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REGIONALISATION AND WORLD TRADE

Peter J. Lloyd

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The author is Professor of Economics at the University of Melbourne. Australia. He wrote this article as Consultant to the Resource Allocation Division. Economics and Statistics Department of the OECD. most of it in Paris during May and June 1991. At the time of writing the Uruguay Round had not concluded. He is grateful to Andrew Dean. Serge Devos. Henry Ergas, David Henderson. Grant Kirkpatrick. John P. Martin. Anne Richards. Jeffrey R. Shafer. Nick Vanston and Robert York for many helpful comments. Florence Spiesser and Stefano Cavaglia did the computations reported in Sections II and V.

INTRODUCTION

There has been a concern among international trade economists and government officials that the growth of regional trade blocs poses a threat to multilateral trading relations. This concern was evident after the decision of the European Community in **1985** to adopt measures to complete the creation of a Single Market in **1992. It** has increased substantially in recent years with the United States and Canada agreeing in **1988** to form a Free Trade Area, which may now be extended to a North American Free Trade Agreement including Mexico, and with the uncertainty as to the prospect of a satisfactory conclusion of the Uruguay Round. The main concerns have been over the further erosion of the principle of non-discrimination and, more particularly, over the danger of trade wars between trading blocs.

It is taken for granted by many commentators in this debate that world trade has become more "regionalised", whatever that term may mean. Certainly a number of regional arrangements have been formed or extended. These are reviewed briefly in Section I. However, over the same period multilateral and unilateral reductions in trade barriers have also occurred. Section II considers whether the net effect of all these changes in trade policies has indeed led to greater regionalisation of world trade over the period **1961-1989.** Section III reviews the literature on the effects of forming regional arrangements, emphasising the relationship of these effects to the observed trade flows and the effects on third countries. Section IV considers how the regional arrangements have affected the multilateral trading system and Section V examines the tripolar view of regional developments. Some conclusions are set out in Section **VI.**

I. REVIEW OF REGIONAL TRADE ARRANGEMENTS

The General Agreement on Tariffs and Trade (GATT) is based on the principle of non-discrimination among the Contracting Parties. Article **24** provides for regional trading arrangements provided they do not restrict trade with other countries and satisfy other conditions. From the time of its establishment in **1947** until **1990,** more than **80** regional arrangements had been notified to the **GATT** under Article **24** or other Articles[1]. Many of these arrangements are preference schemes and association agreements. These should be separated from reciprocal regional trade arrangements because they are rather different in nature. Preference schemes are non-reciprocal,

Table 1. Regional trade arrangements notified to the GATT, 1947.1990

Title	Members	Date signed
France-Italy Interim Customs Union [This was incorporated into the EC in 1957]	France, Italy	13 September 1947
South African-Southem Rhodesian Customs Union	South Africa. Southern Rhodesia	December 1948
Nicaragua and El Salvador Free Trade Area [This was incorporated into the Central America Free Trade Area in 1958]	El Salvador, Nicaragua	9 March 1951
European Coal and Steel Community [This was incorporated into the EC in 1957]	Belgium, France, western Germany, Italy, Luxembourg, Netherlands	
European Economic Community (including European Atomic Energy Community)	1. Belgium, France, western Germany, Italy, Luxembourg, Netherlands 2. Denmark, Ireland, United Kingdom joined in 1973 3. Greece joined in 1981 4. Portugal and Spain joined in 1986	25 March 1957
Central American Free Trade Area [This was incorporated into the Central American Common Market in 1960]	Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua	10 June 1958
European Free Trade Association	1. Austria, Denmark, Norway, Portugal, Sweden, Switzerland, United Kingdom 2. Denmark and United Kingdom seceded and joined the EC in 1973 3. Iceland acceded in 1970 4. Finland became a full member in 1986 5. Portugal seceded and joined the EC in 1986	4 January 1960
Latin American Free Trade Area [This was replaced by the Latin America Integration Association in 1980]	1. Argentina, Brazil, Chile, Mexico, Paraguay, Peru, Uruguay 2. Colombia and Ecuador acceded in 1961	18 February 1960
Central American Common Market	Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua	1960
Arab Common Market	United Arab Republic	13 August 1964
Central African Economic and Customs Union	Congo (Brazzaville), Chad, Gabon, Central African Republic	8 December 1964
Canada-U.S. Automative Agreement [This was incorporated into the Canada-United States Free Trade Area in 1988]	Canada, United States	1965
New Zealand-Australia Free Trade Agreement [This was replaced by the Australia-New Zealand Closer Economic Relations Agreement in 1983]	Australia, New Zealand	31 August 1965

Table 1. ***(continued)***

Title	Members	Date signed
United Kingdom-Ireland Free Trade Agreement [This was incorporated into the EC in 19731	Ireland, United Kingdom	14 December 1965
Caribbean Free Trade Agreement [This was replaced by the Caribbean Community and Common Market in 1974]	Barbados, Guyana, Jamaica, Trinidad and Tobago	1968
Andean Pad	Bolivia, Colombia, Ecuador, Peru, Venezuela	1969
Caribbean Community and Common Market	1. Barbados, Guyana, Jamaica, Trinidad and Tobago 2. Other countries joined in 1974	4 July 1973
ASEAN Preferential Trading Arrangements	1. Indonesia, Malaysia, Philippines, Singapore, Thailand 2. Brunei joined in 1988	24 February 1977
Latin American Integration Association	'Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, Venezuela	1979
Australia-New Zealand Closer Economic Relations Trade Agreement	Australia, New Zealand	28 March 1983
Free Trade Agreement between Israel and the United States	Israel, United States	22 April 1985
Single European Act [This replaces the European Coal and Steel Community, the European Economic Community and the European Atomic Energy Community]	Belgium, Denmark, France, western Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, United Kingdom	1986
Canada-United States Free Trade Area	Canada, United States	2 January 1988

Note; **These arrangements were notified under Article 24 or in a few cases Article 1 or other Articles. The table does not include preference schemes and association agreements notified to the GATT.**

Sources: **GATT, Basic Instruments and Selected Documents, Supplements 1-36. GATT, *Activities,* various issues.**

usually provide for a reduction in tariff rates or implicit protection but not their elimination, and are available to developing countries only, many of which are outside the region concerned. Association agreements are usually reciprocal but some are not. For example, those between the EC on the one hand and the EFTA countries and Cyprus, Israel, Malta, Turkey and Andorra on the other are reciprocal. These associations are really an extension of the EC free trading area but they are limited in commodity and instrument coverage. The term "Regional Trading Arrangement" (RTA) is used below to cover all forms of regional trading except preference schemes and association agreements. Excluding the preference and association agreements, there have been more than **20** RTAs. These are listed in Table **1.** (In addition, there have been a number of other reciprocal trading arrangements among developing countries, especially in Africa, which do not have to be notified to the GATT.)

A. Different forms of RTAs

The first major RTA under the aegis of GATT was the European Economic Community established by the Treaty of Rome in **1958.** The EEC was a customs union in the terminology of GATT, as it involved the establishment of **a** common external tariff. It was described in the Treaty as a Common Market **as** it provided for free trade in capital and labour as well as in goods and services. This precedent and the importance of the six countries concerned led to the formation of EFTA in **1960** and a number of other regional arrangements followed in rapid succession during the **1960s.** These included the Latin American Free Trade Area (which came into effect in **1960),** the Central American Common Market **(1960),** the Canada-U.S. Automotive Agreement **(1965),** the New Zealand-Australia Free Trade Area **(1965),** the U.K.-Ireland Free Trade Agreement **(1965)** and a number of less important agreements among developing countries in Africa, the Middle East and the Caribbean. The United Kingdom and Denmark moved from EFTA to the EC in **1972.**

During the **1980s** there was a second burst of new trading agreements. These included the Second Enlargement of the EC (which added Greece in **1981,** and Portugal and Spain in **1986),** the commitment to form a Single Market in the EC by **1992,** the Closer Economic Relations (CER) Agreement between Australia and New Zealand in **1983,** and the Canada-U.S. Free Trade Agreement in **1989.** All of these involved countries which are members of the OECD, and all were extensions of earlier agreements. Thus, they may be referred to as second-generation agreements. In **1991, two** agreements were reached in Latin America which promise more substantial trade liberalisation than previous agreements in the area; these are the Southern Cone Common Market of Brazil, Argentina, Uruguay, and Paraguay and the Act of Caracas which has set up a new free trade area for the Andean countries (Bolivia, Colombia, Ecuador, Peru and Venezuela). Geographically, these arrangements have been concentrated in Europe, Africa, and the Americas. The first and only agreement in the Asian region was the **1977** ASEAN agreement.

The regional freeing of trade in commodities proceeds in two ways. It may proceed by extending geographically through forming new agreements or accepting new members into an existing agreement. Alternatively, it may proceed by increasing the extent of intra-area free trade for each agreement through lowering restrictions on the commodities covered or by extending the commodity coverage.

Evidently there has been a continued increase in the number of regional agreements and in the total number of member countries[2]. However, some have replaced earlier agreements between the same countries. Hence, the proliferation of arrangements is exaggerated by the number notified. The most important new arrangement is the Canada-U.S. Free Trade Area.

The geographic extension of existing RTAs is easily traced too. To date the only major instance of geographic extension of an existing arrangement is the expansion of the EC from the original six members to nine, then 10 and now 12. (One could count the unification of the former East Germany with the Federal Republic of Germany in 1990 as the addition of a thirteenth country because it became *de facto* a part of the EC customs territory.) The European Economic Area accord between the EC and EFTA which was signed in October 1991 will, when implemented in 1993, effectively extend the EC Single Market to 19 countries. ASEAN was extended from the original five to six members with the inclusion of Brunei in 1988.

B. The extent of RTA liberalisation

The extent of intra-RTA trade liberalisation is much more difficult to measure. All of these arrangements have led or will lead to the removal of some barriers to intra-area trade in commodities but some agreements have achieved a much greater degree of liberalisation than others. There is a bewildering array of different kinds of "free trade areas", "customs unions", "common markets", "single markets" and other arrangements. Some exclude agriculture (e.g. EFTA and the Canada-U.S. Free Trade Area). Most exclude trade in services, although the EC '92, the Canada-U.S. FTA, and the CER Agreement between Australia and New Zealand include trade in specified services. Some have no provision for factor movements (e.g. ASEAN), some cover free movement of capital (e.g. Canada-U.S. FTA) or labour (e.g. CER)[3] or both (EC '92). Some harmonise selected non-border instruments (EC and CER) but most do not. The term "Regional Trading Arrangement" (RTA) is used below to cover all forms of regional trading except preference schemes and association agreements.

Most of these RTAs were approved by GATT as free trade areas which result in the freeing of "substantially all" commodity trade between members rather than customs unions. Many of the "free trade areas" were severely restricted in commodity coverage, however, and for those commodities covered they frequently did not provide for the complete elimination of all tariffs. For example, the Canada-U.S. Automotive Agreement was restricted to one sector of the economy and the New Zealand-Australia Free Trade Area was based on trade in forest products. The agreements among developing countries generally involved relatively little commodity and factor trade liberalisation.

Only two RTAs come close to removing all barriers to trade in goods and services, namely the EC and CER. All tariffs and quantitative restrictions were eliminated on the intra-EC trade of the original six by 1968. The Single Market measures will eliminate many other non-tariff barriers when they are implemented; for example, preferences on government procurement across national borders will be lifted and the technical and product standards will be harmonised through mutual recognition. In the case of the CER, all tariffs, import licensing and quantitative restrictions, export incentives and subsidies restricting trade between the two countries were removed by 1 July 1990 and harmonisation of other instruments is proceeding.

For all other RTAs it is not possible to measure with any degree of precision the extent of intra-area trade liberalisation. In this respect, as in other aspects of trade policies, empirical research is severely restricted by the absence of systematic measurement of national trade barriers. Ideally, one needs time series of an aggregate measure of support for all industries in all countries ***vis-a-vis*** third countries and of the margins of preference ***vis-a-vis*** member countries. The only comprehensive multi-country series of levels of support is that of producer subsidy equivalents produced by the OECD for most major commodities in the agricultural sector. These data are available on an annual basis since 1979 and measure support ***vis-a-vis*** all countries. There are no time series of the margins of preference in any RTA.

In the absence of measures of intra-regional trade barriers, one can merely note broad trends. The commodity coverage of most RTAs has been extended; for example, the coverage of the Canada-U.S. FTA and CER greatly exceeds that of the agreements between the countries which they replaced. More agreements now have a timetable which provides for the elimination of tariffs among members, e.g. the Canada-U.S. FTA, the Southern Cone Common Market and the Andean Agreement. Increasingly over the last ten years or so, RTAs have included provisions for eliminating barriers due to non-tariff border measures which have provided an increasing portion of national protection. Hence, though one cannot gauge the extent of intra-area trade liberalisation, one can safely conclude that it has risen substantially in the 1980s under the second generation of more ambitious agreements.

C. Recent developments in RTAs

Trade liberalisation within some RTAs has recently been extended to barriers to trade deriving from non-border measures. Article 24 of the GATT relates solely to border restrictions on trade among members and with outside countries. Most RTAs have been preoccupied with the reduction among members of tariffs, quotas and other border restrictions on trade among members[4]. As an RTA progresses towards the achievement of ***complete free trade*** within the area in the sense of the total absence of border restrictions, other non-border instruments continue to restrict or distort trade. These include differences in rates of national subsidies and bounties, and in excise, VAT and other Commodity tax rates. These distortions can be reduced or removed by harmonisation of policies. These include the harmonisation of standards and business law regulations and competition policy, where differences between member countries inhibit competition. They also include the substitution of an area policy for a border restriction such as the replacement of anti-dumping actions on imports from members of the area by area-wide competition policy.

Extension of the policy measures to non-border taxes and regulations is based on the realisation that ***complete equality of access*** within an area requires more than the removal of border restrictions. The removal of the border restrictions itself increases the relative importance of the remaining instruments which restrict or distort trade among members. Thus, once the freeing of trade has progressed substantially, there is a force within the agreement which leads to further liberalisation[5]. The *two* RTAs which have exhibited this progression in a number of areas to date are the EC and more recently the CER. This progression is also evident in the Canada-U.S. FTA in areas such as the recognition of the need for a new anti-dumping regime[6]. The goal of complete freedom of access is, like that of free trade, a means to the end of promoting more efficient production. The ultimate goal is higher real incomes for the residents of these areas.

This leads one to ask when the complete freedom of trade in the sense of equal access to markets is achieved. The EC uses the term a "Single Market". A Single Market is manifestly not a Common Market but what precisely is it? In introducing the Single Market measures, the White Paper began with the statement:

> "Unifying the market (of 320 million) presupposes the member States will agree on the abolition of barriers of all kinds, harmonisation of rules, approximation of legislation and tax structures, strengthening of monetary cooperation and the necessary flanking measures to encourage European firms to work together." (Commission of the European Communities, 1985).

This conveys the essential idea that there should be no barriers to the operation of a single Community-wide market.

Perhaps the best conception of a single market is one in which the Law of One Price prevails. This means that in a competitive market, for either a produced commodity or a factor, there is only one price, allowing for transport and other transfer costs which prevent perfect arbitrage. This concept could be used to measure the degree of achievement of completely free access within RTAs.

These developments in relation to the instruments of government policy and the methods of eliminating restrictions on market access have created new forms of economic integration. With the removal of non-border barriers among members, trade among the members of the EC is now more free than trade between any other countries, including bilateral trade involving partner countries such as Singapore or Hong Kong which have virtually no border restrictions'. EC '92 has progressed beyond the conception of free trade in the rules of GATT. Furthermore, the development of some RTAs is associated increasingly with proposals for monetary union and even federation or political union among members. These developments are not considered in this paper.

One may conclude that the number of RTAs and of member countries, and the extent of intra-area trade liberalisation within them, have all steadily increased. The effect on world trade patterns is considered in the next section. RTAs also have important effects on foreign investment and other factor **flows** and on competition but these are not examined in this paper.

II. HAS THE WORLD ECONOMY BECOME MORE REGIONALISED?

There are two distinct versions of the claim that world trade has become more regionalised. One relates to trade within RTAs and the other to trade within more broadly defined regions such as Europe and the Pacific Rim. This section considers

RTAs as regions, while Section V considers the broader groupings as a part of the multilateral trading system.

RTAs are of primary interest because they are the regional units which operate trade policies which discriminate against third countries and thereby change the distribution of world trade. However, non-regional trade interventions and transport costs also affect the distribution of trade, and these too have not remained constant. Consequently, the spread of RTAs does not imply a growing regionalisation of world trade. The Tokyo Round, whose last reductions took effect in 1987, has led to further multilateral reductions in tariffs and some non-tariff measures such as government procurement. These reductions have had the dual effect of increasing non-discriminatory trade among GATT Contracting Parties and, as these have applied to the RTAs or their members, of reducing discrimination in these arrangements. In addition, a number of Contracting Parties have undertaken major unilateral reductions in trade barriers. These include over the last decade Japan, Australia, New Zealand and Turkey among OECD Members and a number of developing countries such as Chile, Mexico and Thailand. Conversely, some countries have increased tariffs or non-tariff measures and **so** too have some regional arrangements, e.g. anti-dumping actions and VERs have increased in the EC countries. The latter interventions only reduce trade flows between the RTA which imposes them and non-member countries since they do not apply to intra-RTA trade.

A. Import trends in four OECD RTAs

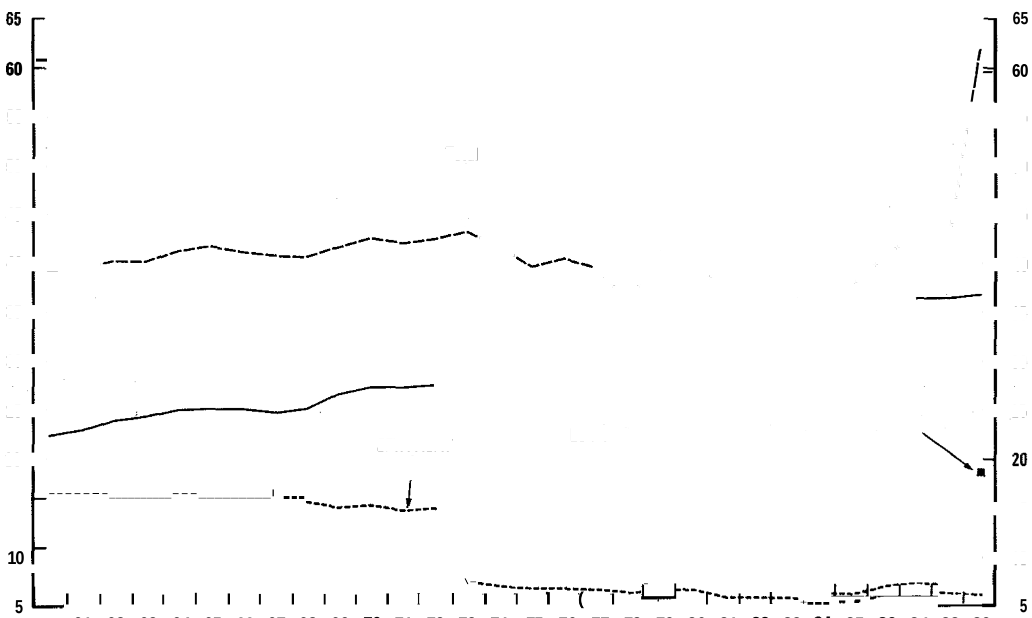
To consider the effects of RTAs on trade flows in the presence of multilateral and unilateral changes in trade policies, a preliminary study was made of import trends in the four current RTAs whose member countries are all in the OECD (the EC, EFTA, Canada and the United States, Australia and New Zealand). These high-income RTAs cover "substantially all trade" for the whole or at least part of the period, as in the GATT criterion for a free trade area or customs union. The EC and EFTA countries alone have accounted for **40** per cent or more of total world imports since EFTA was formed in **1960.** Moreover, the degree of intra-area freedom of trade and discrimination ***vis-a-vis*** non-member countries is higher in all four of these RTAs than for any RTA among the non-OECD countries. Consequently, any effects of regionalisation are more likely to show up in these groupings.

Import data are used in preference to export data because trade discrimination policies are applied to imports and because non-zero balances of trade imply that the import shares for some countries and groups of countries diverge from the corresponding export shares. The import data relate to total commodity trade, the broad commodity groups of "Manufactures" and "Non-energy products", and to a small sample of four industries as defined at the two-digit level of the SITC ("Food", "Clothing and textiles", "Iron and steel" and "Passenger motor vehicles"). The broad aggregate of "Manufactures" was chosen because liberalising trade in manufactures has been the major focus in most RTAs, and "Non-energy products" was chosen to exclude the influence of large changes in energy prices relative to prices of other goods. The four two-digit industries were selected because of the importance of trade flows in these areas and the high degree of regional discrimination in the commodities of these industries which results from the combination of free or near-free trade between member countries with relatively high protection against third countries. If discrimination affects the direction of trade flows, one would expect it to show up in time series for such industries. The details of the groupings of countries and commodities are given in the Appendix. The time period of the sample is 1961-89 inclusive. This covers a 30-year period of almost uninterrupted expansion in world trade and it follows the formation of the EEC and EFTA.

Two measures of regionalisation are used. The first is the share of the group in world imports. Because of changes in the membership of some groups (the EC and EFTA) over the period, two definitions of the group are used. When the group is "as at the time" (or ASAT), the series shows the growth of regional trade in the sense of the change in the share of the group in world trade. This measure combines the influences of greater trade liberalisation among member countries with that of an expanding membership. To isolate the effects of intra-area trade liberalisation per se, one examines the trend in the shares of a fixed group such as the original members. The import trade shares are also affected by other factors, such as increases in factor productivities in fast-growing countries, which are independent of trade policy. These shares are useful as a measure of the importance of the group in international trade.

The results for this measure are reported in Chart 1. As this measure is regarded as an indicator of the importance of the region in world trade, it is calculated only for all commodities. The data bases provided this measure only for the EC, EFTA and Canada-United States (since 1989) but these are the three most important regional

Chart 1. OECD RTA'S shares of world imports, 1960-1989



arrangements. Chart 1 shows that the combined shares in world import trade of the EC and EFTA have not tended to increase over the 30-year period. The share of the EC "as at the time" has increased substantially from 22 per cent at the beginning of the period to almost 37 per cent at the end but this is almost wholly due to the addition of the United Kingdom in 1973 and Portugal and Spain in 1986. The total ASAT series for all three groups including North America jumps upwards in 1989 because of the formation of the Canada-U.S. FTA in that year.

The second measure of regionalisation is the share of intra-group trade in the total import trade of the group in the commodities concerned. The intra-group share is the measure commonly used as an indicator of regionalisation, although the share of export trade is sometimes used. The intra-group share of total import trade would increase as a result of the introduction of discrimination within RTAs if there were no changes in trade policies *vis-à-vis* third countries and no other disturbances. In the presence of multilateral and unilateral changes in trade restrictions over the period, this measure captures the combined effects of unilateral, regional and multilateral policy changes. It also captures the effects of differences in the growth rates of countries on import demand and export supply, the effects of major price changes and changes in national preferences and technologies. An increase in the intra-group share is, therefore, weak evidence of the effects of RTAs on trade patterns. (See Section III for discussion of the interpretation of this measure.)

The intra-group shares of RTA group trade are reported in Charts 2A to 2G[8]. Consider first the EC, EFTA and CER as these three groups have experienced substantial intra-group trade liberalisation over the whole period in the case of the EC and EFTA and since 1965 in the case of CER. The EC and EFTA have had changing membership over the period. For the EC, the most useful definition of the group here is the ***original*** membership – referred to as EC-6 – as they have been in the group for the whole period. For EFTA, the most useful definition is the original eight (including Finland) plus Iceland less the United Kingdom, Denmark and Portugal which have joined the EC[9]. This group will be called the EFTA-6.

For all merchandise commodities, Chart 2A shows an upward trend in the intra-group share for the EC-6 in the 1960s and early 1970s following the Treaty of Rome, and in the CER. In EFTA-6 the trend is upward until the early 1970s and then downwards. The same trends are evident in all three regional groups for the series for Non-energy products (Chart 2B), except in the CER where there is no clear trend, and for Manufactures in the case of EFTA. There is no trend in Manufactures in the case of the EC-6 and CER groups, despite the importance of intra-group preferences for this commodity group (Chart 2C).

The peaking of EC-6 and EFTA-6 intra-group import shares around the time the United Kingdom and Denmark moved from EFTA to the EC could be the result of the original formation of the EC and EFTA with the effect of the new members reducing the shares of the intra-EC-6 group. Alternatively, the decline in shares after the early 1970s could be the result of global freeing of trade and/or the declining competitiveness in some industries. To cancel the effects of the shift of members between EFTA and EC, the shares were also considered for the group of EC-12 throughout the period. This shows an upward trend for all commodities in the intra-EC-12 import shares but it is stronger in the period up to 1973, indicating that both the change in membership of the EC and EFTA and the decline in competitiveness contributed to the later fall in these shares.

Chart **2. Intra-area imports as share of total group imports**

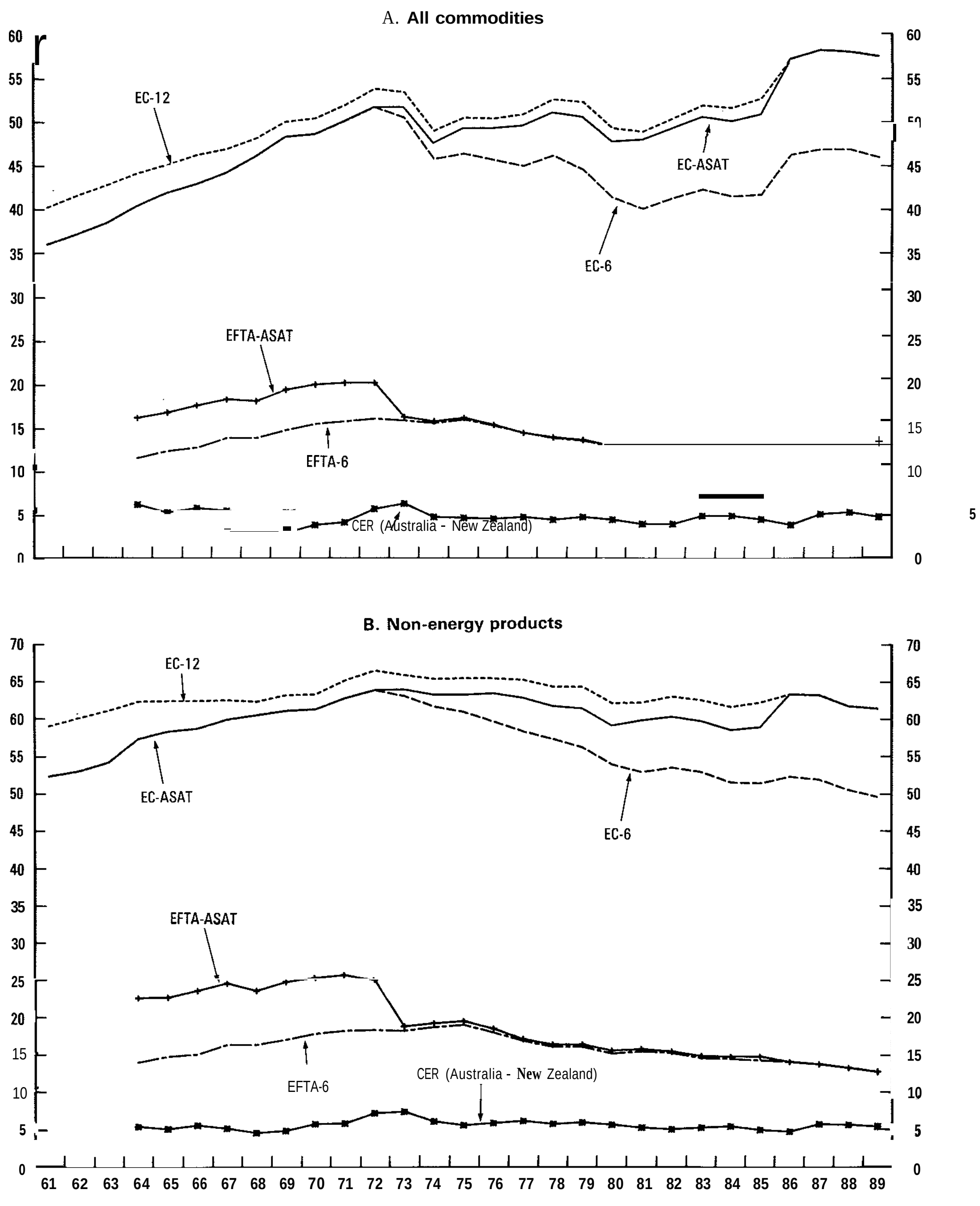
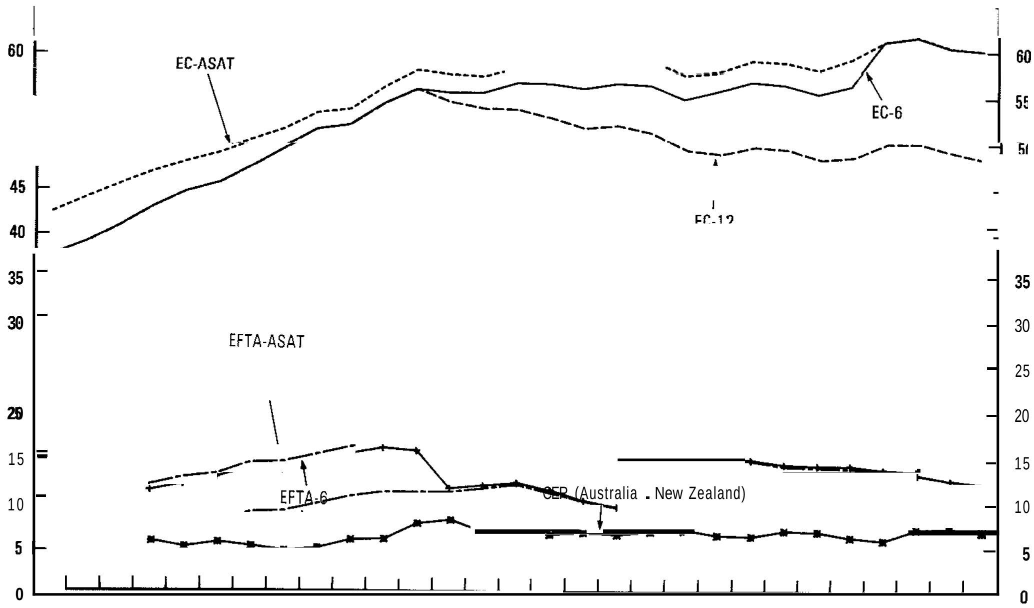


Chart 2. (continued)



D. Clothing and textiles

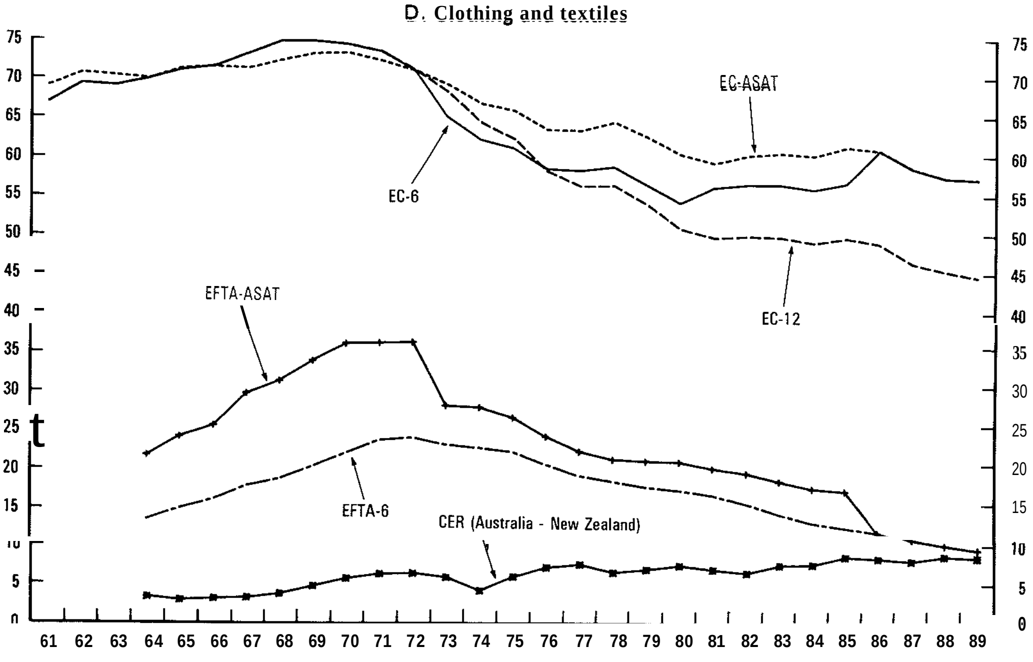
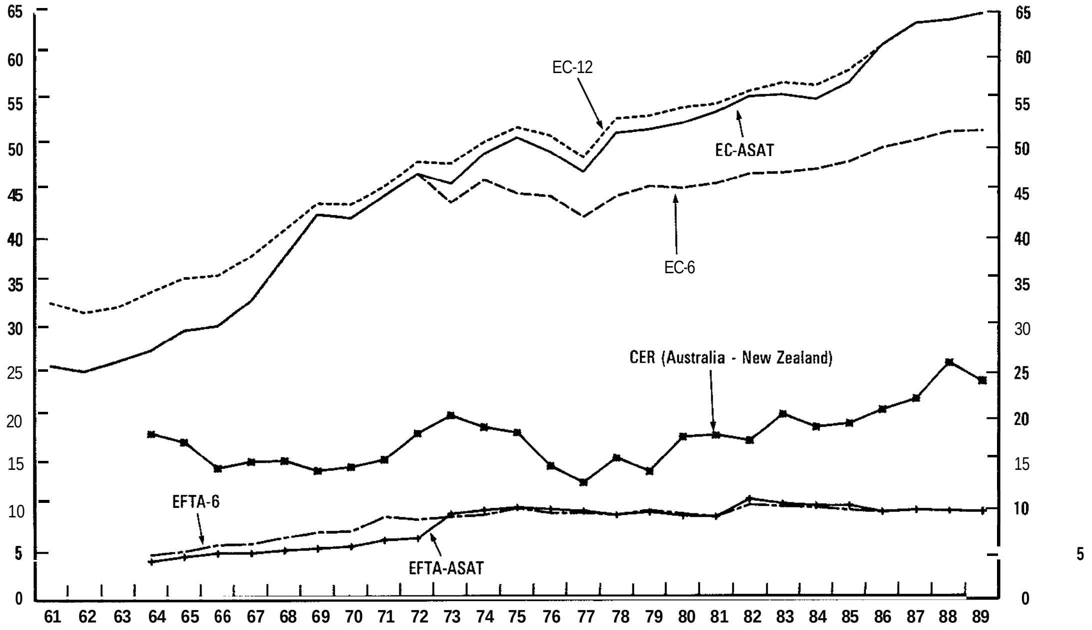


Chart 2. **(continued)**

E. Food



F. Iron and steel

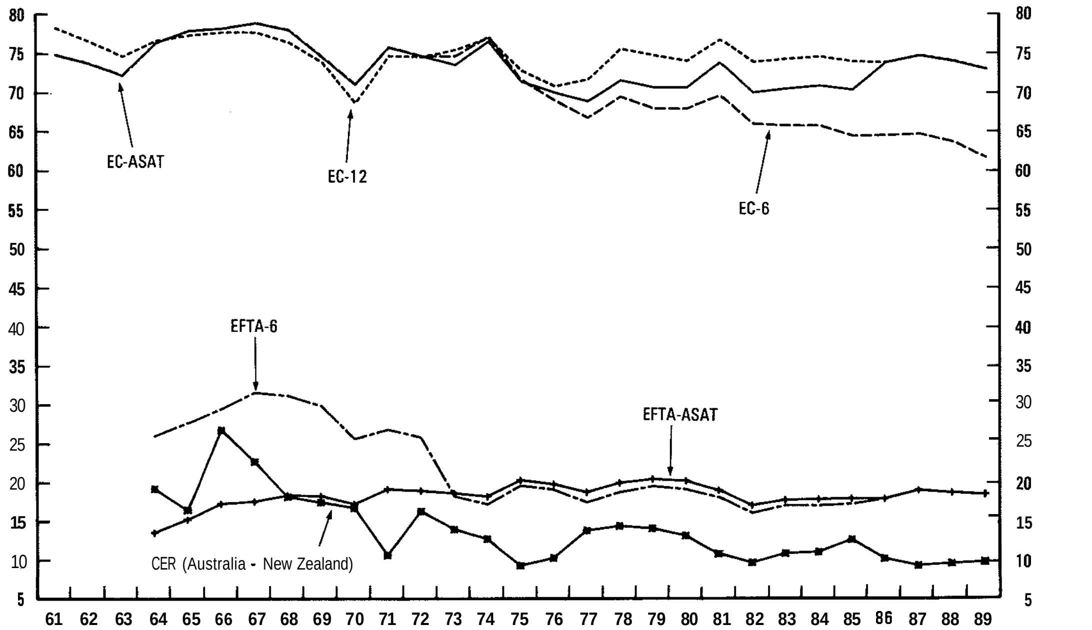
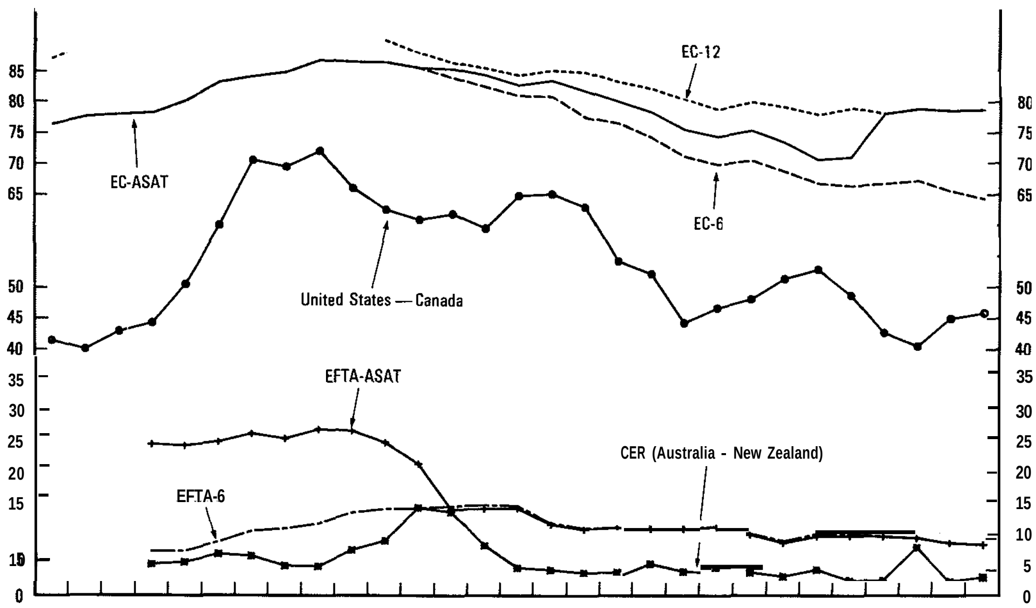


Chart 2. (continued)



Data at the disaggregated two-digit level relate to the four industry groups of particular interest and rule out the effects of changes in the composition of import trade by commodity groups. At this level the evidence is very mixed. For both the EC-6 and EC-12, there is a distinct and substantial upward trend in the group share for Food only (Chart 2E). For the other three industrial products, there is an upward trend until the early or middle 1970s, followed by a downward trend. This is especially marked in the case of Clothing and textiles (Chart 2D) which probably reflects the declining competitiveness of the EC-6 and EC-12 for this commodity group relative to the NICs and later a broader group of developing countries which emerged as low-cost producers of these commodities.

For the EFTA-6, there is no trend after the 1960s in the case of Food and no trend in the case of Iron and steel (Chart 2F) and Passenger motor vehicles (Chart 2G). In the case of Clothing and textiles, there is an early upward trend followed by a downward trend, again reflecting the declining competitiveness of the regional group in these commodities.

For the CER, there are upward trends in both Food and clothing and textiles. In the cases of Iron and steel and Passenger motor vehicles, there is a downward trend although the tariff preferences were substantial for most of the period. This reflects primarily the importance of import licensing in New Zealand and secondarily the substantial unilateral liberalisations in both countries.

For Canada and the United States, the only commodity group considered is Passenger motor vehicles because substantially free trade has not yet been achieved for other industries. This group shows some upward trend in the early years of the Agreement but a steady downward trend since the share peaked in the mid-1970s, due principally to the increase in imports from Japan.

Overall, these series provide only very weak support for the hypothesis that RTA intra-group preferences increase the share of imports for traded commodities once allowance is made for extensions of membership of the RTAs over time. There is weak evidence at the level of all commodities or broad commodity groups for the OECD groups, mainly in the early years following the formation of the RTAs, but this trend did not continue into the 1980s. At the disaggregated level, the evidence is consistent with the hypothesis only for a few observations of the sample, particularly Food in the EC and CER and Clothing and textiles in the CER.

B. Possible explanations of import trends

The first factor that may explain the contradiction between the expected increase in intra-group import shares and the observed trends for the OECD RTAs is the countervailing influence of multilateral and unilateral reductions in trade barriers. This non-regional liberalisation may be greater than commonly believed. (For this purpose one should include the introduction of non-reciprocal trade preferences to developing countries and association agreements, although in most cases they have had only a small effect on trade flows.) Second, there is also a tendency to exaggerate the restrictiveness of non-tariff measures which apply exclusively or predominantly to third countries. The series of NTM's compiled by UNCTAD and the World Bank relate to the incidence of these measures, not to the height of the barriers. Some of the measures which receive a lot of publicity affect only small volumes of trade, e.g. anti-dumping duties. Some NTMs are rather ineffective in restraining total imports of the commodity groups concerned. Those which apply 'selectively to individual countries, such as VERs, induce substitution towards imports from other non-restricted countries. Those which apply to narrowly defined commodity groups induce substitution of closely related commodities. Quantitative restrictions induce quality and unit value upgrading (see Baldwin, 1982, for a general thesis that NTMs are ineffective). Geographically, the increasing use of NTMs in the EC and United States has received publicity but the decline in levels of protection in Japan and the Asian region as a whole (see Stoeckel, Pearce and Banks, 1990, Chapter 2) has received less attention. Finally, one needs to recall that the extent of regional freeing of trade can be exaggerated as all RTAs retain some distortions of intra-RTA trade.

A second factor in interpreting these results is the effect on import shares of changes in competitiveness and comparative advantage, as in the cases of Clothing and textiles and of Passenger motor vehicles noted above. In such cases it may be that the crude group import share decreased reflecting a **loss** of competitiveness, but the share would have increased in the absence of changes in competitiveness. Hence, the intra-group preferences (and in some cases unilateral increases in protection) may have limited the decrease in the group shares. Viewing these trends from the point of view of third countries, one could say that the intra-group preferences did not prevent some growth in the level of imports from low-cost suppliers in third countries.

To derive the relative importance of regional freeing of trade one would need to regress the country/region shares of individual commodity markets on variables reflecting multilateral, regional and unilateral trade policy changes and such changes in prices, incomes or technologies and other non-price factors as are considered important. This would be a major and difficult research project which is beyond the scope of the present study.

The next section considers how to interpret the change in shares due to the introduction of discrimination within RTAs and other effects of RTAs on trade and welfare, especially in third countries.

III. THE DIRECT EFFECTS OF RTAs ON WORLD TRADE AND WELFARE

The formation of an RTA is a major perturbation of the economies of the member countries and sometimes of third countries because it changes many relative commodity prices. These commodity price changes induce changes in factor prices and in market competition. An RTA, therefore, affects the welfare of households in these economies in a complex way, both as consumers and as income earners. There is a large literature which analyses these effects. The classic survey of the earlier literature is by Lipsey (1960). A recent survey is provided by Pomfret (1988, Chapters 7 and 8). In order to interpret the trends noted in the previous section, this section concentrates on the effects of regional trade liberalisation on trade and third-country welfare. The discussion is restricted to Developed Countries. (Langhamrner and Hiemenz, 1990, provide an excellent survey of the theory and empirical studies for Developing Countries.)

A. Trade creation, trade diversion and other effects

Viner (1950) introduced the concern over the effects of "trade diversion" on countries' welfare which has remained central to the analysis of RTAs ever since. The term was used before Viner but there was no clear definition or perception of its implications. Viner described "trade diversion" as a shift in the location of production from a low-cost source of supply outside the RTA to a high-cost source in another member country within the RTA. He contrasted it with the second type of trade effect, "trade creation", which is a shift in the location of production from a high-cost domestic source to a lower-cost source within the RTA. This distinction arises only because of the discriminatory nature of reductions in an RTA which will sometimes affect commodity markets in the same manner as a non-discriminatory reduction but will at other times divert the pattern of trade from that which would occur in the absence of discrimination. Viner's conclusion was definite:

> "Where the trade-creating force is predominant, one of the members at least must benefit, both may benefit, the two combined must have a net benefit, and the world

at large benefits; but the outside world loses, in the short run at least ... Where the trade-diverting effect is predominant, one at least of the member countries is bound to be injured, the two combined will suffer a net injury, and there will be injury to the outside world and to the world at large." (Viner, **1950,** p. **44).**

Vinerian trade diversion is a terms-of-trade effect due to the switch of sources of import supply. When increasing costs are introduced, third countries may continue to supply some of the imported country in the post-RTA situation along with the member country. The quantity of trade diverted is ambiguous. The decrease in the market shares of third countries exaggerates the value of trade diverted, even in a partial equilibrium context, because the consumption effect increases total imports. Furthermore, in a world characterised by globalised production and trade, trade creation may benefit third-country firms operating in the region and trade diversion may harm member country firms with production facilities in third countries and exporting to the region "... indicators such as trade creation or trade diversion may lose much of their significance in the context of globalisation" (Julius, **1990).** The concepts of trade creation and trade diversion are of no use in the presence of decreasing costs as trade liberalisation causes substantial changes in the set of commodities produced by countries.

As models with a more complex structure and higher dimensions in terms of the number of traded commodities were constructed, it became clear that the formation of an RTA has **a** number of other effects which may outweigh those of trade diversion for a member country or third countries. There are induced changes in the volume of trade with both members and non-members, changes in the terms of trade with the Rest **of** the World and in the value of national output. All of these may be positive or negative for a country. **It** is not necessary that the value of imports from third countries falls even if trade diversion predominates. The changes in relative prices and the growth in real income of the RTA may induce new trade with non-members. This has been called "external trade creation". Nor is it necessary that the terms of trade of the Rest of the World will decline, as commonly supposed, though this occurs under plausible assumptions (Mundell, **1964** and Riezman, **1979).** This terms-of-trade effect is crucial to the welfare of outside countries.

With some hindsight, the early emphasis placed on the theory of trade diversion and trade creation can be seen to have been misplaced. The phenomenon of trade diversion was recognised as a problem of the Theory of the Second Best and it was shown that the importing country does not necessarily lose in such instances. Kowalczyk **(1990)** argues that the concepts of trade diversion and trade creation should be abandoned and be replaced by the terms-of-trade and trade volume effects which are used in other areas of the theory of distorted economies. Vinerian trade diversion is just one kind of terms-of-trade effect. The concept of trade diversion focused on the importing member country excessively and biased the analysis against finding welfare gains for the members and the third countries.

Most of the formal literature has assumed that the real value of national output (as distinct from real national income) of member countries is fixed and therefore unaffected by the formation of an RTA. Lipsey's influential survey mentioned the possibilities of increasing real output due to greater exploitation of economies of scale, improvements in input productivity and faster growth but these were treated as an afterthought. These factors received some attention in the earlier literature on European integration (see especially, Scitovsky, **1956,** and Balassa, **1961)** but the analysis was simplistic because of the inability of general equilibrium theory at that time to handle production with economies of scale and/or imperfect competition. Moreover, changes in factor prices associated with the changes in national output interact with the commodity price effects and may change the pattern of commodity trade.

B. Empirical studies

Many empirical studies have attempted to identify the signs of the effects which economic theory predicts are ambiguous. Until recently, most have been limited to the effects on trade rather than estimating directly the effects on countries' welfare, have failed to distinguish between trade volume and terms-of-trade effects and have been partial equilibrium in nature, not taking account of changes in factor prices and incomes.

The EC-6 is by far the most studied of the actual RTAs. There are several surveys of this literature, including Balassa **(1975)**, Robson **(1984,** pp. **192-203)** and Pomfret **(1988,** Chapter **8).** Robson **(1984,** p. 200) concluded that:

> "**...** for manufactured products (to which most of the studies are limited) the trade created was considerable and far outweighed trade diverted **....** Secondly, several of the studies suggested that the formation of the EEC has resulted in a good deal of external trade creation. From both points of view it may be concluded that the effects of the EEC have been favourable to allocative efficiency at a global level."

This positive view of trade in manufactures is shared by most empirical researchers, though Pomfret **(1988,** Chapter **8)** disputes it, denying in particular that there is any evidence of "external trade creation". With respect to agriculture, the consensus is that the CAP has resulted in substantial trade diversion and losses of income for agricultural exporting countries through a fall in world prices for commodities covered by the CAP. With respect to the growth effects, Pomfret **(1988,** pp. **134-135)** concludes:

> "There is no empirical evidence that additional scale economies or X-efficiency gains have resulted from the customs union. There is some evidence that the EC benefited from additional direct foreign investment and especially from terms-of-trade gains, but both of these involve redistribution rather than net gains to the world."

Balassa **(1975)** estimates that the welfare gain to the EC, after netting out the trade diversion in agricultural products, was less than one-tenth of **1** per cent of the members' GNP. Incorporating economies of scale in manufacturing industries but still using essentially partial equilibrium analysis, Owens **(1983)** obtained much larger benefits of between **3** and 6 per cent of the GDP of the original six.

C. Computable general equilibrium modelling results

In the last decade the techniques available for analysing RTAs have improved dramatically with the advent of multi-country, multi-sector computable general equilibrium (CGE) models. These were pioneered by Whalley (see especially, Whalley, **1985).** He concludes:

> "... geographically discriminating protection that leaves average protection levels much the same seems to have small effects on the protecting region, with the largest effects detrimental to the region discriminated against and to the advantage of the region favoured by discrimination." (Whalley, **1985,** p. **215).**

This reaffirms the importance of terms-of-trade effects. The advent of CGE methods is undoubtedly a significant advance but some economists believe that the low foreign trade substitution elasticities usually adopted with the Armington assumption concerning nationally differentiated commodities in the Whalley model exaggerate the magnitude of these terms-of-trade effects (for example, Harrison and Rutstrom, **1991,** footnotes **1** and 7).

The latest advance in CGE modelling has been the incorporation of economies of scale and imperfect competition. These models were first used to study unilateral or multilateral trade liberalisation, beginning with the pioneering studies of Canada by Harris **(1984)** and Harris and Cox **(1984).** Trade liberalisation in this class of models has been surveyed by Richardson **(1989)** and Norman **(1990).**

CGE models with economies of scale and imperfect competition have now been adapted to measure ***ex** ante* the effects of prospective or proposed RTAs. The prospective completion of the European Single Market in **1992** has been studied by Smith and Venables **(1988).** The Canada-U.S. Free Trade Area was studied extensively at the time of its proposal in models of this type by Brown and Stern **(1988),** Canada **(1988),** Hazeldine **(1989)** and Markusen and Wigle **(1988).** The GET model, which descended from the earlier work in Canada by Harris and Cox, was commissioned and used by the Canadian Government in its negotiation of the Canada-U.S. Free Trade Area and to convince the Canadian public of the benefits of the FTA proposal. The Australian Government's Bureau of Industry Economics **(1989)** used a Harris and Cox-type model to evaluate the effects of CER.

These models have generally predicted larger gains to the member countries than were obtained from traditional competitive industry versions of the general equilibrium models. Regional trade liberalisation in these models leads to gains in the form of increased competition, reduced unit costs and greater product variety which are additional to those quantified in standard models. When these gains are measured by the percentage increase in real income, they are often two or three times larger than those estimated under perfect competition. For example, Smith and Venables **(1988)** predict that the completion of the EC's internal market will lead to more than three times the gain from trade liberalisation alone. This is due to the increased competition as production for a single market eliminates the ability of domestic firms to charge higher prices on nationally segmented markets. Curiously, this effect tends to reduce the value of intra-EC trade because it lowers the price of domestically-produced goods ***vis-a-vis*** imported goods.

One difficulty with these imperfectly competitive models is that the quantitative results are very sensitive to variations in the specifications of the models such as the form of strategic interaction between oligopolistic firms or the presence of free entry and exit from industries. Very few of the model parameters are estimated econometrically. Consequently, they should be regarded as indicative thought experiments rather than reliable predictions but they have changed the perception of the benefits and costs of RTAs. In particular, they have emphasised the benefits of increased competition.

The predicted effect of RTAs from the viewpoint of third countries seems now to be regarded more positively, though there is still concern over terms-of-trade effects. This is partly due to the accumulated consensus that trade diversion is less important and partly to the increased emphasis on the real income effects. These real income effects, unlike the price effects of discriminatory border protection reductions, are almost certain to benefit the outside countries collectively because of the increased demand for most goods and services. It is possible that they could favour third countries over other members and lead to an increase in the extra-area share of trade. These effects may be substantial. For example, the European Commission's own estimates of the Single Market in Cecchini (1988) and Emerson *et* al. (1988) predicted an increase in real Community GDP of between 2.5 to 6.5 per cent, most of which is attributed to the realisation of economies of scale and increased competition. Baldwin (1989) suggests even more optimistically that the reforms could lead to a permanent increase in the EC GDP growth rate of at least 0.6 percentage points a year. The effects will differ among third countries, depending chiefly upon the links of the third-country economy and firms with the region and the world economy.

The concern now has shifted to the possibility that the RTAs may adopt restrictive trade policies *vis-à-vis* third countries or they may engage in trade wars with other blocs. The next section considers the long-term effects of RTAs on the multilateral trading system.

IV. IS THERE A CONFLICT BETWEEN REGIONALISATION AND MULTILATERALISM?

All RTAs are discriminatory by definition. Indeed, that is their distinguishing feature. Since its formation the GATT has been primarily concerned with the effects of regional arrangements on third-country producers. Under Article 24 the GATT recognised free trade areas and customs unions as acceptable exceptions to the principle of non-discrimination, provided they met certain conditions. They must not adopt tariff duties or other border restrictions which are more restrictive on average than those previously applied, they must have a plan and schedule for the formation of the customs union or area and, in the case of a free trade area, they must apply to "substantially all the trade" between members. Article 24 states "... The purpose of a customs union or of a free trade area should be to facilitate trade between the constituent territories and not to raise barriers to the trade of other contracting parties with such territories."

Of the more than 70 arrangements under Article 24 which have been reviewed by the GATT, only four were declared fully compatible with the Article and all of these were lesser agreements among non-OECD countries. However, no agreement was declared incompatible with the Article. [The 1979 Decision on Differential and More Favourable

Treatment for Developing Countries (known as the Enabling Clause) exempted these countries from the requirement to meet the criteria of Article 24.1 Other GATT members have raised concerns over the "substantially all trade" requirement, the failure in some cases to meet the timetable requirement, external trade policies and other features. A number of suggestions have been made in the Uruguay Round negotiations to tighten the application of Article 24 and in particular to reduce the adverse effects of discrimination on third countries.

A. Tariff wars and game theory

The direct effects of discriminatory trade policies were considered in the previous section. RTAs may also affect the multilateral trading system in a number of ways other than the direct effects. For example, formation of trading blocs may lead to conflict among them and even to an outbreak of restrictions on trade between two or more RTAs or members of such RTAs and to retaliatory actions. This could be precipitated by RTAs or large member countries seeking to use their bargaining power to obtain policies in trading partners which they consider fairer. It could also be precipitated by a desire to improve the terms of trade of a trading group.

There is a recent literature, confined almost exclusively to the United States and Canada, which applies game theory to trade between blocs and the formation of blocs. The earlier customs union literature proceeded on the assumption that the common external tariff is fixed, i.e. it cannot be adjusted. In a well-known paper Johnson (1958) analysed the optimal tariff for two countries (or two trading blocs) to maximise the welfare of members when each can retaliate repeatedly in a tariff war. This produced the result that both countries normally lose from a tariff war, although the country initiating the war can gain. (The world as a whole, of course, is always best off under free trade.) This result went unchallenged for a long time. Johnson's tariff war equilibrium was later recognised as the solution of a two-person non-zero-sum game in which the countries or blocs are the players. Using a more general two-player game model, Keenan and Riezman (1988) found that if one country is substantially bigger than the other, it can expect to gain from retaliation – big countries win trade wars. In doing so, they impose losses on the smaller countries. Keenan and Riezman (1990) extended the model to three players. This introduces the possibility of different coalitions of two players (there are three possibilities with three players). The game becomes a two-stage game, the first stage being the choice of partner and the second the choice of optimal tariff for each player. This is a much richer game. The prospects of countries gaining from the formation of customs unions are greater with three players, and again the larger the union the more likely it is to gain.

These game theory models can also be used to compare free trade areas, which do not have a common external tariff policy, with customs union which do. Keenan and Riezman (1990) compare the advantages to two countries of forming either a free trade area or a customs union when there is a third country. They show that a customs union has two advantages in this context. It is a larger bloc for the purpose of setting optimal tariffs, and it internalises a "tariff externality" which exists when both members import the same good. The latter effect is due to the induced improvement in the terms of trade which benefits both countries when only one imposes a tariff on imports from the third outside country.

Such game theory models are grossly simplified in structure and they assume an ability to retaliate which is not realistic in the present multilateral system. They are also based on the assumption that countries act in the interest of the country as a whole rather than in that of particular groups of producer or consumer agents. This implies too that the country ignores the interests of the Rest of the World. These assumptions may not be realistic. For example, it is a notable fact that for approaching 200 years the leading economy in the world (first the United Kingdom and then the United States) has vigorously promoted trade liberalisation.

Nevertheless, these models are suggestive. They highlight the importance of terrns-of-trade effects and, following from that, the importance of the external tariff policy of RTAs. They will have more real world appeal if the world trading system becomes less co-operative, and in this respect they parallel the development of "strategic trade policies" based on the market power and strategies of large oligopolistic firms.

B. Possible coalescence of RTAs

It has also been suggested that the extension of RTAs may inhibit multilateral trade liberalisation by providing an alternative for some trade partners that is faster than the protracted GATT multilateral negotiations.

A central question is whether RTAs will proliferate or, alternatively, whether they will be a way of progressing towards global freeing of trade by extending the country coverage. In the latter case they could extend until possibly the world economy is one bloc, the so-called grand coalition. Progress towards completely free global trade could occur via continual multilateral trade reductions, or unilateral reductions, or the coalescence of areas that have achieved intra-area free trade, or some combination of these.

The coalescence prospect is predicted by Kemp and Wan **(1976).** They showed that a customs union could be beneficial to all its members if the common external tariff is adjusted **so** that the terms of trade are unchanged and members who would lose are compensated by lump-sum payments among members of the group. The obvious problem with this optimistic scenario is the difficulty of arranging payments among members, whether lump-sum or not, though Grinols **(1981)** has proposed a method of compensation. There are also problems of which partners to select.

The predicted outcome is very different in the game theory models without compensation payments and with competitive tariff-fixing. These models show that countries have a motive for forming a customs union and moving away from global free trade if they can adjust their external tariffs. (Other motives for RTAs are surveyed by Pomfret, **1988,** Chapter 9.)

C. RTAs and multilateral trade negotiations

On the other hand, it is possible that regional trade liberalisation may reinforce multilateral trade liberalisation. It could do **so** in a number of ways. By making member countries more competitive and international trade-oriented, it might reduce protectionist pressures. RTAs can act as a model for multilateral trade liberalisation, especially in areas of non-tariff measures and services trade where the GATT record in achieving multilateral reduction has been less successful. The costs of transacting agreements may be lower in RTAs with few countries and less diverse preferences and cost structures than in many-country multilateral negotiations. Member countries may reduce import barriers for third countries to avoid trade diversion and to gain access to the lowest-cost imported inputs. Third countries may pursue unilateral liberalisation as they press for multilateral liberalisation in order to gain from the opportunities of trading with an expanding RTA. The EC, NAFTA and CER members have at times exemplified all of these aspects.

Work done at the OECD has concluded that there appears to be a strong case in favour of regionalism in pushing forward the multilateral liberalisation process, though it adds that this result hinges on the RTAs having an outward orientation. After a survey of the historical experience of the EC and **10** RTAs involving Developing Countries, the World Bank **(1991,** pp. **107-108)** emphasised the dangers of inward-looking agreements and stressed that unilateral and multilateral liberalisation are preferable to the formation of trading blocs. One may note that many RTA member countries in more recent years have simultaneously pursued unilateral and regional trade liberalisation, e.g. Australia, Chile, Mexico, New Zealand and Thailand.

Practical questions of market access to major trading partners may also be decisive. Countries which are left out of blocs fear that their access to major markets will deteriorate. They may seek to join an RTA, preferably with one or more large fellow members, in order to improve their market access as well as their bargaining power. The developing countries as a group fear that they may lose market access if they are not part of a major group or if trade wars between blocs occur (see Emmerij, **1989).**

Numerous proposals have been put forward for new arrangements in recent years, especially in the Pacific and North American regions. Over the last five years or **so** proposals have been made for new bilateral RTAs between the United States on the one hand and Australia, ASEAN, Japan, Korea and Taiwan on the other. In the cases of Japan, Korea, Taiwan and ASEAN, these advanced as far as the preparation, at the request of the U.S. Congress, of reports by the U.S. International Trade Commission on the "pros and cons" of each proposal. There have been other proposals for trilateral RTAs. The most important of these is the proposed North American Free Trade Area. The President of the United States has put forward an Enterprise for the Americas Initiative whose ultimate objective is a free trade zone embracing North and South America. There have also been proposals for multi-nation Pacific groupings. These began with the proposal in **1966** for a free trade area involving the five developed Pacific countries, the United States, Japan, Canada, Australia and New Zealand (Kojima, **1966).** The latest proposal is one by Malaysia for an East Asian Economic Group including the ASEAN countries and possibly Japan and other Asian countries. (For a discussion of these proposals up to **1988,** see Schott, **1989*a,b*)**.

The proximate cause of the proposals to form free trade areas with the United States was the ending by the United States in the early **1980s** of its previous opposition to new geographically discriminatory trade arrangements. This ***volte* face** in its attitude and its current interest in bilateral free trade areas is attributed mainly to two factors: *i)* **U.S.** disillusionment with GATT progress in achieving multilateral improvements in market access; and *ii)* the concern over "unfair" trading practices overseas which many U.S. politicians blame for their persistent balance of payments deficits (see Schott **(1989*a*)** and Pomfret **(1988,** pp. **89-93).** Another general concern is the fear of competition with other RTAs and the economic security from largeness.

The attractiveness of regional arrangements will depend significantly upon the outcome of the Uruguay Round and the future of the GATT system. Many of the proposed RTAs are defensive in character. In the Pacific Rim the RTAs are fewer in number and less advanced in form. United States acceptance of the Canada-U.S. FTA was largely based on frustration with the difficulties of launching the Uruguay Round and as a vehicle for underlining the significance which it attached to the new issues of trade in services, intellectual property and investment. This is even more true of the various Pacific Rim proposals. While the Pacific countries are concerned about the possible emergence of "Fortress Europe", the prevailing opinion in all Pacific countries, at least in official pronouncements, has been strongly in favour of the multilateral route towards trade liberalisation. For example, the 1989 Asia Pacific Economic Cooperation (APEC) agreement among 12 countries is not an RTA and one of its basic principles is that "cooperation should be directed at strengthening the open multilateral trading system; it should not involve the formation of a trading bloc" (APEC, 1989, p. 6).

D. RTAs may reinforce the decline of non-discrimination

A third aspect of the relationship between RTAs and the multilateral trading system is the indirect effects on the principle of non-discrimination via other discriminatory practices. Several of the RTAs or countries which are members of RTAs operate additional preferences for non-member countries. The EC maintains a multi-layer system of trade preferences which gives preferences to most of its trading partners outside the EC. (In this context the reciprocal association agreements with the EFTA countries, four Mediterranean countries and Andorra should be excluded as they are an extension of the EC free trading area.) There is the Lome IV Convention with more than sixty countries, the Community GSP, the co-operation agreements with seven North African countries and Yugoslavia, and the Agreements with six central and eastern European countries[10]. The Canada-U.S. and Australia-New Zealand RTAs operate similar though less extensive multi-layer systems. The United States introduced new non-reciprocal preferences for Caribbean countries in 1963 (and a reciprocal agreement with Israel in the same year) and Canada has a co-operation agreement with the Caribbean Common Market. Both the United States and Canada operate GSP schemes. Australia and New Zealand grant non-reciprocal preferences on a wide range of imports to 11 members of the South Pacific Forum under the 1981 SPARTECA Agreement, both countries operate GSP-type schemes for developing countries, and Australia grants additional preferences to Papua Niugini. In total, these amount to a network of preferences associated with RTAs that has been spreading continually.

The principle of non-discrimination has also been breached with increasing frequency by actions under the MFA and Article 19 of the GATT, the growth of voluntary export restraint agreements and other non-global quantitative restrictions outside GATT regulations. In this context, the discriminatory nature of RTAs themselves and the further discriminations through RTA-based preferences and association agreements and RTA-operated discriminatory NTMs have contributed to the decline in the commitment to non-discrimination in the multilateral system.

V. THE TRIPOLAR VIEW OF THE WORLD

Much of the recent discussion is in terms of a tripolar view of the world, with the United States, Japan and the EC being the three poles (see, for example, Aho and Ostry, 1990; Lorenz, 1990; and Stoeckel, Pearce and Banks, 1990). These three are the biggest traders in the world economy and each is the centre of trading for many other countries based on geographical ties, preference systems and investment links. A more recent concern is over the possibility that the world economy could become essentially bipolar if the United States, Japan and other Pacific Rim countries formed a new bloc.

A. A test of the hypothesis of polarisation

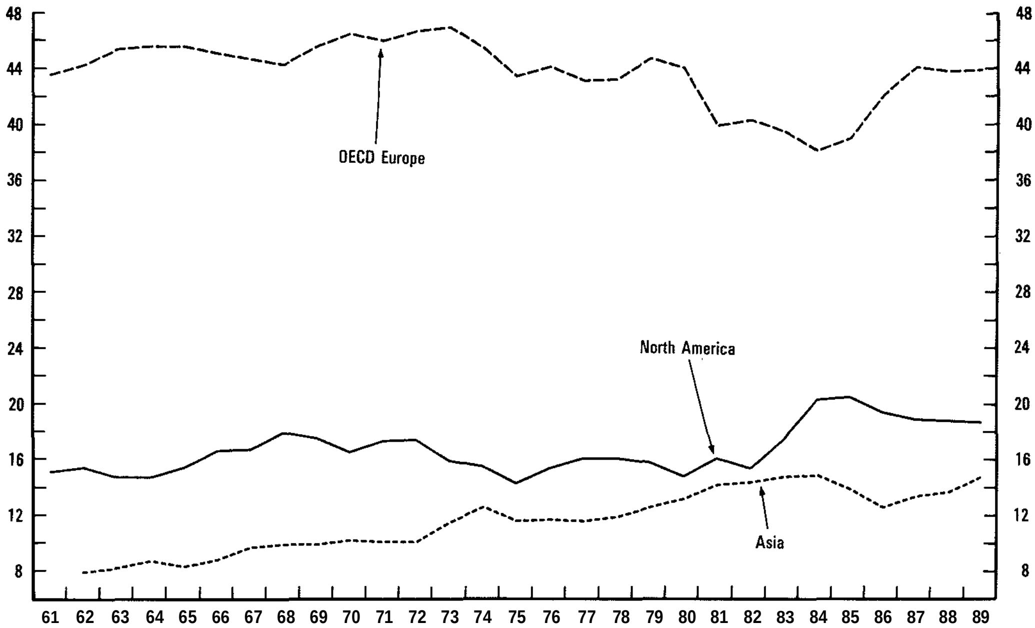
The hypothesis that the world is becoming more polarised in terms of trade flows is tested in the same manner as the RTA version of the regionalisation view of the world was examined in Section II. For this purpose, only the total commodity trade of each "region" is considered since all commodities form part of the influence of the pole and the region. The country groups relevant here are OECD Europe, North America (the United States and Canada) and Asia (Japan, Hong Kong, Korea, Taiwan and the ASEAN countries).

Data on the crude shares of world imports for these three "regions" are reported in Chart 3. They show that the import share of western Europe has been remarkably constant throughout the period at just over 40 per cent and that of North America has been roughly constant at around 15-17 per cent, with some increase in the second half of the 1980s. The Asian share of world imports has almost doubled over this period reflecting the impressive economic performance of this group of countries.

The intra-area import shares as a measure of the concentration of trade within these areas are reported in Chart 4. For OECD Europe, this measure has tended to increase throughout the period, from 56.4 per cent in 1964 to a peak of 69 per cent in 1987. For North America, this share is much lower and has fallen from a peak of 40.5 per cent in 1969 to only 27.5 per cent in 1988. For Asia, the intra-region share roughly doubled between 1964 and 1988 from 20 to 41 per cent[11]. However, this is primarily due to the fact that the total (import) trade of countries in the region has grown faster than trade in other countries and not to regionally discriminatory trade policies as there has been much less trade discrimination in the Asian region than in Europe and North America. If there were no change in trade policies and competitiveness, faster growth within a region would itself increase the share of intra-area trade, even if the shares of export markets were constant.

Thus, one may conclude from the evidence in Chart 4 that there is a tendency for world trade to become more regionalised in terms of broadly-defined regions as western Europe and Asia have tended to trade increasingly within their own area. Earlier studies for the post-World War II period (see Pomfret, 1988, pp. 180-83) and the pre-World War II period (see Sautter, 1983), showed no tendency towards regionalisation.

Chart 3. Shares of world imports accounted for by the three poles



Source: North America and OECD Europe: OECD database;
Asia: UN Comtrade database.
Note: The data for Asia contain some missing observations for certain countries.

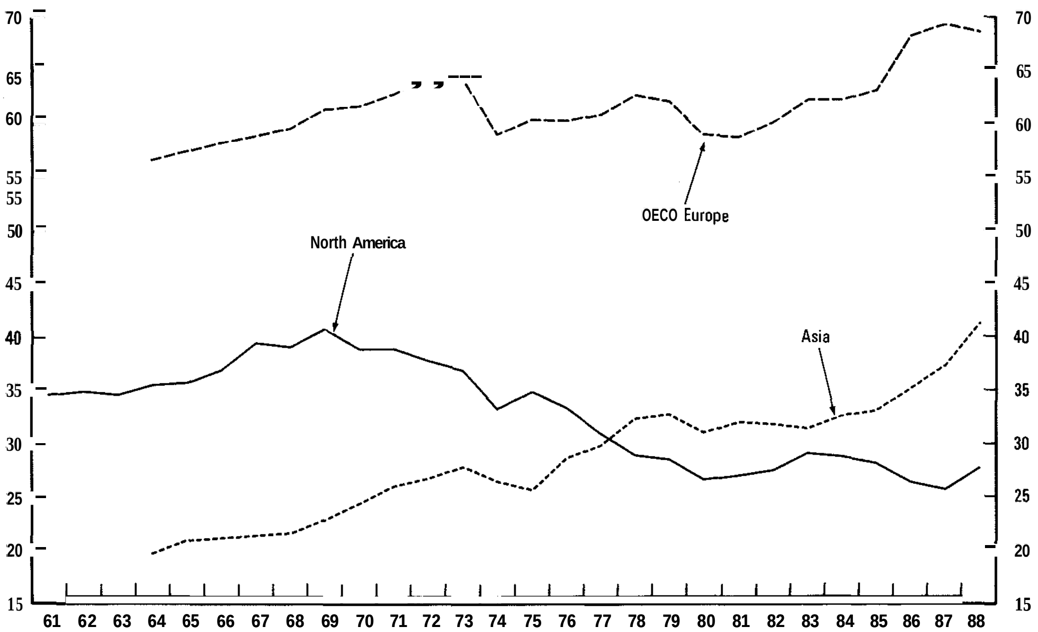
However, the changes in the Asian region at least are not attributable to discriminatory trade policies.

One feature of the more broadly-defined regions is the change in the definitions of the broad groups themselves. Since 1960 several major groupings have collapsed and disappeared. These include the Sterling Area countries, the system of British Imperial (later British Commonwealth) Preferences and most recently the COMECON. These collapses were associated with the decline of the polar power in the grouping, namely, the United Kingdom and the USSR, respectively. Similarly, some RTA groupings in Africa and the Caribbean have collapsed or merged with others. This long-term instability in the groupings reinforces the conclusion that there is no clear polarisation of the world economy.

B. Greater integration of the world economy

The GATT (1990, p. 36) has concluded that the world economy has become more "integrated" in each of the post-war decades. Their main indicator of integration is the trend in the rate of growth of the volume of trade relative to the rate of growth of real

Chart 4. **Intra-area imports as share of total imports: all commodities**



Source: North America and OECD Europe: OECD Database; Asia: UN Comtrade database.
Note: The data for Asia contain some missing observations for certain countries.

output in the world economy. **As** the world as a whole is a closed economy, this implies an increase in the ratios of imports/consumption and of exports/production on average, though not necessarily for all countries. These ratios are more relevant for the welfare of countries than intra-group shares in group trade or group shares of world trade as they reflect directly the benefits of more efficient global production resulting from greater specialisation in the world economy. Integration in this sense could occur at the same time as regionalisation or polarisation, but the sustaining of this trend over decades indicates that the benefits of increased international exchange have been widespread and have dominated the trend towards regionalisation and polarisation.

VI. CONCLUSIONS

The numbers of both RTAs and the countries which are members of them have been growing steadily. The extent of the intra-area liberalisation of trade barriers has also increased for both tariffs and non-tariff measures alike. Some RTAs are now addressing non-border measures which distort intra-area production and trade and harmonising other policies which affect trade. The second generation of RTAs among the OECD members (EC, CER and Canada-United States FTA) are evolving towards the achievement of single markets with completely free access and a greater degree of co-ordination of policies within the arrangements.

These moves have led to a widespread perception of a growing regionalisation of world trade. However, the empirical evidence for four major OECD RTAs does not support this view. There is only weak evidence that the intra-group shares of total group imports for the four RTAs considered have increased over the last 30 years, and this applies to the OECD groupings mainly in the years following the agreements. Similarly, for individual commodity groups with significant discrimination which could be expected to show these trends more clearly, there is again only weak evidence of regionalisation with the exception of trade in agricultural products. The shares of RTAs in total world trade have increased but this is explained in large part by the increase in membership of the RTAs and in any case it is a measure of the importance of these countries in world trade rather than of regionalisation.

A central question is whether the formation of RTAs conflicts with multilateralism and threatens the world multilateral trading system. There are several aspects to this question. RTAs are by definition discriminatory, but this does not itself imply that the direct trading effects harm third countries and the world trading system.

RTAs affect the multilateral system in a number of ways other than the direct effects of discrimination. One concern is that they could lead to retaliatory actions or even to trade wars. Recent applications of game theory confirm this is a danger if countries were free to retaliate and the co-operation involved in the multilateral system were absent. Larger countries or blocs could win trade wars at the expense of small countries. On the other hand, RTAs may progress towards global free trade by coalescing and encouraging multilateral reductions. The predictions of economic theory differ on these aspects depending on the availability of intra-area compensation and other factors. There is evidence that some RTAs have assisted multilateral trade liberalisation. A third aspect is the spread of preferences from RTAs or countries which are members of RTAs to third countries. The growth of RTAs and other RTA-associated trade discrimination has contributed to the decline in the commitment to the principle of non-discrimination in the multilateral system. These systemic effects may be the most serious consequence of the spread of RTAs.

The question of regionalisation is sometimes put in terms of the growing importance of more broadly-defined regions. Currently this view is in terms of the groups around three poles, the United States, Japan and the EC. There has been a tendency for world trade to become more regionalised in the OECD Europe and Asian regions but in the case of Asia this cannot be attributable to discriminatory trade policies.

Moreover, over the longer term, the major groupings have changed as some groupings have collapsed.

There is a current spate of new arrangements and a number of prospective candidates for future RTAs are being considered. There may, therefore, be a greater danger of regionalisation in the future. The United States in particular has abandoned its historical opposition to new discriminatory arrangements. Many of these current proposals are defensive, showing a concern over the dangers of trade conflicts and seeking economic security from largeness. The attractiveness of regional arrangements will depend significantly upon the outcome of the Uruguay Round and the future of the GATT-based system.

A number of aspects of regional trade need to be investigated further. The extent and timing of changes in intra-area trade policies within regional trade arrangements should be carefully tracked. The same should be done for actions with respect to third countries to ascertain whether these arrangements have restricted trade with outside countries. Article 24 of the GATT which covers regional trade arrangements needs to be examined, especially from the point of view of the effects of RTAs on third countries. An attempt might be made to estimate the net effect of regional variables *vis-à-vis* other variables in a sample of markets subject to regional discrimination[12]. These studies could be extended to more RTAs and regions and to a longer time period, and a detailed examination of the history of RTAs could reveal more of the economic and political motivations for forming and expanding them. The effects of harmonising domestic policies and the movement towards monetary and political union in some RTAs should be investigated. Increasing freedom of movement of factors within RTAs will have direct productivity effects and may substantially change the patterns of production and trade among members in ways which are poorly understood at present. The conclusions presented in the previous paragraphs, therefore, may be sharpened or modified as further research throws more light on the way in which RTAs have developed. And the future may not repeat the past.

NOTES

1. This excludes the earlier preference schemes, such as the British Imperial Preferences, which were accepted under the grandfather clause of the GATT. Schott, 1989*b*, Annex A provides an incomplete list up to 1988. The very first was an interim customs agreement between France and Italy concluded in 1947.
2. This takes no account of the collapse of COMECON in 1989-90. The economies of the COMECON countries were essentially closed to trade with western economies and the agreement was outside the GATT.
3. Technically, the free movement of labour between Australia and New Zealand was provided by a separate agreement, the Trans-Tasman Travel Agreement, which preceded the trade agreement.
4. The Treaty of Rome contained some features which went beyond the removal of border restrictions. These included the provisions relating to the harmonisation of standards and the approximation of commodity taxes and competition law, but they were limited in effectiveness.
5. It can be argued that restrictions on trade set up the same form of momentum in reverse, leading to further restrictions on substitute or downstream commodities which are adversely affected.
6. There are few studies of this aspect of RTAs. The EC history is well known. For an account of the evolution of the CER, see Lloyd (1987). Hart (1989) reviews the treatment of dumping in free trade areas and customs unions.

   A second related trend is the development of new means of harmonising national instruments. The EC92 measures contain a "new approach" to harmonisation based on the principle of Mutual Recognition of each others' standards. The EC has also used this method in the area of recognition of professional training, for certification in professional bodies. The ***Cassis de Dijon*** decision of the European Court in 1978 ruled that a product which was sold legally in the market of one member country can enter without restriction the markets of another member country, even if it does not meet the standards of this country. This made a policy of Mutual Recognition enforceable.

   The adoption of mutual recognition in place of attempts to achieve harmonisation by agreement among all members on a single uniform standard has, in turn, changed the process of harmonisation and the legal and political structure of policy making. In the longer term it will lead to the convergence of standards because of competition between government jurisdictions. Siebert (1989) refers to this as "ex ***post"*** harmonisation in contrast to ***"ex ante"*** harmonisation by prior agreement.
7. Agriculture in the EC is an exception as intra-EC trade is still distorted by "green rates" which differ from market exchange rates and by other regulations.
8. The time-series data on the import shares in these figures are available from the author on request.
9. Wijkman (1991) gives a detailed account of the trade patterns of the EFTA and the EC countries.
10. These arrangements are conveniently described in GATT (1991, Chapter 118). This does not include the Agreement with East Germany. Since October 1990 Community law has applied to the territory of the former East Germany.
11. The data for Asia contain some missing observations for certain countries. In particular, there was no observations for imports into the Philippines in 1987 and Korea in 1988 in the data supplied by the UN.
12. One difficulty with empirical studies is that the great majority of countries do not have adequate estimates of trade restrictions *vis-à-vis* the rest of the world because of the absence of measures of non-tariff protection or assistance. However, there are statistics for some commodity groups (e.g. the OECD PSE series for agricultural commodities) and for some countries (e.g. the United States, Australia and

New Zealand) and some instruments (e.g. VERs and other export restraints). The data problem is even more severe for discriminatory trade policies such as partial tariff preferences or special partner country import quotas. Fortunately, discrimination in regional trading arrangements is increasingly associated with the removal of all tariff and NTM restrictions on trade among member countries *so* that the rate of protection *vis-à-vis* third countries measures the intra-area margin **of** preference.

Appendix

NOTES ON DATA AND DEFINITIONS

A. Deflnition of a region

Two concepts of a region are used in the study.

1. Regional trading arrangements

Four such groups are examined:

i) The European Community (EC)
Period: 1958-72 (inclusive): the original six (Belgium, France, Italy, Luxembourg, Netherlands, western Germany)
1973-80: six + Denmark, Ireland, United Kingdom
1981-85: nine + Greece
1986-present: 10 + Portugal and Spain.

ii) The European Free Trade Area (EFTA)
Period: 1960-72: the original eight (Austria, Denmark, Norway, Portugal, Sweden, Switzerland, United Kingdom) plus Finland
1972-85: nine less United Kingdom and Denmark
1986-present: nine less United Kingdom, Denmark and Portugal.

iii) North America (Canada and the United States)
Period: 1989-present.
Although the Canada-US. Automotive Agreement came into effect in 1965, and was approved by the GATT as a "free trade area" under Article 24, it was a sectoral free trade area which covered only a small percentage of the total bilateral trade. Therefore, the formation of the North American area is dated from the Canada-United States Free Trade Area in 1989. This covers most trade in merchandise, though it excludes almost all agriculture and does not cover all NTMs on the remaining trade.

iv) Australia and New Zealand
Period: 1965-present.
The New Zealand-Australia Free Trade Area covered most actual goods traded between the two countries although it excluded agriculture and permitted the retention of NTMs, particularly the comprehensive import licensing system which New Zealand maintained until it was dismantled progressively from 1983. The Closer Economic Relations (CER) Agreement which came into effect in 1983, covered all goods trade (and most services) and has led to the elimination of all NTMs on bilateral trade.

2. Broad regional groups

Three broad regional groupings have been used:

OECD Europe;

North America (United States, Canada);

Asia (Japan, Hong Kong, Korea, Taiwan plus ASEAN countries).

These groups correspond to geographic regions which have a recognisable identity because of the formation of RTAs among some countries in the group and other links due to proximity and regional preferences and closer investment ties. They correspond to the three poles of trade centred on the EC, United States and Japan, respectively. The choice of members for the "Asian" group is most difficult. China was omitted because it is still a more closed economy with a distinct commodity pattern of trade. The remaining countries of East and South-East Asia have closer trade and investment ties that have been increasing more rapidly in the last years of the **1980s.**

B. Time and commodity coverage

The period of the sample is **1961-1989** or a sub-period if the data is restricted.

The merchandise trade commodities have been examined at three levels; those of trade in all commodities, trade in the groups of "manufactures" and the broader group of "non-energy products," and a small selection of industries. These commodity groups are defined in terms of SITC as follows:

"Manufactures": Sections **5-8** less Division **68** ("on-ferrous Metals").

"Non-Energy Products": Total less Section **3** ("Fuels").

"Food": Section O "Food and Live Animals".

"Clothing and Textiles": Divisions 65 ("Textile Yarns, Fabrics and Made-up Articles n.e.s.") and **84** ("Articles of Apparel and Clothing Accessories").

"Iron and Steel": Division **67** ("Iron and Steel").

"Passenger Motor Vehicles": Division **78** ("Road Vehicles").

C. Database

OECD database for all but the data on import shares for Asia which are taken from the UN Comtrade database.

BIBLIOGRAPHY

Aho, C.M. and S. Ostry (1990), "Regional trade blocs", in W. Brock and R.D. Harmat (eds.), The Global Economy: America's Role in the Decade Ahead, W.W. Norton and Company.

Asia Pacific Economic Cooperation (APEC) (1989), Summary Statement by the Chairman, Conference Secretariat, Department of Foreign Affairs and Trade, Canberra.

Balassa, B. (1961), The Theory of Economic Integration, Irwin, Homewood, Illinois.

Balassa, B. (ed.)(1975), European Economic Integration, North Holland, Amsterdam.

Baldwin, R. (1989), "On the growth effects of 1992", Economic Policy, 9, (Autumn), pp. 247-81.

Baldwin, R.E. (1982), "The inefficacy of trade policy", Princeton University International Finance Section, Essays in International Finance, No. 150, (December).

Brown, D.K. and R.M. Stem (1989), "Computational analysis of the U.S.-Canada Free Trade Agreement: the rate of product differentiation and market structures", in R.C. Feenstra (ed.), Empirical Methods for International Trade, MIT Press, Cambridge.

Bureau of Industry Economics (1989), "Trade liberalisation and Australian manufacturing industry: the impact of the Australia-New Zealand Closer Economic Relations Trade Agreement", Research Report No. 29, Australian Government Publishing Service, Canberra.

Canada, Department of Finance, Fiscal Policy and Economic Analysis Branch (1988), The *Canadian-U.S.* Free Trade Agreement: An Economic Assessment, Ottawa.

Cecchini, P. et al. (1988), The European Challenge *7992:* The *Benefits of* a Single Market, Wildwood House, Aldershot.

Commission of the European Economic Communities (1985), Completing *the Internal* Market, White Paper for the Commission to the European Council, Office for Official Publications of the European Communities, Luxembourg.

Dell, S. (1963), Trade Blocs and Common Markets, Constable, London.

Emerson, M. et al. (1988), The Economics of *7992:* The EC Commission's Assessment of *the* Economic *Effects* of Completing the *Internal* Market, Oxford University Press, Oxford.

Emmerij, L. (ed.) (1989), One *World* or Several, Development Centre of the OECD, Paris.

GATT (1990), International Trade *89-90,* GATT, Geneva.

GATT (1991), Trade Policy Review - European Communities, GATT, Geneva.

Grinols, E.L. (1981), "An extension of the Kemp-Wan theorem on the formation of customs unions", Journal of International Economics, 11, pp. 259-66.

Harris, R.G. (1984), "Applied general equilibrium analysis of small open economies with economies of scale and imperfect competition", *American* Economic Review, 74, (December), pp. 1016-1032.

Harris, R.G. and D. Cox (1984), Trade, *Industrial* Policy and Canadian Manufacturing, Ontario Economic Council, Toronto.

Harrison, G.W. and E.E. Rutstrom (1991), "Trade wars, trade negotiations and applied game theory", Economic Journal, 101, (May), pp. 420-435.

Hart, M. (1990) "Dumping and free trade areas", in J.H. Jackson and E.A. Vermulst (eds.), Antidumping Laws and Practice: A Comparative Study, Harvester Wheatsheaf, London.

Hazeldine, T. (1989), "Industrial organisation foundations of trade policy". Australian Journal of Agricultural Economics, 33, (April), pp. 1-19.

Johnson, H.G. (1958). "Marshallian analysis of discriminatory tariff reductions: an extension", Indian Journal of Economics, 6, pp. 177-82.

Julius, D. (1990), Global *Companies* and Public Policy: The Growing Challenge of Foreign Direct Investment, The Royal Institute of International Affairs, London.

Keenan, J. and R. Riezman (1988), "Do big countries win tariff wars", International Economic Review, 29, (February), pp. 81-85.

Keenan, J. and R. Riezman (*1990*), "Optimal tariff equilibria with customs unions", Canadian *Journal* of Economics, 23, (February), pp. 70-83.

Kemp, M.C. and H. Wan (1976), "An elementary proposition concerning the formation of customs unions", Journal of International Economics, 6, pp. 95-97.

Kojima, K (1966), "A Pacific economic community and Asian developing countries", Hitotsubashi Journal of Economics, 7, (June), pp. 17-37.

Kowalczyk, C. (1990), "Welfare and customs union", NBER Working Papers No. 3476, Cambridge, Mass.

Kreinen, M.E. (1989), "EC-1992 and world trade and the world trading system", Paper presented to the Conference on 1992, Europe and America, Reading, England.

Langhammer, R.J. and U. Hiemenz, (1990), "Regional integration among developing countries", Kieler Studies No. 232, University of Kiel, Kiel.

Lipsey, R.G. (1960), "The theory of customs unions: a general survey", Economic Journal, 70, (September), pp. 496-513.

Lloyd, P.J. (1987), "Australia-New Zealand trade relations: NAFTA to CER", in K. Sinclair (ed.) Tasman Relations, New Zealand and Australia, 7788-7988, Auckland University Press, Auckland, pp. 142-163.

Lloyd, P.J. (1991), The Future of *CER: A* Single Market *for Australia* and New Zealand, CEDA and Institute of Policy Studies, Wellington.

Lorenz, D. (1991), "Regionalisation versus regionalism – problems of change in the world economy", *Intereconomics,* (January/February), pp. 3-16.

Markusen, J.R. and R.M. Wigle (1989), "Nash equilibrium tariffs for the United States and Canada: the roles of country size, scale economies, and capital mobility", Journal of Political Economy, 97, (April), pp. 368-386.

Mundell, R.A. (1964), "Tariff preferences and the terms of trade", Manchesfer School of Economics and Social Studies, 32, (January), pp. 1-13.

Norman, V.D. (1990), "Assessing trade and welfare effects of trade liberalisation: a comparison of alternative approaches to CGE modelling with imperfect competition", European Economic Review, 34, pp. 725-751.

Owen, N. (1983), Economies of Scale, Competitiveness and Trade Patterns within the European Community, Clarendon Press, Oxford.

Pomfret, R. (1988), Unequal Trade: The Economics of Discriminatory International Trade Policies, Basil Blackwell, Oxford.

Richardson, J.D. (1989), "Empirical Research on trade liberalisation with imperfect competition: a survey", *OECD* Economic Studies, No. 12, (Spring), pp. 7-50.

Riezman, R. (1979), "A 3x3 model of customs unions", Journal of International Economics, 9, pp. 341-54.

Riezman, R. (1982), 'Tariff retaliation from a strategic point of view", Southern Economic Journal, 48, pp. 583-93.

Robson, P. (1984), The Economics of International Integration, George Allen and Unwin, London.

Sautter, H. (1983), Regionalisierung und komparative *Vorteile* im internationalen Handel, Tubingen.

Schott, J.J. (ed.) (1989*a*), Free Trade Areas and US Trade Policy, Institute for International Economics, Washington, D.C.

Schott, J.J. (ed.) (1989*b*), More Free Trade Areas?, Institute for International Economics, Washington, D.C.

Scitovsky, T. (1956), "Economies of scale, competition and European integration", American Economic Review, 46, (March), pp. 71-91.

Siebert, H. **(1990),** "The harmonisation issue in Europe: prior agreement or a competitive process?" in H. Siebert (ed.), The Completion of the *Internal* Market, J.C.B. Mohr, Tubingen.

Smith, A. and A.J. Venables **(1988),** "Completing the internal market in the European Community: some industry simulations", European Economic Review, 32, pp. **1501-1525.**

Stoeckel, A., D. Pearce and G. Banks **(1990),** Western Trade Blocs, Centre for International Economics, Canberra, Australia.

Thorbecke, E. (**1960),** The Tendency Towards Regionalisation in International Trade *1928-56,* Martinus Nijhoff, The Hague.

Viner, J. **(1950),** The Customs Union Issue, Carnegie Foundation for International Peace, New York.

Whalley, J. **(1985),** Trade Liberalization Among Major World Trading Areas, MIT Press, Cambridge, Mass.

Wijkman, P.M. **(1991),** "Patterns of production and trade in Western Europe: looking forward after thirty years", in W. Wallace (ed.) The Dynamics of European Integration, Royal Institute of International Affairs, London.