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**Working Paper**

## Regional trade agreements and the WTO

CREDIT Research Paper, No. 00/3

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*Suggested Citation:* Crawford, Jo-Ann; Laird, Sam (2000) : Regional trade agreements and the WTO, CREDIT Research Paper, No. 00/3, The University of Nottingham, Centre for Research in Economic Development and International Trade (CREDIT), Nottingham

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# **Regional Trade Agreements and the WTO**

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**Jo-Ann Crawford and Sam Laird**

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**Acknowledgements**

Paper prepared for a meeting of the North American Economic and Finance Association in Boston, 6-9 January 2000. The views expressed in this paper are those of the authors and do not necessarily represent the views of the World Trade Organization or its Member States.

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May 2000

# **Regional Trade Agreements and the WTO**

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## **Abstract**

The rapid growth in the number of regional trade agreements (RTAs) has led to concern about the weakening of the multilateral trading system. This paper looks at the spread of such agreements and the extent which they pose a threat to the system.

## **Outline**

1. Introduction
2. The Spread of RTAs
3. The Coverage of RTAs
4. Regionalism Versus Multilateralism
5. RTAs in the WTO
6. Conclusions



## I INTRODUCTION

There has been a rapid growth in the number of regional trade agreements (RTAs) in recent years. In Europe, these are mainly centred on the European Union, spreading to the Central and Eastern European countries, the Baltic States, the Mediterranean and beyond. In the Americas, two agreements – NAFTA and MERCOSUR – have had a significant impact, but these may be overtaken by the Free Trade Area for the Americas. There has also been an increase in the extent to which RTAs overlap, although there are significant variations in the product coverage and the rules of origin. On the whole, the newer agreements tend to have deeper coverage, extending into areas of domestic disciplines beyond the exchange of tariff concessions, and a number of agreements now also cover the services sector. The spread of RTAs and their coverage are discussed in Sections II and III.

Bhagwati (1992), in particular, has raised the question as to whether RTAs pose a threat to the multilateral trading system, and he has initiated a rapid growth in the economic literature on the subject. In Section IV we look briefly at some of the main arguments, and the extent to which they square up with the phenomena which we have observed. The paper does not revisit the question of the benefits of RTAs or the conditions under which they contribute to economic welfare. However, it is worth noting that political and security considerations have been of considerable importance in the decision to form a number of RTAs, especially in Europe, and these would have been established even if strict economic criteria were not met.

In Section V we review the debate on "systemic" issues within the WTO. There are considerable differences between WTO Members' views on the meaning of certain terms in the various WTO rules relating to RTAs; such differences do not fall cleanly between those Members who participate in RTAs and the few who do not. These divergences of view have made it difficult to conclude the examination of RTAs for consistency with WTO rules, although these are not the only problem. There are proposals to clarify the rules in the new multilateral negotiations, and these are also examined briefly.



Finally, we conclude by posing a number of questions about the consistency of regionalism with the longer term goal of freer trade among WTO Members.

## **II THE SPREAD OF RTAS**

The number of RTAs in force has varied considerably over the years. WTO (1999a) provides various statistics about agreements which have been notified to the GATT or the WTO, agreements which have not (yet) been notified, and those which remain in force. According to the WTO Secretariat, 102 of the agreements which have been notified to the GATT/WTO were in force at the end of 1998. This includes 78 agreements covering trade in goods notified under Article XXIV of the GATT 1994, 13 goods agreements concluded between developing countries notified under the Enabling Clause, and 11 agreements covering trade in services notified under the GATS. More than half of these agreements have entered into force since 1990, when there were only about 40 agreements in force. In other words there were some 250 per cent more agreements in force in 1998 than eight years earlier, and we know that new agreements continue to be signed.

The longer term growth in the number of RTAs in recent years is shown in Chart 1 which shows the cumulation of RTAs notified to the WTO Secretariat, as well as the net increase. It demonstrates the rapid growth which has taken place in the 1990s. It should be noted that these figures show only notified agreements and do not include the many non-notified agreements that are in existence today. Such agreements occur when there is a time lag before official notification is made to the WTO, or when RTA participants simply fail to notify agreements. There is no provision for counter-notification of agreements under current WTO rules.

Apart from the growth in the number of agreements, modern RTAs have a much wider network of participants and stretch across countries at different levels of economic development. APEC, which does not (yet) allow for the mutual exchange of trade preferences, will cover some 40 per cent of the world's population. The Free Trade Area of the Americas and the European Union's agreements with Central and Eastern Europe and the Mediterranean each encompass more than 500 million people. In mid-1998, 100

of the (then) 132 or 76 per cent of all WTO Members were participants in one or more notified regional trade agreements. If participation in both notified and non-notified agreements is taken into account, then the share of participating WTO Members rises to 97 per cent.

It is also noticeable that many of these new agreements are inter-linked. By our estimates, the countries of the European Union and Mexico belong to more than 10 regional agreements (Chart 2). Brazil, Colombia, Venezuela, Chile and some Central American countries belong to between 5 and 10 such agreements. Most other WTO members belong to at least one agreement. The main exceptions to this pattern are Hong Kong, China; Japan; Macau and Mongolia.

A broad overview of the degree of world integration and includes both active and prospective RTAs is shown in Chart 3. A number of agreements, such as APEC, the agreements between the EU and South Africa, the EU's framework agreements with Mexico and MERCOSUR, and others reach across continents. It is also clear that there is a tendency for the new agreements to fall within the sphere of influence of the European Union and the United States, raising the spectre of a world of trading megablocs. (However, there are important differences between RTAs involving the EU and the US partnerships in that many EU agreements fall within a standard pattern based on the EU's *acquis communautaire* and are seen as a stage towards eventual full membership of the European Union).

While these various agreements are in the process of implementation, their trade regimes tend to become more complex. Thus, most agreements have different time frames for implementation, different product coverage and different rules of origin. The main exception on rules of origin is the pan-European System of Cumulation of Origin which links the EU, CEFTA and EFTA countries and seeks to establish a single set of rules of origin within the FTAs signed by these countries (although these also encompass differing rules relating to change of tariff heading and various degrees of value added or transformation) Of course, ROOs are not a feature of fully-implemented customs unions where internal barriers have been swept away, but the European Union is unique in

having achieved that degree of integration as a Single Market. At present, there are no WTO disciplines on preferential rules of origin.

### III THE COVERAGE OF RTAS

An important feature of modern RTAs is more extensive product coverage than in earlier agreements.<sup>1</sup> Overall very few agreements have 100 per cent product coverage, many having exceptions under the general provisions of Article XX and the security provisions of Article XXI of the GATT 1994, and there is generally more limited coverage in agriculture. However, of the agreements under examination in the WTO in 1998 and which were established in the post 1990 era, 43 had 100 per cent coverage in industrial products and more selective coverage in the agricultural sector. This compares with only 11 such agreements in the pre-1990 period.

Another major feature of the new agreements is that many go beyond the traditional tariff-cutting exercises. They now may cover services, investment, intellectual property, technical barriers to trade, dispute settlement, *supra*-national institutional arrangements and so on. Many more agreements today contain disciplines limiting the use of quantitative restrictions and subsidies. These developments are also described in WTO (1998a), a Background Note by the Secretariat prepared for the WTO Committee on Regional Trade Agreements. In one important development, a number of agreements have provisions for the use of competition policy instruments in place of anti-dumping procedures on trade among the parties: the EU, the EEA, the Australia-New Zealand Agreement on Closer Economic Relations, and the Canada-Chile FTA.

On the whole, the wider scope of the new agreements makes sense for participants, allowing for greater efficiency gains than is possible from the elimination of frontier barriers alone. As an illustration, the elimination or harmonization of technical barriers is the key to achieving economies of scale as well as helping regional industries to become more competitive internationally. This was considered by Ceccini (1988) to be one of the most important potential gains from the establishment of the single market in Europe. To

the degree that elimination or harmonization of technical barriers – or indeed other measures affecting trade - simplifies the rules facing third countries then this may also be to their advantage. However, on the issue of harmonization versus mutual recognition of standards, it should be noted that the Europe Agreements typically call for the harmonization of standards to EC rather than international standards. While harmonization on this basis might lead to internal gains, there remains the possibility of adverse effects on third parties.

#### **IV REGIONALISM VERSUS MULTILATERALISM**

The trend in the growth of RTAs is difficult to interpret. On the one hand, this scale of trading within regional agreements would have been difficult to imagine by the founders of the GATT. On the other hand, the trend has to be set in the context of two other recent phenomena. First, the 1990s were also a period of rapid growth of accessions to the GATT and the WTO, from some 80 GATT Contracting Parties in 1990 to over 130 WTO Members today. In the accession process, new GATT/WTO Members committed themselves to reduced protection and the implementation of WTO rules, which include the notification of RTAs to which they are party. Second, this was also a period of unilateral liberalization, particularly among developing countries and economies in transition, and this liberalization was largely consolidated in the Uruguay Round. Thus, we have also seen a decline in the use of non-tariff measures as well as considerable rationalization of tariff structures, tariff reductions to moderate average levels and a major expansion in binding coverage. This background of unilateral and multilateral liberalization considerably reduces the scope for trade diversion, and in practice, as Baldwin (1997) points out "almost all empirical studies of European and North American arrangements find positive impacts on member's living standards".<sup>2</sup>

Thus, the context of the new RTAs and their product coverage are rather different from the unsuccessful regional trade agreements of the 1950s and 1960s, which were in many

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<sup>1</sup> For details, see WTO (1998a).

<sup>2</sup> An exception is in Southern Africa, where Evans (1999) finds that there are winners and losers among the participants in the SADC FTA, due to be implemented in 2000.

respects designed deliberately to achieve trade diversion.<sup>3</sup> Nevertheless, the fact is that trade within RTAs has been generally growing much faster than trade from non-members. An analysis of seven regional integration agreements (APEC, the European Union, NAFTA, ASEAN, CEFTA, MERCOSUR and the Andean Community) shows that, on average, imports from other members of these arrangements increased on (import-weighted) average at some 7 per cent a year in the period 1990-98, while imports from non-members increased at 5.5 per cent (Table 1).<sup>4</sup> However, while the growth in imports from non-members was on average lower than from members (the exception is the EU whose imports from non-members grew at the same rate as from members), this is similar to the average rate of growth of 6 per cent in world imports, including those by the selected integration arrangements, in the same period. Also, it has to be noted that in the cases of NAFTA, MERCOSUR and the Andean Community imports from non-members grew at 7, 15 and 12 per cent, respectively, somewhat above the growth rate for world imports.

It is, therefore, important to look carefully at the dynamics of particular agreements. On a simple comparative static analysis, third parties may be adversely affected by trade diversion and a reduction in their terms of trade, but this is less obvious on the basis of a crude dynamic analysis, especially in the case of the faster growing RTAs. In any event, the overall numbers do not point to serious diversion away from imports from non-members of RTAs. On the other hand, there have certainly been concerns expressed in the Caribbean about the negative effects of NAFTA on their trade. Yeats (1997) claims evidence of trade diversion in MERCOSUR. While protection of certain sectors such as automobiles certainly limits market opportunities in MERCOSUR, overall these countries are now much more open than they were in the 1980s, and, as noted earlier, imports from third countries have also been growing rapidly (Laird, 1998).

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<sup>3</sup> See, for example, de Melo and Dhar (1992) or Langhammer and Hiemenz (1991).

<sup>4</sup> In the period 1990-97, imports from other members of these arrangements increased on average at some 15 per cent a year, while imports from non-members increased at 10 per cent. Thus, the decline in trade following the financial crisis had a similar effect overall on members and non-members.

Bhagwati (1992) and Krueger (1995) express strong concerns about the negative effects of growing regionalism and they worry that RTAs divert attention from the multilateral trading system. Bhagwati, in particular, stresses the benefits of free trade and rejects arguments about the need for an alternative to the GATT for countries which wish to liberalize faster, regionalism as a supplement to GATT, regionalism to accelerate the GATT processes, balance-of-payments pressures for a quick result on trade, recent experiences in Europe and the Americas, changed attitudes to liberalization in developing countries, and so on.

On the other hand, Baldwin (1997), Ethier (1998) and Lawrence (1999) tend to regard regionalism much more as a complement to multilateralism (building blocks rather than stumbling blocks). Baldwin argues that NAFTA triggered off pressures for such agreements as a kind of domino effect. He and Lawrence both argue that such liberalization strengthens the hand of exporters and pro-trade forces. Ethier (1998) emphasises that "the new regionalism is in good part a direct result of the success of multilateral liberalization, as well as being the means by which new countries trying to enter the multilateral system (and small countries already in it) compete among themselves for direct investment".

Lawrence also makes an important point that the correct comparison is not between a preferential arrangement and complete multilateral liberalization, but between two second-best situations of multilateral liberalization that is only partial with preferential trade liberalization which could be much more complete.

Alan Winters has argued that RTAs are like street gangs: "you may not like them, but if they are in your neighbourhood, it is safer to be in one".<sup>5</sup> However, in Winters (1996) he argues that, on the basis of various models, it is not yet possible to determine whether regionalism encourages or discourages evolution towards globally freer trade, and in Winters (1998), he says that there is no reason to expect a single, simple answer. However, he is worried that regionalism probably increases the risks of catastrophe in the

trading system, a comment that might seem particularly apt in the wake of the Seattle WTO Ministerial meeting of late 1999.

In a look at the issue of the tendency towards large blocs of RTAs, Winters (1998) also discusses whether reducing the number of players in multilateral negotiations could simplify the process of reaching agreement at the multilateral level. Citing the difficulties that the European Union had in formulating a common position in the Uruguay Round, he argues that such powerful coalitions could make negotiations more difficult.

## V RTAS IN THE WTO

Within the GATT and the WTO, the examination of specific RTAs has been plagued by disagreement about the interpretation of certain elements of the rules relating to RTAs as well as by certain procedural aspects. For example, in the 46 years of the GATT up to the end of 1994, a total of 98 agreements had been notified under Article XXIV, most of which were examined in individual working parties. But, consensus on the conformity of these agreements with GATT provisions was reached in only one case: the Czech-Slovak customs union.

On the procedural side, in an effort to streamline the examination process, the General Council of the WTO replaced the previous system of separate working parties with the establishment of the Committee on Regional Trade Agreements (CRTA) in February 1996. The mandate of the CRTA is to carry out the examination of agreements referred to it by the Council for Trade in Goods (CTG) (agreements under Article XXIV of the GATT 1994), the Council for Trade in Services (CTS) (agreements under Article V of the GATS) and the Committee on Trade and Development (CTD) (agreements between developing countries, established under the Enabling Clause<sup>6</sup>) (WTO document WT/L/127 of 7 February 1979). The CRTA is also charged to make recommendations

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<sup>5</sup> Statement at Seminar on Regional Trade Agreements, WTO, Geneva, Wednesday 30 June 1999.

<sup>6</sup> *Differential and More Favourable Treatment, Reciprocity and Fuller Participation of Developing Countries*, Decision of 28 November 1979.

on the reporting requirements for each type of agreement and to develop procedures to facilitate and improve the examination process.

The current state of play in the CRTA (October 1999) is that 118 RTAs have been notified to the GATT/WTO and are still in force: 93 under GATT Article XXIV; 14 under the Enabling Clause; and eleven under GATS Article V. However, no report has been adopted in the CRTA's nearly four years of operation. The Committee has currently under review a total of 72 agreements, including agreements on accession to existing RTAs, as well as agreements on trade in services parallel to existing RTAs in the goods area. The examination of 64 of these agreements has been referred to the Committee by the Council for Trade in Goods (CTG), seven by the Council for Trade in Services (CTS) and one by the Committee on Trade and Development (CTD). Draft reports on the examination of 30 agreements are currently under consideration; for 31 other agreements, reports are being drafted or factual examinations are currently underway. There are eleven RTAs for which factual examination has not yet started (see Table 2).

On substantive issues, there was an attempt to clarify the rules through the WTO Understanding on the Interpretation of Article XXIV of the GATT 1994, adopted as part of the Final Act of the Uruguay Round. However, the Understanding has not resolved the more difficult issues, and it was hoped that further clarification would come from the CRTA which also has in its mandate the responsibility "to consider the systemic implications of such agreements and regional initiatives for the multilateral trading system and the relationship between them, and make appropriate recommendations to the General Council".

In practice, the CRTA has not been able to resolve many of the "systemic" issues, and it is too early yet to say what might be the outcome of a proposal to clarify these issues in the context of new multilateral negotiations.

As noted in the last two annual reports of the CRTA, work on systemic issues has been based in part on issues arising in the examination of specific agreements as well as on



written contributions by a number of delegations. Most recently these have attempted to identify the issues arising from the interpretation and application of individual provisions of GATS Article V and the possible linkages between GATS Article V and GATT Article XXIV. Discussion has concentrated on the interpretation of individual provisions in GATS Article V, particularly in regard to the scope of "substantial sectoral coverage" and "substantially all discrimination".<sup>7</sup>

At present, the WTO Secretariat is preparing a synoptic paper on systemic issues, based on the "Checklist of Systemic Issues" (document WT/REG/W/12) and the Annotated Checklist of Systemic Issues (WT/REG/W/16). The aim of this draft paper, which is not yet in the public domain, is to summarise on a factual basis the discussion that has already taken place on systemic issues. As mentioned earlier, there have been additional contributions in the form of submissions by WTO Members and other, earlier documentation by the WTO Secretariat (e.g. WTO, 1995). A list of official documents on this theme (as well as several "Non-papers") was appended to the 1998 Annual Report of the CRTA to the WTO General Council (Attachment 3), while the most recent submissions are listed in the 1999 Annual Report of the CRTA to the General Council (WTO, 1999b). Most of these documents are now publicly available on the WTO's Internet Document Dissemination Facility (<http://www.wto.org/wto/ddf/ep/public.html>), in the document series WT/REG/W/...<sup>8</sup>

Considerable detail is also included in the "Annotated Checklist of Systemic Issues", a Note by the WTO Secretariat (WTO document WT/REG/W/16 of 26 May 1997), which elaborates the checklist (in WT/REG/W/12) and gives a good indication of some of the sensitivities underlying the systemic debate.

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<sup>7</sup> However, there is disagreement on where these issues should be discussed, with some WTO Members taking the view that some of these issues should only be considered in the Council for Trade in Services while others feel that they should be considered in CRTA.

<sup>8</sup> Much of the documentation, as well as a number of studies by World Bank economists, was provided as background material for an On-line Forum on Regionalism, organized by World Bank and the WTO, and are still posted at <http://www-dev.itd.org/forums/forreg.htm>.

On the goods side, probably the most important single issue relates to the interpretation of the term "substantially all the trade", which relates to the requirement that "duties and other restrictive regulations of commerce ... are eliminated on substantially all the trade between the constituent territories" as defined in GATT Article XXIV:8.<sup>9</sup> This is particularly relevant for those agreements where the coverage of agriculture is presently limited, for example, many of the RTAs formed by European countries. The debate on "substantially all the trade" has centred on two possible interpretations which are not mutually exclusive. The first, a *quantitative* approach, favours the definition of a statistical benchmark, such as a certain percentage of trade between the parties. The second, a *qualitative* approach, would require that no sector (or at least no major sector) be excluded from intra-RTA trade liberalization. A number of participants in existing RTAs argue that account should be taken of whether an RTA facilitates trade in a sector even where trade barriers are not fully eliminated; others consider that trade not covered by elimination of duties and other restrictive regulations of commerce remains subject to the MFN principle, and that partial duty reduction is not permitted under Article XXIV.

A closely related issue is the meaning of the phrase "the general incidence of duties and other regulations of commerce", which are not on the whole to be higher or more restrictive against third parties upon the formation of a customs union (Article XXIV:5). This issue has been largely clarified with the 1994 Understanding which specifies that the evaluation of the general incidence of the duties and other regulations of commerce applicable before and after the formation of the customs union shall be based upon an overall assessment of weighted average tariff rates. (The Understanding says the weighted average tariff rates and customs duties collected, but the duties cannot be known in advance and notifications are required prior to the formation of the customs union, so the reference to customs duties collected is effectively redundant). For the purpose of this calculation, the applied rates not the bound rates are to be used. The WTO Secretariat, not the parties to the customs union, is to make the calculations according to the methodology used in the Uruguay Round. However, one issue, not

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<sup>9</sup> The drafting history of the various legal provisions is to be found in WTO document WT/REG/W/21/Rev.1 of 5 February 1998.

mentioned in the checklists is how to reconcile the import-weighted average of duties with the Uruguay Round methodology of computing arithmetic average for commitments in the agricultural sector.

If it were desired to ensure that even static trade diversion were avoided, this could be achieved by requiring that the MFN rates also be reduced to a level which would prevent or minimize trade diversion, as has been suggested by Australia in the preparatory process for Seattle. This would require a modification of the above rules – for which the prospects are not bright – and has some technical complications. Less technically complex is Bhagwati's (1992) proposal that in the formation of a customs union the lowest rate of any member should form the basis for the common external tariff. Apart from also requiring a rule change, this does not address the fact that most RTAs are in the form of FTAs even where they are customs unions in the making. However, reduction of trade diversion is also obtained by MFN reductions in multilateral negotiations (the main GATT/WTO solution), as has been occurring progressively in the last 50 years, or through the unilateral reforms of the last 10-15 years.

In relation to "other regulations of commerce" (Articles XXIV:5 and XXIV:8) and "other restrictive regulations of commerce(ORRCs)" (Article XXIV:8), the systemic debate also runs up against the issue of the definition and measurement of non-tariff barriers. "Regulations of commerce" is an expression which has been used in the GATT legal texts only in connection with RTAs. No definition of the term is provided.<sup>10</sup> Some Members have argued that what is important is not whether some specific measures fall under the umbrella of ORRCs, but rather if their application among RTA parties leads to a restriction on the trade of third parties. In terms of measurement of non-tariff barriers, it is not clear, for example, what methodology should be used to aggregate commitments on domestic supports and export subsidies.

Certainly, the difficulty in interpreting these provisions is recognized in the Understanding where it states that "for the purpose of the overall assessment of the incidence of other

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<sup>10</sup> The drafting history can be found in WTO document WT/REG/W/17/Rev.1

regulations of commerce for which quantification and aggregation are difficult, the examination of individual measures, regulations, products covered and trade flows may be required". Among the relevant measures which have been identified by some WTO Members are anti-dumping duties, preferential rules of origin, technical standards, subsidies and countervailing measures, whose "scope and importance of those measures [has] increased in the post-Uruguay Round period" (WT/REG/M/4, para.60.).

Another issue is whether a new member of a custom union may apply a quantitative restriction or other measure already being applied by other members, consistent with WTO obligations. A recent panel (Turkey – Restrictions on Imports of Textile and Clothing Products) ruled that Article XXIV does not provide the cover for any violation of WTO obligations, other than the MFN obligation. While the constituent members of a customs union are required to adopt substantially the same regulations of commerce, other WTO-compatible alternatives could have been adopted by Turkey in order to fulfill this obligation. This decision was essentially upheld by the WTO Appellate Body, which ruled that Article XXIV *may* justify a measure which is inconsistent with certain other GATT provisions, but *only if* the "measure at issue is introduced upon the formation of a customs union that fully meets the requirements of sub-paragraphs 8(a) and 5(a) of Article XXIV. And, second, that party must demonstrate that the formation of that customs union would have been prevented if it were not allowed to introduce the measure at issue."<sup>11</sup>

It has been argued, notably by Krueger (1995) that rules of origin can constitute significant non-barriers to trade, and similar arguments have been used in the CRTA where it has been argued that "rules of origin ... were relevant to the 'other regulations of commerce'-test, found in Article XXIV:5. The core of the concern [has been] that in some sectors ... the effect seemed to be to manage trade and to prevent the full trade-creating benefits of the liberalization process from developing"( WT/REG4/M/2, para. 3.). However, there are no explicit WTO disciplines on the use of preferential rules of origin. Although these are specific to free trade areas, and not to customs unions, in fact all RTAs other than the EU are customs unions in the making and work operationally

more like FTAs during their long, apparently interminable, gestation periods. The absence of clearcut rules on preferential ROOs is a serious shortcoming.

One proposal is that preferential rules of origin be tied to the definition of "substantially all the trade" (SAT). Thus, in measuring SAT as percentage, the base (100 per cent of trade between the RTA parties) should comprise all intra-RTA trade measured according to MFN rules, while the qualifying proportion of trade (to meet the SAT requirement) should be measured according to preferential rules of origin. Thus, the less stringent the preferential rules of origin, the higher percentage of members' intra-trade would be included towards meeting the SAT threshold.<sup>12</sup>

As mentioned earlier, the meaning of certain aspects of Article V of the GATS has also been raised within the systemic debate, particularly in 1999. The basic provision is that an "economic integration agreement", the term used in the GATS for an RTA covering trade in services, should have "substantial sectoral coverage", understood in terms of the number of defined sectors used in GATS schedules of commitments, volume of trade affected and modes of supply. This coverage is to be achieved through the elimination of existing discriminatory measures and the prohibition of new or more discriminatory measures, except those allowed under Articles XI, XII, XIV and XIV *bis* of the GATS (mirroring similar exceptions in Article XXIV of the GATT 1994). For the purposes of evaluation, account may be taken of the contribution of such an RTA to a wider process of economic integration or trade liberalization among the Members. Some flexibility is allowed for such agreements involving developing countries. The discussion on GATS Article V is much less advanced than the debate on systemic issues related to trade in goods under GATT Article XXIV, perhaps due to the fact that there are only eleven such agreements at present. In this area, weaknesses in services trade statistics are seen by some countries as a problem for the evaluation of RTAs in services.

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<sup>11</sup> See WT/DS34/AB/R

<sup>12</sup> Hong Kong, China in WT/REG/W/27

Some of the other more significant questions, drawn from the extensive Annotated Checklist, include:

- Is Article XXIV:4, stating that the purpose of an RTA "should be to facilitate trade" among the parties and "not to raise barriers to the trade" of third parties, a general statement of principle or an additional condition to be satisfied?<sup>13</sup>
- What is the implication if an FTA member raises MFN rates within bound levels?
- What is the scope and nature of compensation to third parties for any injury caused by the creation of RTAs?
- How are certain internal differences in the WTO regulatory framework to be reconciled? For example, safeguards are normally to be applied on an MFN basis. Given that the list of exceptions cited in Article XXIV:8 does not include safeguards or anti-dumping measures, the question arises of whether this list is *exhaustive* or *illustrative*. Those favouring the former interpretation argue that RTA parties should not apply safeguards against each other, while those favouring the latter interpretation argue that safeguard measures should be applied on an MFN basis.
- How does one resolve the problem that notifications under Article XXIV are intended to allow other Members to comment prior to implementation, but in practice are often made on a *post hoc* basis after ratification by national legislatures?
- Is there any substantive difference between interim agreements, which are also agreements *per se*, and agreements with transition periods?

One issue which has not been discussed extensively in the systemic debate, except in relation to the notification requirements, is that of RTAs established under the Enabling Clause, i.e., RTAs in the area of trade in goods between developing countries. Such agreements may take the form of mutual reduction or elimination of tariffs on traded products. As Laird (1999) says, essentially, this means that an RTA formed under the Enabling Clause need not cover substantially all the trade; does not require duty

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<sup>13</sup> This issue has been clarified by the Appellate Body Report (Turkey – Restrictions on Imports of Textiles and Clothing Products) which states that paragraph 4 contains purposive, not operative, language. It does not set forth a separate obligation itself but, rather, sets forth the overriding and pervasive purpose for Article XXIV. See WTO document WT/DS34/AB/R.

elimination; has no fixed timetable for implementation; and is not subject to periodic reporting requirements. The main obligations of parties to such an RTA are to notify the agreement or its modification to the WTO Committee on Trade and Development, to furnish information deemed appropriate, and afford the opportunity for prompt consultations with respect to any difficulty or matter that may arise.

Finally, there has been no discussion of a practice that has arisen in a number of RTAs involving countries at different stages of development – developed, developing or in transition - of allowing for certain asymmetries in the coverage and time-frames for implementation. Examples include the EC-EFTA agreements with Central and Eastern European countries, NAFTA, the Canada-Chile FTA, SPARTECA (Australia, New Zealand and South Pacific countries), and others. As noted by Laird (1999), the developed countries tend to have wider trade coverage and generally apply their commitments over a stricter time-frame than their partners. There is no explicit provision for such asymmetrical application of the WTO rules, although this would seem consistent with the principle of special and differential treatment for developing countries.

A few Members have expressed their willingness to renegotiate the rules relating to RTAs in an effort to strengthen them. Others have endorsed this approach on condition that RTAs already notified to the WTO remain subject to the conformity conditions that prevailed at that time; thus, an attempt to "grandfather" existing RTAs. Others have emphasized the need to ensure that agreements contribute to economic development.

## **VI CONCLUSIONS**

Does membership of an RTA weaken the interest in multilateral negotiations and liberalization? The background of unilateral reforms and increased membership of the strengthened multilateral system should mean that the recent strong trend towards regionalism is somewhat less dangerous to third countries and to the multilateral system than earlier experiences. This conclusion is re-inforced by the nature of the new agreements, which have wider coverage of product and instruments than earlier agreements, enhancing the degree of integration. On the other hand, we have certainly heard in Geneva comments from negotiators to the effect "If we do not get what we want

in the negotiating agenda, why should we worry? We have our own RTA. That is where the action is!" Was this a factor behind the failure of the WTO Ministerial meeting in Seattle in late 1999? On the whole, experience seems to confirm the equivocal view of Winters (1998) who says that there is no reason to expect a simple answer to whether regionalism encourages or discourages the evolution towards globally freer trade. Similarly, the jury remains out on whether the emerging mega-blocs of RTAs will facilitate or frustrate the making of multilateral agreements. It should be noted, however, that the emerging mega-blocks ignore, for the most part, the least-developed countries, particularly those in sub-Saharan Africa and South Asia.

Are these new blocs then a sign of frustration with the multilateral system? While many countries have embraced trade liberalization as part of a wider package of economic reforms, the pace of change varies widely and has certainly slowed in recent years, even before the Asian financial crisis. For the faster moving countries, finding like-minded countries may well have been a factor behind regional agreements. Moreover, locking in reforms through RTAs has also been a consideration, Mexico in NAFTA is a key example, and this may also be the most important result of the Europe Agreements. Thus, the new regionalism lays down a challenge to be bettered at the multilateral level.

Do RTAs harm third countries and weaken the MFN principle? It is hard to find concrete evidence that RTAs have harmed third countries. RTAs are by their nature discriminatory and hence a derogation of the MFN principle. It is, therefore, not surprising that trade within such blocs is generally growing faster than trade from non-members (except in the EC where the numbers are the same in the 1990s). On the other hand, trade with non-members is growing at about the same rate as world trade in general, and in some of the smaller, more dynamic RTAs, trade with non-members is growing faster than world trade. It is argued in the literature that more comprehensive coverage ("going all the way") inclines countries to take a more positive view of general liberalization. Similarly it is argued that deeper integration is beneficial to third countries as domestic regulations allow greater competition even from non-members. These issues obviously need more rigorous research. The maintenance of a dual system (of anti-dumping duties for third parties and competition or anti-trust policy among RTA parties)



can create distortions where different criteria and conditions apply to the invocation of such measures and thus have the potential for discrimination against third countries.

Differing ROOs among RTAs are likely to have negative effects on trade. Complex and varying methods of calculating regional content impose a significant burden on industry and this problem is magnified by the overlap of RTAs. Likewise, the network of diagonal cumulation schemes of preferential ROOs may have the effect of extending an RTA beyond its own membership, without any legal basis. This is discriminatory, since some of the RTA's trading partners – those participating in the diagonal cumulation scheme – benefit from preferential treatment, while other third parties – those outside the diagonal

What about the examination of RTAs in the WTO and the inconclusive debate on systemic issues? Does this matter? This certainly does the system little credit, but it is also a consequence of the fundamental consensus process of the WTO. It is frustrating to all WTO Members, participants or not in an RTA, and has effectively given *carte blanche* to participants to operate a range of discriminatory schemes. Given the divergences of view in the CRTA and the strength of entrenched positions, it is difficult to see any major breakthroughs in this area. It may be that the compatibility of individual RTAs with WTO rules is, in future, decided in the DSB of the WTO, in the absence of firm conclusions in the CRTA. WTO (1995) suggests the conversion of the examination process towards a transparency mechanism, which could be welfare-enhancing as suggested by the public choice literature. For example, the present legal examinations might be completed, reflecting the existing divergences of opinion (the current approach in the CRTA), and this might be followed with a periodic examination, looking at the implementation of each agreement and the evolution of trade among partners. A timetable for broad-based, economic review, keeping the RTAs under scrutiny, could go some way to satisfying the concern of third countries about the operation of RTAs.

There can be little doubt that the main economic advantages to participants in regional trade agreements would be even greater if the liberalization were carried out on a wider, multilateral scale. RTAs are a second-best solution. Thus, on the basis of theory, Kemp

and Wan (1976) note "...there is a big incentive to form and enlarge a customs union until the world is one big customs union, that is, until free trade prevails."

## REFERENCES

- Baldwin, R.E. (1997), "The Causes of Regionalism", *The World Economy*, **20**, 7, 865-888.
- Bhagwati, J. (1992), "Regionalism versus Multilateralism", *The World Economy*, **15**, 5, 535-555.
- Ceccini, P. *et al.* (1988), *The European Challenge 1992: The Benefits of a Single Market*, Gower Publishing Company Limited, Aldershot, Brookfield USA, Hong Kong, Singapore, Sydney.
- Ethier, W. (1998), "The New Regionalism", *The Economic Journal*, **108**, 1149-1161.
- Evans, D. (1999), "Regional Integration in Southern Africa in a General Equilibrium Framework: Model, Data and First Results", IDS Working Paper 95, University of Sussex.
- Kemp, M. C. and H. Wan (1976), "An Elementary Proposition Concerning the Formation of Customs Unions", *Journal of International Economics*, **6**, 95-98.
- Krueger, A. (1995), "Free Trade Agreements versus Customs Unions", NBER Working Paper No.5084, Cambridge, Mass.
- Laird, S. (1998), "MERCOSUR: Objectives and Achievements", Proceedings of Third Annual World Bank Conference on Development in Latin America and the Caribbean on "Trade: Towards Open Regionalism", June 29 - July 1, 1997, Montevideo, Uruguay, The World Bank, Washington D.C.
- Laird, S. (1999), "Regional Trade Agreements: Dangerous Liaisons?" *The World Economy*, **22**, 9, 1179-1200.
- Langhammer R. and U. Heimenz, (1991), "Regional Integration among Developing Countries: Survey of Past Performance and Agenda for Future Policy Action", UNDP-World Bank Trade Expansion Program Occasional Paper No. 7, Trade Policy Division, The World Bank, Washington D.C.
- Lawrence, R.Z. (1999), "Regionalism, Multilateralism and Deeper Integration: Changing Paradigms for Developing Countries" in *Trade Rules in the Making* (Eds. M. Rodríguez Mendoza, B. Kotschwar and P. Low), Brookings Institution and Organization of American States, Washington D.C.

- de Melo, Jaime and S. Dhar (1992), "Lessons of Trade Liberalization in Latin America for Economies in Transition", Policy Research WPS No. 1040, The World Bank, Washington D.C.
- Viner, J. (1950), *The Customs Union Issue*, Carnegie Endowment for International Peace, New York.
- Winters, L.A. (1996), "Regionalism versus Multilateralism", Policy Research Working Paper No. 1687, The World Bank, Washington D.C.
- Winters, L.A. (1998), "Regionalism and the Next Round", in J. Schott (ed.), *Launching New Global Trade Talks – An Action Agenda*, Special Report 12, Institute for International Economics, Washington D.C. (September).
- WTO (1995), *Regionalism and the World Trading System*, Geneva.
- WTO (1998a), "Inventory of Non-tariff Provisions in Regional Trade Agreements", Background note by the Secretariat, document number WTO/REG/W/26 (5 May).
- WTO (1998b), *Annual Report - 1998*, Geneva.
- WTO (1999a), "Mapping of Regional Trade Agreements", Background Note by the Secretariat, published for Seminar on Regional Trade Agreements held at WTO, Geneva on 30 June. Available on <http://www.itd.org/forums/mapping1.pdf>.
- WTO (1999b), "Report (1999) of the Committee on Regional Trade Agreements to the General Council", document number WT/REG/8 (11 October).
- WTO (1999c), *Annual Report 1999 – International Trade Statistics*, Geneva.
- Yeats, A. (1997), "Does MERCOSUR's trade performance justify concerns about the effects of regional trade agreements?", PPR Working Paper 1729, World Bank, Washington D.C.

Table 1: Merchandise imports of selected RTAs, 1990-98

RTA	\$billion 1998	Share in total imports (%)		Growth rate (%)
		1990	1998	1990-98
<b>APEC (21)<sup>a</sup></b>				
Intra-imports	1705	65.4	71.4	8
Extra-imports	682	34.6	28.6	4
<b>EU (15)</b>				
Intra-imports	1372	63.0	63.1	4
Extra-imports	801	37.0	36.9	4
<b>NAFTA (3)</b>				
Intra-imports	512	34.4	40.3	10
Extra-imports	759	65.6	59.7	7
<b>ASEAN (10)</b>				
Intra-imports	63	16.2	22.6	12
Extra-imports	216	83.8	77.4	6
<b>CEFTA (6)<sup>b</sup></b>				
Intra-imports	13	n.a.	9.7	n.a.
Extra-imports	123	n.a.	90.3	n.a.
<b>MERCOSUR (4)</b>				
Intra-imports	21	14.5	21.1	22
Extra-imports	78	85.5	78.9	15
<b>ANDEAN (5)</b>				
Intra-imports	6	7.5	12.6	20
Extra-imports	39	92.5	87.4	12

**Source:** Based on data in WTO (1999c).

**Notes:** a 1996 instead of 1997.

b Break in continuity between 1995 and 1996. See WTO (1998) for technical details.

**Table 2: Status of Examination of RTAs in WTO CRTA at the end of 1999**RTAs for which draft reports on the examination are currently under consideration (30):

ANZCERTA (Services)	EC-Bulgaria IA
EC-Czech Republic IA	EC-Enlargement (Goods)
EC-Enlargement (Services)	EC-Estonia FTA
EC-Hungary IA	EC-Hungary EA (Services)
EC-Latvia FTA	EC- Lithuania FTA
EC-Poland IA	EC-Poland EA (Services)
EC-Romania IA	EC-Slovak Republic IA
EC-Slovak Republic EA (Services)	CEFTA
EFTA-Bulgaria FTA	EFTA-Estonia FTA
EFTA-Hungary FTA	EFTA-Israel FTA
EFTA-Latvia FTA	EFTA-Lithuania FTA
EFTA-Poland FTA	EFTA-Romania FTA
EFTA-Slovenia FTA	Iceland-Faroe Islands
NAFTA (Goods)	NAFTA (Services)
Norway-Faroe Islands	Switzerland-Faroe Islands

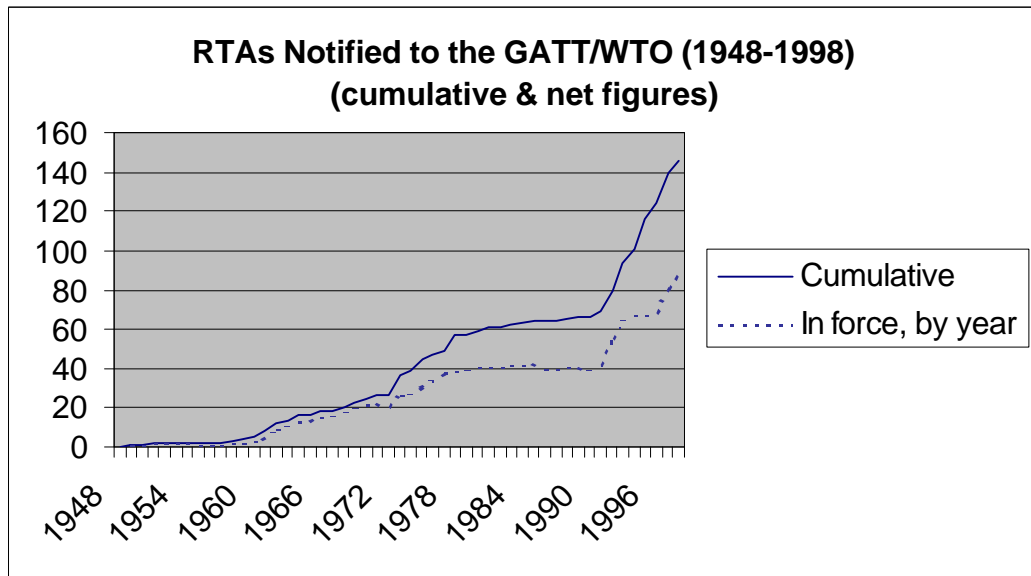
RTAs for which reports are being drafted or factual examinations are well engaged (31):

Canada-Chile FTA	Canada-Israel FTA
Czech Republic-Estonia FTA	Czech Republic-Latvia FTA
Czech Republic-Lithuania FTA	Czech Republic-Turkey FTA
EC-Faroe Islands	EC-P. of Andorra CU
EC-Slovenia IA	EC-Turkey CU
EU-Tunisia Euro-Mediterranean Agr.	European Union (Services)
Israel-Czech Republic FTA	Israel-Hungary FTA
Israel-Slovak Republic FTA	MERCOSUR
Poland-Lithuania FTA	Romania-Moldova FTA
Slovak Republic-Estonia FTA	Slovak Republic-Latvia FTA
Slovak Republic-Lithuania FTA	Slovak Republic-Turkey FTA
Slovenia-Croatia FTA	Slovenia-Estonia FTA
Slovenia-Latvia FTA	Slovenia-Lithuania FTA
Turkey-Estonia FTA	Turkey-Hungary FTA
Turkey-Israel FTA	Turkey-Lithuania FTA
Turkey-Romania FTA	

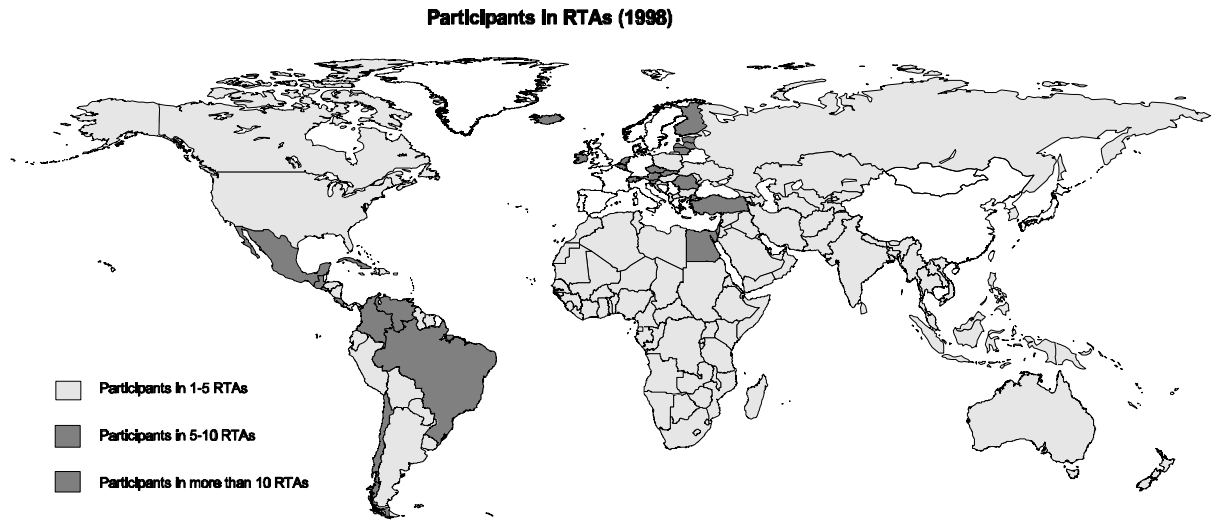
RTAs for which factual examination has not yet commenced (11):

EC-Palestinian Authority FTA	Faroe Islands-Estonia
Estonia-Latvia-Lithuania FTA	Israel-Slovenia FTA
Kyrgyz Republic-Moldova FTA	Kyrgyz Republic-Russian Fed. FTA
Kyrgyz Rep.- CU Russian Fed./Belarus/Kazakhstan	Kyrgyz Republic-Ukraine FTA
Kyrgyz Republic-Uzbekistan FTA	Slovenia-F.Y.R.O.M. FTA
Turkey-Bulgaria FTA	

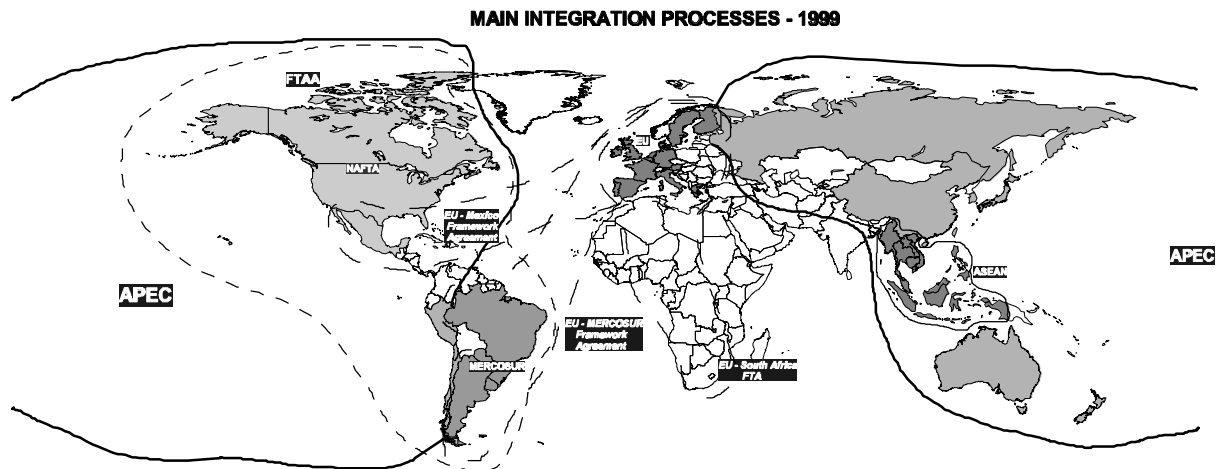
Source: WTO document WT/REG/8 of 11 October 1999.

**Chart 1: Groth of RTAs**

**Chart 2 : Participation in RTAs (1998) by country**



**Chart 3: Emerging megablocs of RTAs**



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