, an appreciation of the domestic currency vis-à-vis the dollar tended to stimulate demand for agricultural products and discourage production (in many countries, for example in Western Europe and Japan, the protection of agricultural producers means this condition is met for a limited number of commodities only).

In recent months, world stocks of several commodities such as wool, cotton, wheat, coarse grains, maize, soyabeans and dairy products have declined. In the case of some products, such as soyabeans, wheat and maize, the severe drought in major farm areas of North America will affect this year's crop. Together with a more general rekindling of inflationary expectations, this is reinforcing upward pressures on prices.

As was observed at the beginning of this section, the pick-up in prices and export volumes for agricultural products in 1987 was not sufficient to prevent a further decline in agriculture's share of world merchandise trade. More fundamentally, in many agricultural markets, including such important ones as those for cereals, dairy products, sugar and meat, sizeable production and export subsidies, import restrictions and/or market sharing continued to affect world trade. In other words, improvements since the beginning of 1987 do nothing to reduce the urgency of long overdue reforms of trade-related policies in agriculture.

[23] Other things being equal, changes in agricultural production tend to have a larger impact on prices than changes in the output of manufactures for several reasons, including (i) a smaller proportion of total production of many agricultural commodities is traded internationally, (ii) agricultural supply responds with a relatively long delay to any change in the market situation, and (iii) the demand for agricultural products is generally less responsive to any given change in prices than that for manufactures.

III. Trade policy in an evolving global economy

The developments in merchandise trade reviewed in the first section of this report are generally encouraging. Over the past eighteen months the expansion of trade has been well above the average thus far in the 1980s, and it seems likely that 1988 as a whole will mark the second consecutive year of trade volume growth in the vicinity of 5 per cent. When it comes to 1989 and beyond, there is of course more uncertainty about the outlook for world trade. Given the range of unresolved issues mentioned at the end of the first section, it is safe to assume that output and trade will continue to be influenced by a mixture of developments affecting prices, employment and growth, as well as by the policy responses to those developments. It is clearly very difficult to make any long range predictions about the course of these developments.

While policy making is inevitably influenced by short-term considerations, it is important for decisions on trade policies to take into account to the maximum extent possible the underlying factors and trends influencing the evolution of the world economy. With this in mind, the following discussion considers very briefly the implications for trade and trade policy of two major longer-term trends which are generating pressure for structural changes in the patterns of world production and trade.

Pressures for change

Change is the only constant in the evolution of the modern world economy. It affects patterns of demand, output, employment and trade. Among the factors that generate pressure for change, two in particular – new technologies and diverging population trends – are shaping the future of world trade in important ways.

Technology is globalizing markets

There is little doubt that the world has entered a new stage of rapid technological progress. As is now widely recognized, many of the advances are based on the increasing use in production, organization, industrial design and marketing of new technologies based on microelectronics, an area which itself is constantly changing. By adding to the potential for responding flexibly to changes in demand at home and abroad and – together with innovations in other areas, including biotechnology, laser technology, optical fibres, energy and space technology – by promoting product innovation and product differentiation, the new technologies substantially broaden the scope for specialization and product diversification in international trade. In the process, they are also enlarging the services component of trade in goods.

These new opportunities for firms and countries are being enhanced by major advances in transportation which continue to reduce the cost of moving goods internationally. Recent progress in telecommunications is playing an even bigger rôle in shortening the economic distance between countries. Better and faster information is broadening markets and further internationalizing decisions on production, buying and selling. Modern telecommunications is also stimulating world trade by fostering the growth of international trade in services and worldwide capital markets.

At the enterprise level these changes are operating as a major factor in the internationalization of production and distribution within and between firms of different countries, and in the growth in the number of specialized small to medium-sized firms whose economic viability is critically dependent on worldwide

outlets for their products.[1] At the level of the international economy, the changes are reflected in trends described in the first section of this Report, including the tendency for trade to increase more rapidly than national output, the diversification of exports into new products and new markets, and the emergence of new countries on the list of the world's leading traders.

Coupled with the competitive search for profitable investment projects, the new technologies are promoting the *globalization of markets* and greatly increasing the scope for international trade.[2] As a consequence, the costs of non-tariff barriers to trade, in particular quantitative restrictions, will be rising in tandem with the ongoing globalization of markets even if the level of non-tariff barriers remains constant.[3] The resulting loss of economic efficiency is particularly damaging at a time when the challenges posed by worldwide population trends make higher rates of economic growth in the world economy more important than ever.

Population trends and market dynamics

The latest population projections by the United Nations indicate that the industrial countries are entering an era in which they can less and less afford the lower economic growth that accompanies blocked or delayed structural adjustment. Birth rates in several countries are already below the rate generally required to keep the population constant, and current projections are that the industrial countries will account for only 50 out of each 1000 new people added to the world's population during 1990–2010. Given these birth rate projections, and assuming no major changes in immigration policies, the industrial countries as a group are facing a future with close to zero population growth, a gradually ageing population and a steady increase in the ratio of retired people to active workers.

The same population statistics point to an increase in the population in developing areas of nearly 50 per cent between 1990 and 2010, for a net increase of 1.4 billion. Labour force growth rates are, of course, more difficult to predict because labour force participation rates can vary. Granting this point, the predictions show a net increase of 55 per cent, or 600 million new workers in the developing areas between 1990 and 2010. This *addition* to the labour force in developing areas is nearly as large as the current *populations* of North America and Western Europe combined.

These developments have far-reaching implications for demand, production and world trade. The population figures suggest that for many goods and services the greatest potential for dynamic market growth in the coming decades will be in the developing areas. And since the types of goods and services demanded vary according to the income level and age of consumers, there are likely to be important changes in the composition of world output as well. As for the labour force projections, the combination of high rates of growth in the developing areas and little or no labour force growth in industrial countries is likely to affect the relative competitiveness of a broad range of

[1] These developments manifest themselves in a variety of ways, including direct foreign investment in production and distribution facilities, firm-to-firm agreements for joint production or marketing, increased foreign sourcing for equipment and intermediate inputs, mergers, technology sharing, licensing agreements and similar arrangements.

[2] Some forms of technological change can have an «anti-trade bias», as far as their *direct* impact on production technologies are concerned, in particular when they reduce the optimum size factory and thus reduce the importance of the economies of scale that go with access to large markets. However, even in these cases the introduction of new technologies frequently allows more product differentiation and flexibility in responding to changes in demand – both factors which foster the international exchange of goods and services. They also stimulate international trade through their impact on economic growth.

[3] As was noted above, the technology-induced globalization of markets means that foreign products become available in greater variety and at lower cost. Quantitative restrictions and similar non-tariff protective measures prevent consumers and user-industries from taking advantage of these opportunities. By insulating the domestic market against future developments abroad, these measures not only raise the prices of foreign products relative to their domestic substitutes (as do bound tariffs), but ensure that these price differentials will continue to rise as foreign products become cheaper. The export sector will also be indirectly affected by this process because international trade is a two-way street. Any action that reduces participation on the import side must ultimately lead to reduced participation in expanding world exports.

industries.[4] Although the exact outcome of these various developments is impossible to predict, there is little doubt that the coming years will see continuing, perhaps even stronger pressures for adjustment in the patterns of output and trade in the world economy.

Challenges for trade policy

The pressures for change discussed above pose direct challenges for trade policy, in particular, how to assist timely and continuous adjustment. In other words, are current trends in the trading system and in national trade policies likely to facilitate or impede ongoing structural changes in the world economy?

The multilateral trading system supports structural change and economic growth in the world economy in two ways. One is by promoting trade liberalization. The other is through the establishment of a framework of rules and disciplines for the conduct of national trade policies. By guarding against increases in tariffs (through the use of «bindings»), banning the use of quantitative restrictions save in exceptional circumstances and laying down provisions for minimizing distortions in competition, these rules and disciplines are designed to increase the stability and predictability of future trade policies and thereby promote trade-related investment. Trade-related investment, in turn, is central to the process of structural adjustment.

The trading system has not always carried out these tasks as effectively as its creators had hoped. Nonetheless, the value of the rules, and the commitment of governments to uphold the GATT system, is readily apparent forty years after the General Agreement came into force. The system has faced particular strains in the 1980s, mostly the result of macroeconomic policies, but also due to microeconomic policies.[5] Despite these strains (to which trade policy errors made their own contribution), there has been no major retreat into protectionism.

Recognizing the importance of reinforcing the rules of competition, furthering the process of trade liberalization and extending it to new areas of trade, GATT's member countries – which have increased in number by eleven since 1980, with six more in line for full membership – have embarked on the most ambitious and wide ranging round of negotiations in GATT's history. At the same time, this initiative reflects concerns over a rise in the number of trade disputes and a perception that, in the face of an adverse macroeconomic environment, the rules have not always been effective in preventing the spread of policies which obstruct rather than facilitate structural adjustment.

Discriminatory quantitative export restraints and increasing subsidization in agriculture are high on the list of current measures which threaten to undermine the multilateral trading system. More recently, there have been complaints about a more aggressive use of anti-dumping and countervailing measures.[6] It is largely the industrial countries which have been relying on these instruments to deal with protectionist pressures. In many developing areas, on the other hand, the trade regime is characterized by high unbound tariffs and import licensing, the latter being justified on balance-of-payments grounds, but often having substantial protective effects in specific industries.

With the growing linkages among economies, the costs of ill-conceived trade policies in developed and developing countries will

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[4] Some forms of technological change appear to reduce the rôle of relative factor endowments in determining where products will be produced. In other cases, innovations can increase the rôle played by relative factor endowments by reducing natural impediments to international trade, such as transportation and communication costs.

[5] These included the poorest economic growth performance in four decades, serious debt service problems in a number of developing areas, high unemployment in many countries, historically large and persistent current account imbalances, very wide movements in exchange rates and the biggest upheaval in world stock markets since 1929.

[6] Whether the increased friction over anti-dumping and countervailing measures reflects the existence of a considerable amount of dumping and subsidization or the abuse of otherwise legitimate measures for protectionist purposes, these disputes are contributing to a perception that the trading system is not functioning in the way it was intended to by its participants. Regarding the abuse of anti-dumping or countervailing actions for protectionist purposes, one major concern is the possibility that the initiation of such an action, or even the threat of an initiation, is used to get exporting countries to agree to market-sharing arrangements – that is, to the kind of discriminatory trade restraint arrangements mentioned above.

continue rising. In particular, the distorted patterns of output and employment reduce opportunities for profitable investment and job creation.

The ability of the developing areas to create 600 million new jobs in the next two decades will require more success than in the past in mobilizing domestic savings and in creating conditions that will attract new net inflows of capital for productive investment. Successful trade policy reforms in developing areas, together with realistic exchange rates and an improved global trade policy environment, would contribute to this goal by promoting structural adjustment, which in turn would make these economies more attractive to domestic and foreign investors.[7]

For the developing areas to realize the full potential of such major reforms, it is essential that the industrial countries actively promote an improved trade policy environment. It should hardly be necessary to add that by responding positively to the pressures for changes in the patterns of production and trade, the industrial countries would be helping themselves as well.[8]

Among the leading candidates for policy changes that would increase national productivity in industrial countries while simultaneously increasing growth opportunities for developing areas are agriculture, textiles, clothing and steel (Box 4). Some adjustment has already occurred of course – high protection has not prevented important shifts in employment from these sectors to the rest of the economy. But their demands for continued special protection suggest that it is far from complete. As long as resources remain tied up in inefficient production and as long as consumers and users of protected intermediate goods are forced to pay above world market prices, the standard of living and competitiveness will continue to suffer. It is important, therefore, for governments to allow pressures for structural change to be translated into opportunities for faster growth in both developed and developing countries.

Conclusions

Most countries recognized a long time ago that maintaining trade barriers between provinces or regions within the same country would seriously handicap national development. For the market-oriented economies, a rule-based framework ensuring open competition between different regions of the country, coupled with a well-functioning domestic monetary system, played a central rôle in fostering economic growth.

There are, of course, important differences between national competition and international competition (in addition to the latter involving exchange rates, differences exist in such areas as financial flows and labour mobility). But these differences do not alter the basic point that, as the proportion of national income accounted for by trade in goods and services increases, there is a growing need for the global counterparts of the domestic frameworks – the multilateral trading system and the international monetary system – to function effectively. These two basic elements of the international economic order provide the institutional framework which countries need in order to fully exploit the potential for economic growth created by technological advances. This is particularly important because these technological advances are greatly enlarging the scope for international specialization at a time when worldwide population trends indicate that higher economic growth is badly needed.

Growing interconnections between markets are also changing the way trade policies are defined. Already in the mid-1970s it was recognized that the definition of trade policies could no longer be limited to actions taken at the border, as is shown by the decision to include in the Tokyo Round such measures that can affect international competition as technical

[7] For a number of poor and middle income developing countries, debt servicing burdens add to the challenges stemming from rapid population and labour force growth. Resolving debt-service problems in the absence of strong economic growth in an open world economy would mean primarily economic retrenchment, which would make it even more difficult for job growth to keep up with labour force growth.

[8] In the absence of a much faster rate of productivity gain in the industrial countries than that recorded in the past decade, the ageing of the population will imply a choice among lower levels of pensions and health care for retirees than are currently anticipated, sizeable cut-backs in other areas of government expenditure and increased taxes on active workers.

Box 4 – The temptation of discriminatory quantitative restrictions and why it is so difficult to get rid of them

The spread of discriminatory restrictions is frequently the result of unresolved or delayed adjustment problems. A large majority of the known discriminatory restraint agreements involve the classic problem areas of agriculture, textiles, clothing and steel. In the case of textiles and clothing, most of the restraints were negotiated under the Multifibre Arrangement. The latest extension of the MFA was negotiated in 1986, a full quarter-century after the introduction of special «temporary» discriminatory restrictions on textiles and clothing.

These and other experiences suggest very strongly that such «solutions» to adjustment problems stemming from shifts in competitive advantage soon become part of the problem. Partly this is because quantitative restrictions not only grant domestic producers a margin of protection vis-à-vis foreign competitors, but also block the operation of the price mechanism (the alternative of non-prohibitive tariffs would allow the price mechanism to continue functioning). Even more important are two key features of discriminatory quantitative restrictions:

- Experience suggests that their availability is likely to increase the overall level of protection because governments face fewer constraints in taking action against imports of a product from one or a few countries than against imports of that product from all countries, including economically powerful trading partners. This increases the likelihood of protection being used when it is not really needed – in other words, that it will magnify adjustment problems or even create adjustment problems in situations where market competition was capable of ensuring orderly adjustment.
- Once in place, discriminatory quantitative restrictions are generally difficult to remove because they often build-up vested interests not only among the protected producers in the importing country, but also among the *established* producers in the exporting country or countries. Benefits to the latter group from such market sharing agreements include the opportunity to charge higher prices for the reduced volume of exports. Furthermore, such a system handicaps potential new competitors in the exporting country because of the difficulties they face in getting on the list of those who receive export licenses free of charge. With no multilateral requirements for digressivity or time limits, this greater staying power increases the likelihood that a discriminatory quantitative restriction will remain in place well beyond the transitional adjustment period envisaged when it was first put in place.

Together, these considerations help to explain why the most common result of using protection to deal with structural adjustment problems is that the adjustment is postponed rather than facilitated. In addition to making the ultimate adjustment more painful, delayed adjustment also reduces overall economic growth in the interim.

standards and production subsidies. Now, with international trade accounting for a steadily larger share of national income in most countries, and with the dramatic evidence in recent years of the extent to which trade flows can be influenced by a country's exchange rate policy, monetary policy, and fiscal policy (through the impact on the current account balance), the traditional distinctions between different policy areas are becoming even more blurred.

However we choose to define trade policy in these changing circumstances, one thing is clear. In many countries trade policy is becoming the single most important resource allocation policy, and as such is rapidly joining monetary and fiscal policies in the front rank of national economic policies. As a result, business and market confidence are increasingly influenced by perceived trends in trade policies and in commercial policy relations between countries. This explains why financial and stock markets now follow much more closely – and are much more sensitive to – trade and trade policy developments than was true even a few years ago.

The current multilateral trade negotiations can facilitate the process of structural adjustment throughout the world economy – first by coupling reductions in the levels of protection with increased market access abroad, and second by reducing business uncertainty through improvements in the functioning of the trading system. The result will be higher long-term economic growth. This is precisely what is needed to deal with the challenges posed by technological innovation and worldwide demographic trends.

Appendix tables

Appendix Table I
World merchandise exports, commodity output and gross domestic product, 1980–87

(Billion dollars and indices, 1980 = 100)

	1980	1981	1982	1983	1984	1985	1986	1987
World exports								
Value (Billion dollars)								
Total	**1998**	**1971**	**1851**	**1813**	**1913**	**1936**	**2127**	**2490**
Agricultural products	299	295	273	269	282	268	298	340
Minerals[a]	569	551	490	448	445	425	336	366
Manufactures	1100	1094	1059	1065	1149	1204	1452	1735
Unit Value								
Total	**100**	**98**	**94**	**89**	**86**	**84**	**89**	**99**
Agricultural products	100	95	88	86	87	83	93	101
Minerals[a]	100	107	101	94	90	87	65	69
Manufactures	100	95	94	90	88	87	101	114
Volume								
Total	**100**	**101**	**99**	**102**	**111**	**115**	**120**	**126**
Agricultural products	100	104	103	104	108	108	107	112
Minerals[a]	100	90	85	84	87	85	92	93
Manufactures	100	104	102	107	119	125	130	137
World Commodity Output								
Total	**100**	**102**	**99**	**101**	**108**	**111**	**114**	**117**
Agricultural products	100	104	107	107	113	115	116	113
Mining	100	93	87	86	87	88	92	93
Manufacturing	100	101	99	101	109	113	117	122
World real GDP	**100**	**103**	**103**	**106**	**110**	**114**	**117**	**121**

[a] Including fuels and non-ferrous metals.
Note: For series since 1950 see Volume II of *International Trade 1987–88.*

Appendix Table II
Import volume of agricultural products, excluding fishery and forestry products, by area, 1980–86

(Indices, 1980 = 100)

	1980	1981	1982	1983	1984	1985	1986
European Community (10)	100	99	105	103	104	113	113
United States	100	111	107	117	135	142	139
Japan	100	98	100	104	108	111	112
Other developed countries	100	103	108	103	106	98	105
Heavily indebted developing countries [a]	100	98	84	90	86	88	80
OPEC	100	107	117	119	129	116	112
Developing Africa [b]	100	109	109	119	132	133	133
Other developing areas	100	102	103	115	118	117	123
USSR	100	131	131	113	130	129	91
China	100	105	119	100	75	52	62
Other countries of the Eastern trading area	100	98	70	68	66	64	67
World	100	104	105	105	108	109	106

[a] Countries identified in Table 10, excluding OPEC members (that is, excluding Ecuador, Nigeria, Venezuela).
[b] Excluding OPEC members and heavily indebted countries (that is, excluding Algeria, Côte d'Ivoire, Gabon, Libyan Arab Jamahiriya, Nigeria).
Note: For statistical reasons, the indices for world import volume (Appendix Table II) and world export volume (Appendix Table III) do not precisely match.

Appendix Table III
Export volume of agricultural products, excluding fishery and forestry products, by area, 1980–86

(Indices, 1980 = 100)

	1980	1981	1982	1983	1984	1985	1986
European Community (10)	100	109	109	116	124	132	136
United States	100	100	93	89	90	73	67
Japan	100	113	76	90	68	52	49
Other developed countries	100	110	108	106	111	113	119
Heavily indebted developing countries [a]	100	117	106	129	122	134	116
OPEC	100	89	84	87	89	106	100
Developing Africa [b]	100	97	102	96	87	89	92
Other developing areas	100	109	120	111	121	117	130
USSR	100	113	110	101	99	96	100
China	100	86	87	106	125	201	221
Other countries of the Eastern trading area	100	100	102	97	98	104	101
World	100	104	103	105	108	107	107

[a] Countries identified in Table 10, excluding OPEC members (that is, excluding Ecuador, Nigeria, Venezuela).
[b] Excluding OPEC members and heavily indebted countries (that is, excluding Algeria, Côte d'Ivoire, Gabon, Libyan Arab Jamahiriya, Nigeria).
Note: For statistical reasons, the indices for world import volume (Appendix Table II) and export volume (Appendix Table III) do not precisely match.

Appendix Table IV
World exports of agricultural products by major product group, 1980–86

(Billion dollars)

	1980	1981	1982	1983	1984	1985	1986
Cereals and cereal preparations	44.2	47.9	39.9	39.3	41.3	35.5	31.2
Fruits and vegetables	26.7	27.5	26.5	24.6	26.5	25.9	31.2
Meat and meat preparations	27.4	27.9	26.5	25.0	23.4	23.2	27.8
Oilseeds, fats, oils, oilcakes and meals	26.8	27.6	4.9	26.3	30.2	26.1	22.7
Tropical beverages	17.4	12.7	13.0	13.4	16.7	16.8	20.5
Fish and fish preparations	15.3	15.8	15.3	15.7	15.8	16.9	20.1
Wood	20.6	16.5	15.3	16.4	15.7	15.3	16.9
Dairy products	13.7	14.2	13.7	12.4	12.0	11.5	13.9
Beverages, excluding tropical	10.8	10.3	10.0	9.4	9.5	10.1	12.4
Natural fibres	13.7	13.2	11.9	11.7	12.8	11.7	10.8
Sugar	14.7	14.8	11.3	10.8	10.1	8.9	9.4
Tobacco and tobacco products	8.0	8.8	9.0	8.5	8.3	8.5	9.3
Pulp	9.6	9.4	7.9	7.8	9.1	7.9	9.1
Crude materials	6.8	6.6	6.5	6.5	6.7	7.0	8.6
Hides and skins	5.0	4.5	4.3	4.2	5.0	5.1	5.8
Natural rubber	4.4	3.4	2.5	3.3	3.5	2.8	3.0
Other products	15.0	14.5	13.9	14.2	15.2	15.8	21.3
Total agricultural exports	**280.1**	**275.6**	**252.4**	**249.5**	**261.8**	**249.0**	**274.0**

Appendix Table V
Shares of developed countries, developing areas and the Eastern trading area in world imports of selected agricultural products, 1967–86

(Percentage)

Trend of world market share, 1967–86			Product group	Share in world imports, 1986		
Developed countries	Developing areas	Eastern trading area		Developed countries	Developing areas	Easters trading area
0	+	0	Pulp	88.6	7.9	3.5
+	0	–	Fish and fish preparations	88.1	10.2	1.6
–	+	–	Wood	84.4	12.1	3.4
–	0	0	Tropical beverages	82.7	8.8	8.4
0	0	–	Beverages, excl. tropical	81.8	9.7	7.4
–	+	–	Crude materials	81.3	15.7	3.0
–	+	–	Fruits and vegetables	79.3	13.5	6.7
–	+	+	Meat and meat preparations	73.6	20.2	5.6
–	+	0	Hides and skins	70.0	21.3	8.7
–	+	0	Dairy products	67.5	28.5	3.1
0	+	–	Natural rubber	64.9	19.4	15.7
–	0	–	Tobacco and tobacco products	62.5	22.8	14.3
–	+	0	Oilseeds, fats, oils, oilcakes, etc.	62.0	29.0	8.8
–	+	0	Natural fibres	56.1	24.0	19.9
–	+	+	Cereals and cereal preparations	42.9	41.3	15.4
–	+	+	Sugar	23.8	23.0	53.0

Notes: (i) A plus sign denotes an increasing share, a minus sign denotes a decreasing share and a zero denotes that the coefficient for the time trend over the period is zero at one per cent level of significance; (ii) product groups are ranked in declining order of the 1986 world market share of the developed countries; (iii) world market shares in 1986 do not always add up precisely to 100 per cent because of roundings.

Appendix Table VI
Shares of developed countries, developing areas and the Eastern trading area in world exports of selected agricultural products, 1967–86

(Percentage)

Trend of world market share, 1967–86			Product group	Share in world exports, 1986		
Developed countries	Developing areas	Eastern trading area		Developed countries	Developing areas	Eastern trading area
0	–	–	Dairy products	95.2	1.7	2.9
+	–	–	Beverages, excl. tropical	87.9	5.2	6.9
–	+	+	Pulp	87.7	7.1	5.2
+	–	–	Hides and skins	86.2	6.9	5.7
+	0	–	Cereals and cereal preparations	82.5	12.1	5.7
+	–	–	Meat and meat preparations	78.2	11.4	10.3
+	+	–	Tobacco and tobacco products	70.2	21.3	8.5
–	+	0	Crude materials	68.5	22.5	9.0
+	0	–	Wood	65.3	21.9	14.1
+	0	–	Fruits and vegetables	61.5	30.7	7.2
0	0	–	Oilseeds, fats, oils, oilcakes, etc.	61.4	32.4	6.4
–	+	+	Fish and fish preparations	57.7	35.8	6.5
+	–	+	Natural fibres	48.7	30.9	20.4
+	0	–	Sugar	23.3	71.3	4.0
+	–	+	Tropical beverages	9.4	88.7	1.9
0	0	0	Natural rubber	2.6	96.3	1.6

Notes: (i) A plus sign denotes an increasing share, a minus sign denotes a decreasing share and a zero denotes that the coefficient for the time trend over the period is zero at one per cent level of significance; (ii) product groups are ranked in declining order of the 1986 world market share of the developed countries; (iii) world market shares in 1986 do not always add up precisely to 100 per cent because of roundings.

Appendix Table VII
Import performance of selected agricultural products by area, 1980–86

	Average annual change in import volume of 5 per cent or more between 1980 and 1986	
	Increase	**Decrease**
European Community	Dry milk; cheese; pigmeat; rice	Maize*; non-coniferous sawlogs and veneerlogs
United States	Bovine cattle*; pigmeat*; canned meat n.e.s.; coniferous sawnwood; cocoa beans	Raw sugar*
Japan	Pigmeat*	Non-coniferous sawlogs and veneerlogs
Other developed countries	Soybean cake*; hides, skins	Maize*
Heavily indebted countries[a]	Rice*	Wheat
OPEC	Barley*	Rice*; bovine cattle*
Developing Africa[b]	Rice; refined sugar	
Other developing areas	Hides and skins*; refined sugar*; natural rubber; soyabeans; wheat	Rice
USSR	Barley; raw sugar; canned meat n.e.s.	Wine, vermouth, etc.*; refined sugar; maize
Other countries of the Eastern trading area	Barley	

* Average annual increase or decrease of more than 10 per cent.

[a] Countries identified in Table 10 excluding OPEC members (that is, excluding Ecuador, Nigeria, Venezuela).

[b] Excluding OPEC members and heavily indebted countries (that is, excluding Algeria, Côte d'Ivoire, Gabon, Libyan Arab Jamahiriya, Nigeria).

Notes: Import volume changes are reported for areas whose share in average total imports of the individual product was ten per cent or more during 1980–86 or in the first two or last two years of this time period.

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