



# **MODULE 1**

## *Regional Trade Agreements and developing countries*

### INTRODUCTION

#### **Why study regional trade arrangements?**

Since the beginning of the millennium, preferential trade liberalization – involving neighbors or more distant trade partners – has become a very prominent phenomenon. The European Union (EU), the United States (US/USA) and Japan are leading the charge but major developing countries are also engaged. India, China, the Association of South East Asian Nations (ASEAN) and the Republic of Korea are looking to intensify integration in Asia and globally through bilateral deals; Brazil and other partners in Latin America are doing similarly through MERCOSUR while resisting the United States sponsored Free Trade Area of the Americas (FTAA); and in Africa, South Africa is at the heart of a regional arrangement while having an agreement with the EU and negotiating one with the United States. Thus, these agreements are between developed countries, between developing countries and most controversially between developed and developing countries.

Their economic effects are uncertain and their impact on progress of multilateral and unilateral trade liberalization is hotly disputed. Rules of the World Trade Organization (WTO) are weak in this area and there is fear that larger countries can dominate smaller countries without the protection of global rules. Regional negotiations

are perhaps more complex than multilateral ones because they increasingly go beyond the removal of traditional border barriers (tariffs, other trade taxes and quotas) and move into the area of domestic regulatory and legal frameworks (notably for services), and investment and intellectual property rules where they go beyond existing WTO provisions. They may entail multiple parallel bilateral negotiations with resulting agreements whose provisions only partially overlap. They can also lead to adverse selection as everyone tries to avoid the costs of exclusion and hence drive down any benefits that such agreements might bring as preferences are eroded.

Their impact on economic development is also controversial. On the one hand they may allow partners to displace domestic production (with consequent adjustment and social costs) while not allowing consumers or the external account to obtain all the gains that a non-preferential liberalization would bring. On the other hand they can be a means to better integrate into regional and global value chains with consequent specialization and the productivity gains that it brings. These could substantially exceed the losses from more traditional preferential liberalization, even potentially lifting trend growth rates.

## HANDBOOK

## 1 Typology of regional integration

Economic integration is the process by which a group of countries form closer economic links with each other than with third countries or the rest of the world. Closer integration can, in principle, either be sectoral or general. Sectoral integration is where only specific sectors/industries within an economy are integrated; general integration is where the entire economy is included. Economic integration can take varying forms:

**Preferential Trading Area (PTA):** In a PTA countries offer preferential access to goods and possibly services from partner countries. The preferential access need not necessarily cover all goods, and need not necessarily entail the complete removal of tariffs where preferences are granted. PTAs therefore need not offer symmetric access across the partner countries. An example of a PTA can be seen in the EU's trading relationships with the African, Caribbean and Pacific (ACP) States under the Lomé and Cotonou agreements. Under these agreements the EU granted preferential access on most exports by the ACP states, while the ACP states retained their tariffs on EU exports. It is worth noting that the existing EU-ACP arrangements are WTO incompatible and hence the EU and six ACP regional groupings are currently negotiating a new set of agreements. These new agreements will move away from being a preferential trading area to that of a free trade area.

The term PTA is sometimes used to include the more ambitious Free Trade Area and Customs Union concepts. Article XXIV of the General Agreement on Tariffs and Trade (GATT 1947) in principle forbade PTAs that fell short of being free trade areas or customs unions.

**Free Trade Area (FTA):** There are no tariffs on trade among the countries comprising the free trade area, but each country is free to set its own tariffs with respect to the rest of the world. Approximately 70 per cent of the Regional Trade Agreements (RTAs) that have been notified to the WTO are free trade agreements. Examples of FTAs include: the European Free Trade Area (EFTA) established in 1960 by Austria, Denmark, Norway, Portugal, Sweden, Switzerland and the United Kingdom, with a current membership comprising Iceland, Norway, Liechtenstein and Switzerland; the North American Free Trade Area (NAFTA) established in 1994 comprising Canada, the United States and Mexico. The EU has also signed FTAs with many partners including Southern Mediterranean countries such as Egypt, Tunisia and

Morocco, but also more remote partners with whom the term "Regional Trade Agreement" is less appropriate (e.g. South Africa and Chile). Where there is a free trade area, the member countries need to ensure that a good from a non-member country does not enter the free trade area via the country with the lowest external tariff, and is then shipped to any of the other countries. This process is known as trade deflection. In order to prevent this, a free trade area needs to have "rules of origin" which determine from where a good has originated. This issue and the complications surrounding rules of origin (ROOs) are discussed in more detail in Module 2.

**Customs Union (CU):** With a customs union there are again no tariffs on trade within member countries, but now for each product category there is a common tariff applied by each country vis-à-vis the rest of the world. This is usually referred to as the Common External Tariff (CET). About 8 per cent of the RTAs currently in force are customs unions, including MERCOSUR, the Andean Community, the Central American Common Market (CACM), the Southern African Customs Union (SACU) established in 1969, and the EU-Turkey Customs Union established in 1996. A full customs union can in principle eliminate all internal customs barriers and avoid internal rules of origin, but this requires a mechanism for allocating tariff revenues.

**Common Market (CM):** A common market is a customs union where in addition to the free circulation of goods there is the free mobility of factors of production, and in particular capital and labor, across countries. The European Economic Community when it was established in 1957 between Belgium, France, Germany, Italy, Luxembourg, and the Netherlands set out the objective of creating a common market – a goal that was achieved in 1993. The Caribbean Common Market (CARICOM) established in 1973 is another example although even today there is limited freedom of mobility of factors of production.

**Monetary Union (MU):** A monetary union entails a common monetary policy, and hence almost inevitably implies a common currency/irrevocably fixed exchange rates. There are comparatively few examples of a monetary union, such as the Organization of Eastern Caribbean States (OECS) comprising Anguilla, Antigua and Barbuda, British Virgin Islands, Dominica, Grenada, Montserrat, St. Lucia, St. Kitts and Nevis, and St. Vincent and the

Grenadines, and of course the Eurozone. For the latter, it is though important to note that not all members of the EU have signed up to the common currency. There are currently sixteen countries that have, and these are: Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain.

**Economic and Monetary Union (EMU):** EMU is a stage on from monetary union and implies the coordination/central determination of economic policy and in particular fiscal policy. The EU is a grouping that is the closest to an economic and monetary union.

In this teaching material we will use the term Regional Trade Agreement as a generic term to refer to any of the above forms of regional integration, even when members are not geographically contiguous.

## 2 Why do countries engage in RTAs?

**Political reasons:** RTAs are often a way of intensifying political ties with neighbors who in any case are often among most important trade partners. The classic example of this is the European Union whose founders explicitly looked to economic integration as a step towards political integration, with the intention of reducing and indeed removing the risk of war among its members.

**Economic reasons:** There are a number of potential economic justifications for joining an RTA:

- Market access where the potential partner(s) have high barriers and/or grant preferences to others that reduce or prevent access by your firms (e.g. EU-Mexico FTA in response to NAFTA);

- Binding domestic economic reforms by use of an external treaty (one reason for Mexico joining NAFTA);
- Legally binding liberalization that embeds market led economic integration (this may be a reason for the rush to bilateral agreements in East Asia);
- Reducing policy barriers to actual or potential integration into regional or global value chains and binding this through an international agreement;
- As a means of attracting foreign direct investment from partners.

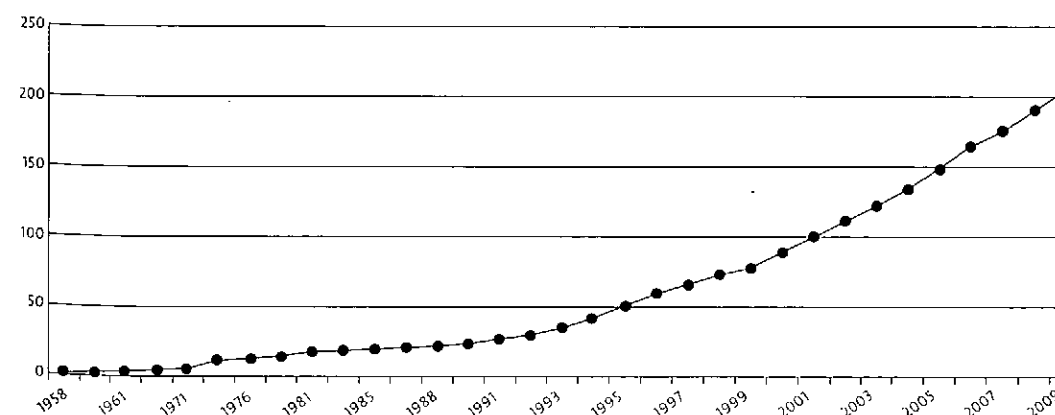
## 3 Trends in RTA formation

There has been an accelerating trend toward preferential regional and bilateral integration in every part of the world (see Figure 1 and Table 1). Agreements in force notified to the WTO (including Services agreements) reached 203 in February 2010, with an additional 33 agreements either signed or under negotiation that have been notified but are not yet in force.

The share in world trade in goods of bilateral trade flows between members of bilateral or regional trade agreements is about a third (Medvedev 2006, p. 17). This growth has happened alongside eight successive rounds of negotiations under the GATT as well as unilateral liberalizations notably by developing countries, which has resulted in significant global trade liberalization and expansion. Medvedev estimates that if bilateral trade flows in tariff lines where the most-favored nation (MFN) duty is 3 per cent or less are excluded (because a preferential zero duty confers no significant competitive advantage anymore) then the trade share covered by RTAs falls to 15 per cent (Medvedev 2006, p. 25).

Figure 1

RTAs in force and notified to the WTO by year of entry into force, as of February 2010



Note:  
Including later accessions to  
already notified agreements

Source: Derived from <http://rtas.wto.org/UI/PublicPreDefRepByEIF.aspx>

<sup>1</sup> Facts about RTAs are available and regularly updated by the WTO at its website: [http://www.wto.org/english/tratop\\_e/region\\_e/region\\_e.htm](http://www.wto.org/english/tratop_e/region_e/region_e.htm).

<sup>2</sup> The US has also established criteria for deciding which partners to engage in FTAs. These include the size and importance of the economy to the US, the country's willingness to negotiate a comprehensive agreement that includes topics such as intellectual property protection, and whether the RTA will help advance WTO or the FTAA negotiations (inside U.S. Trade, 10.01.2003).

<sup>3</sup> Japan signed an agreement with Singapore in November 2002. China followed with its first agreement with ASEAN in November 2002, while the Republic of Korea's first agreement was with Chile in February 2003.

As Table 1 demonstrates, developing countries are heavily engaged in WTO notified regional and bilateral preferential trade arrangements – among themselves (South-South), with developed countries (North-South) and to a much lesser degree with the transition economies that emerged in the 1990s from the former Soviet Union and former Yugoslavia. Overall, developing countries are on one or both sides of 138 agreements out of the 203 agreements in force notified to the WTO as of February 2010.

Most of the early attempts at Regional Trade Agreements in the 1950s and 1960s, many of them among developing countries, met with little success outside Europe. This “first wave” of regionalism has been eclipsed by the exponential growth in the number of RTAs and other PTAs formed over the past 10 years (see Figure 1). Almost every WTO member has now joined at least one agreement and some have entered 20 or more.<sup>1</sup> The most dramatic policy-driven exercise in regional integration has been the establishment of the European Economic Community in 1957 and its evolution into the EU.

In 2003, the US former Special Trade Representative Zoellick described the United States' pursuit of regionalism as a strategy to achieve short-term economic goals, help break the logjam in the multilateral negotiations, and achieve longer term, strategic objectives that can be fostered by trade liberalization.<sup>2</sup> The EU has pursued regionalism aggressively as a means of encouraging investment and competition, and to reinforce multipolarity in the international system (EU Commission 2006). Even Japan, the Republic of

Korea, and China are now engaged in regionalism – with their first agreements signed in 2002–2003.<sup>3</sup>

Looking forward, the EU is committed to converting the preferential arrangements with the ACP countries into full reciprocal Free Trade Agreements (FTAs) on a regional basis including encouraging the implementation of an FTA within the ACP regional agreements where these do not already exist. These so-called Economic Partnership Agreements (EPAs) and Regional Economic Partnership Agreements (REPAs) are under negotiation with the Economic Community of West African States (ECOWAS), the Southern African Development Community (SADC), the Economic and Monetary Community of Central Africa (CEMAC) and the Pacific group of ACP countries. An EPA with the Caribbean Forum of African, Caribbean and Pacific States (CARIFORUM) was already signed in October 2008. Beyond that the EU is in negotiations on FTAs with MERCOSUR, the Central American and Andean groups of countries, and countries from the former Soviet Union. It has already signed a number of FTAs with countries in its near neighborhood including developing countries around the Mediterranean as well as in the Balkans. Finally the EU is proposing a new set of FTAs with India, the Republic of Korea and ASEAN. Taken together with other developed countries' intentions for bilateral agreements with developing countries particularly in Asia (Oxfam 2007 and Table 1 give a useful if not entirely complete list) this represents a significant burden on developing country administrations as they try to deal with separate but overlapping and often simultaneous negotiations.

Table 1

RTAs in force and notified to the WTO by type, as of February 2010

	Preferential trade agreements	Free trade agreements	Free trade agreements + services	Customs unions	Customs unions + services	Services agreements	TOTAL
South-South	10	19	25	10	0	3	67
North-South	0	28	35	1	0	0	64
North-North	0	10	3	5	1	4	23
Transition-Transition	0	29	0	1	0	0	30
North-Transition	0	4	6	0	2	0	12
South-Transition	2	5	0	0	0	0	7
<b>TOTAL</b>	<b>12</b>	<b>95</b>	<b>69</b>	<b>17</b>	<b>3</b>	<b>7</b>	<b>203</b>

Note:  
Including later accessions  
to already notified  
agreements

Source: Derived from <http://rtais.wto.org/UI/PublicAHTAList.aspx>

#### 4 Economic effects of RTAs

Economists have traditionally analyzed RTAs within the framework of neoclassical trade theory, and have focused on the reduction of border measures affecting trade and the impact of their

removal on within-bloc trade compared to trade between the bloc and other countries. An RTA that considers only border protection measures is described as involving only “shallow integration”.

Box 1

#### Shallow and deep integration

**Shallow, or negative, integration involves the removal of border barriers to trade, typically tariffs and quotas.**

**Deep, or positive, integration involves policies and institutions that facilitate trade by reducing or eliminating regulatory and behind-the-border impediments to trade, whether or not protectionist in intent. These can include issues such as customs procedures, regulation of domestic services production that affect foreigners, product standards that differ from international norms or very onerous testing and certification procedures, regulation of inward investments, competition policy, intellectual property protection and public procurement rules.**

Such an RTA generates “trade diversion” (see Box 2). The lower barriers also generate new trade, or “trade creation” which should be welfare enhancing. Whether the RTA is net welfare increasing or decreasing depends on the relative strengths of these two effects and requires empirical analysis to determine the outcome.<sup>4</sup>

To stress the point, unlike multilateral or unilateral liberalization, it is impossible to make *a priori* predictions about the outcome of preferential liberalization such as in RTAs. It is necessary to do the empirical work and compare costs and benefits.

Box 2

#### Trade creation and trade diversion

**Trade creation takes place when the lowering of border barriers to a partner in an FTA allows the most efficient supplier to the domestic market displacing domestic producers. This raises the economic welfare of consumers by more than it depresses the economic welfare of producers assuming that resources can be redeployed relatively easily.**

**Trade diversion takes place when a partner in an FTA displaces a third country supplier to the domestic market as a result of the competitive advantage due to the preferential removal of trade barriers on the market. The importing country then pays a higher before tariff price than before the RTA was formed thus increasing import prices relative to export prices and turning the terms of trade against itself. This is an unambiguous welfare loss to set against any trade creation brought about by removing the tariff or other trade barrier. The exporting partner potentially gains a higher price and a larger volume of exports.**

**In principle these concepts can also apply to foreign investment. See Module 2 for a more formal treatment of these issues.**

Most of the new wave of RTAs have involved much more than removing border policies that limit the sale of goods across international borders. The analysis of these new RTAs requires consideration of the elements of deep integration they incorporate, and what is their potential effect on trade and welfare. The fact that the new RTAs involve much more than border policies has led to a number of questions and research challenges for trade economists:

- What are the empirical characteristics of these new RTAs that distinguish them from earlier shallow RTAs?
- To what extent do the elements of deep integration incorporated in new RTAs lead to economic impacts of the RTA that go beyond the “gains from trade” considered by standard trade theory?
- Can we draw on insights from recent work on “new trade theory”, on “Smithian trade induced division of labour” and on “new regionalism” to analyze these new RTAs?
- In particular, are there elements of deep integration that generate links between expanded trade and productivity growth?
- What are the major knowledge gaps, both empirical and theoretical, that need to be addressed for better analysis of new regionalism?

<sup>4</sup> There is a great deal of theoretical analysis of RTAs. See Panagariya (2000) for an excellent survey of the theoretical literature. This literature concludes that whether an RTA is net welfare enhancing or reducing cannot generally be determined analytically, but requires empirical analysis to sort out the countervailing effects at work.

<sup>5</sup> See Burfisher, Robinson, and Thierfelder (2004) for a discussion of “new regionalism” and “new trade theory” in the analysis of RTAs.

In this module, we seek to analyze the characteristics of the new RTAs that involve elements of deep integration.<sup>5</sup> We seek to provide a framework that allows us to define various typologies of RTAs so that we can judge how beneficial or harmful they might be, using criteria that draw on new trade theory. We start with a description of historical trends in trade among countries in the last forty years, focusing on the emergence of trade blocs. This historical analysis:

- Identifies emerging trends in the formation of trade blocs;
- Provides a background for the analysis of RTAs;
- Provides an initial classification scheme.

We then consider the nature of deep integration that has recently emerged and explore potential links between deep integration and productivity growth, drawing on insights from new trade theory. This analysis, which focuses on potential externalities generated through deep integration, provides a richer framework for defining typologies of RTAs and for suggesting standards by which RTAs can be evaluated for developed and developing countries.

## Key readings

European Commission (2006). *Global Europe – competing in the world*, Communication from the European Commission to the Council, published online at: [http://trade.ec.europa.eu/doclib/docs/2006/october/tradoc\\_130376.pdf](http://trade.ec.europa.eu/doclib/docs/2006/october/tradoc_130376.pdf).

Fiorentino, R., Verdeia, L. and Toqueboeuf, C. (2007). "The Changing Landscape of Regional Trade Agreements: 2006 Update". *WTO Discussion Paper*, No. 12, published online at: [http://www.wto.org/english/res\\_e/booksp\\_e/discussion\\_papers12a\\_e.pdf](http://www.wto.org/english/res_e/booksp_e/discussion_papers12a_e.pdf), and [http://www.wto.org/english/res\\_e/booksp\\_e/discussion\\_papers12b\\_e.pdf](http://www.wto.org/english/res_e/booksp_e/discussion_papers12b_e.pdf).

Medvedev, D. (2006). "Preferential Trade Agreements and Their Role in World Trade". World Bank Policy Research Working Paper, No. 4038.

Oxfam (2007). "Signing Away the Future". *Oxfam Briefing Paper*, No. 101, March 2007, published online at: [http://www.oxfam.org/en/policy/briefingpapers/bp101\\_regional\\_trade\\_agreements\\_0703](http://www.oxfam.org/en/policy/briefingpapers/bp101_regional_trade_agreements_0703).

## 5 History of trade patterns: 1960-1990

Chapter 2 of the World Bank publication *Global Economic Prospects: Trade, Regionalism and Development 2005* (World Bank 2005) provides an analysis of the historical trade patterns over the past forty years, and the emergence of different trade blocs during that period. We summarize the results from that publication.<sup>6</sup>

### 5.1 Trends in regional integration: 1960-1990

The analysis of historical trends in regional integration is based on a method used by Robinson and others to find trading clusters which takes a three-year average of import and export data from the United Nations Statistics Division Commodity Trade Statistics Database (UNSD COMTRADE) for each of 67 trading regions for the 1960s, 1970s, 1980s and 1990s. The data were aggregated into three-year averages of export and import shares

centered on 1967, 1977, 1987 and 1997. A mathematical clustering technique was used to analyze the data to find regional groupings or trade blocs that maximize the trade flows within blocs and minimize the trade flows between blocs.<sup>7</sup> The bloc memberships for each period are given in the tables below, and a summary visual representation of the changing patterns of regionalization is shown in Figure 2, which also includes charts showing average trade shares between blocs.

The world trading system in the 1960s reflected a bipolar world, with Europe and the United States forming blocs with some of their close neighbors, former colonies, and/or cold-war partners and with hub-and-spoke links to the rest of the world. Europe and the United States dominated their blocs – the other countries both within their blocs and in the two Asian groups traded far more with the United States or Europe than among themselves.

Table 2

**The 1960s: Dominance of the European and US trading blocs**

European bloc	US bloc	Asian group – main trading partner UK	Asian group – main trading partner US
SWITZERLAND	CENTRAL AMERICA AND CARIBBEAN	AUSTRALIA	JAPAN
REST OF EFTA		NEW ZEALAND	KOREA
HUNGARY	COLOMBIA	CHINA	TAIWAN PROVINCE OF CHINA
POLAND	PERU	HONG KONG	INDONESIA
TURKEY	VENEZUELA	MALAYSIA	PHILIPPINES
MOROCCO	REST OF ANDEAN COUNTRIES	SINGAPORE	THAILAND
REST OF NORTH AFRICA	ARGENTINA	INDIA	
SOUTH AFRICA	BRAZIL	SRI LANKA	
MALAWI	CHILE	REST OF SOUTH ASIA	
MOZAMBIQUE	URUGUAY	MEDITERRANEAN COUNTRIES IN NORTH AFRICA (REST OF MENA)	
ZAMBIA	PARAGUAY	UGANDA	
ZIMBABWE	NORTH AMERICA	REST OF WORLD (ROW)	
REST OF SOUTH AFRICA			
REST OF SUB-SAHARAN AFRICA			
EU-15			

<sup>6</sup> This section draws on a background paper prepared for the World Bank: Robinson and Diaz-Bonilla (2004).

<sup>7</sup> The technique, which involves integer programming, is described in Robinson and Diaz-Bonilla (2004).

## 5.2 The 1970s: Restructuring world trade

In the 1970s, a realignment of world trade began. The clustering analysis found three distinct blocs and two other clusters, with more fragmentation in trading arrangements (see Figure 2, Map 2). In summary, the 1970s were characterized by major changes in world trading patterns, with a splintering of the earlier European and United States-centered blocs and increasing diversification of trade by countries formerly linked closely with either Europe or the United States. Both the

European and North American blocs became more focused on their core countries and immediate peripheries. East and Southeast Asia (E&SE Asia) emerged as a new trade bloc – a major force in world markets, with a larger share of total world trade than North America. It is a conjecture that these changes were triggered by the continuing GATT trade rounds and the onset of unilateral trade policy liberalization associated with structural adjustment.

## 5.3 The 1980s: Consolidation

Table 3

**The 1980s: Consolidation of the trade blocs**

European bloc	North American bloc	East and Southeast Asian bloc	South American group	Group of remaining countries
SWITZERLAND	CENTRAL AMERICA AND CARIBBEAN	AUSTRALIA	COLOMBIA	BANGLADESH
REST OF EFTA		NEW ZEALAND	PERU	INDIA
HUNGARY	VENEZUELA	CHINA	REST OF ANDEAN COUNTRIES	SRI LANKA
POLAND	NORTH AMERICA	HONG KONG		REST OF SOUTH ASIA
MOROCCO		JAPAN	ARGENTINA	TURKEY
REST OF MENA		KOREA	BRAZIL	REST OF NORTH AFRICA
EU-15		TAIWAN PROVINCE OF CHINA	CHILE	SOUTH AFRICA
		INDONESIA	URUGUAY	MALAWI
		MALAYSIA	PARAGUAY	ZAMBIA
		PHILIPPINES		ZIMBABWE
		SINGAPORE		REST OF SOUTH AFRICA
		THAILAND		UGANDA
		VIETNAM		REST OF SUB-SAHARAN AFRICA
		MOZAMBIQUE		
		ROW		

In the 1980s, the realignment of world trade continued and the various trade blocs solidified. As in the 1970s, the clustering analysis found three blocs and two clusters. In addition to the EU and North America, the new East and Southeast Asian bloc expanded and solidified, with growing links to the United States. The within-bloc trade shares for Europe and North America rose, while the European bloc expanded by one region to include Mediterranean countries in North Africa ("rest of MENA"). The North American bloc did not change composition.

The East and Southeast Asian bloc, however, consolidated, increasing the share of within-bloc trade, and expanded membership from 12 to 15 members (adding Australia, New Zealand, and Mozambique). The within-bloc trade share remained high, even with increased membership. Its export share shifted toward the United States (36.2 per cent in the 1980s compared to 26.4 per cent in the 1970s). It also represented a growing share of total world

trade – 23 per cent in the 1980s compared to 16 per cent in the 1970s (not tabulated).

Detailed analysis of country trade data in the 1980s shows two new blocs starting to form. First, Argentina, Paraguay, and Uruguay increased their trade shares with one another and with Brazil. Brazil also increased its trade share in the region. Second, there was increased trade with South Africa by its near neighbors, Malawi and Zimbabwe.

### 5.4 The 1990s: Consolidation and diversification

By the 1990s, the bipolar world of the 1960s evolved into a tripolar world, with the emergence of the East and Southeast Asian trading giant. This bloc accounted for a larger share of world trade than North America, and diversified its exports over time away from the United States. Two new nascent blocs appeared, MERCOSUR and a group around South Africa, but no other significant

blocs seemed to be forming within Latin America, Africa, or Asia. While the European bloc appeared to be expanding to include more of its periphery, the North American bloc has essentially been stable since the 1970s.

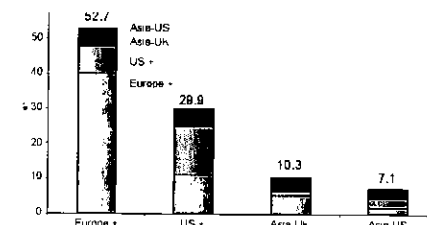
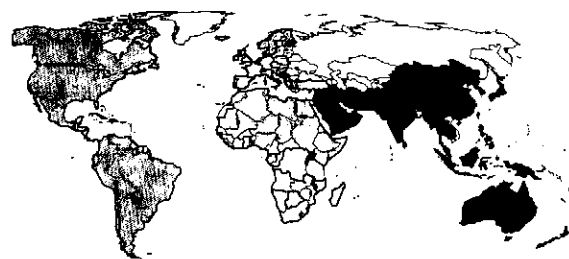
The emergence of the E&SE Asia trading bloc in a tripolar world trading system does not signify

that the world is evolving into three disparate, autarchic trading blocs. In the 1990s, even with the emergence of a new major trading bloc, between-bloc trade was very large. In addition, the emergence of MERCOSUR and South Africa indicates that the process of segmentation and new bloc formation in world trade is still continuing.

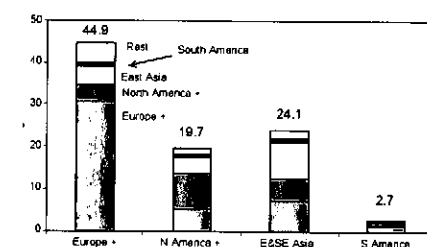
Figure 2

## Emerging patterns of regionalization summarized

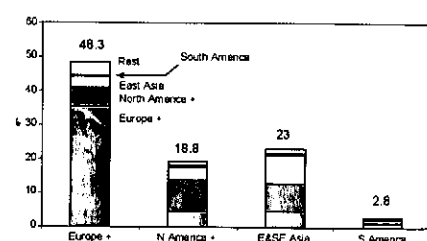
**1960s** In the 1960s, the European Union and United States dominate trade...



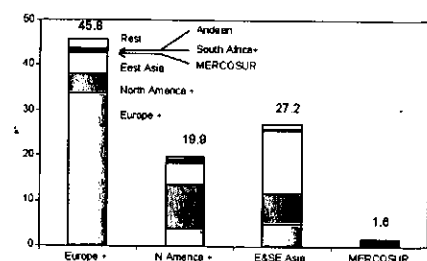
**1970s** ... but by the 1970s, Japan and Korea begin to lead an East Asia bloc...



**1980s** ... a decade later, the East Asian Tigers, ASEAN countries, and Australia consolidate the East Asia bloc...



**1990s** ... and in the 1990s, Europe and Central Asia (ECA) emerges and East Asia trades more with itself than with the US and EU.



Source: GTAP data, GAMS program

## 6 Historical classification of RTAs

A number of patterns emerge from this historical analysis:

In the early periods, the United States and the EU formed the dominant trading blocs, with the addition of a number of closely linked developing countries. Most of world trade was centered on these two blocs that traded largely with one another.

The clustering analysis indicates that a market driven NAFTA formed early, and by the 1970s it is reasonable to view the United States-Mexico-Canada group as constituting a bloc. This development was well in advance of either the United States-Canada free trade agreement (1982) or NAFTA (1994), which can thus be viewed as essentially continuing a process that had been going on for decades.

MERCOSUR also begins to form in the trade numbers by the 1970s, and is a distinctive bloc with a large intra-bloc trade share in the 1990s.

The emergence of the third trading pole, the East and Southeast Asia bloc, starts in the 1970s and accounts for a larger share of world trade than NAFTA in the 1980s and 1990s.

In many cases, the formation of blocs predated any explicit RTA:

- MERCOSUR and NAFTA are good examples;
- Integration of the European periphery into the EU preceded formal expansion of the EU;
- The E&SE Asia bloc formed without any formal RTA. The Asia-Pacific Economic Cooperation (APEC) and ASEAN are not yet full trade agreements and recent agreements between ASEAN and China are also incomplete as a result;
- The United States starts the period linked to the EU, but gradually becomes more linked to the emerging E&SE Asia bloc.

Other than MERCOSUR, no bloc forms in Latin America. There is some evidence of an emerging bloc in Southern Africa centered on South Africa, but no other blocs appear to be forming there. Similarly, no blocs are forming in South Asia.

These trends lead to a distinction between bloc expansion and bloc creation.

- Expansion of the EU involves new countries joining an existing bloc;
- NAFTA actually shrinks as a distinct bloc over the period. The Latin American countries separate from NAFTA and diversify their trade;

- The development of the E&SE Asia bloc comes about from the coalescence of a number of countries into a bloc, rather than expansion of a bloc from an initial center or pole;
- MERCOSUR is an example of bloc creation, the coalescence of the members into a bloc.

This historical analysis leads to classification of RTAs into three categories:

**Bloc formation agreements:** Examples include the EU, NAFTA, and MERCOSUR. Such agreements have followed the establishment of major trade flows among members of the bloc, often by decades, and can be seen as validating strong underlying economic trends rather than driving the process. Such integration involves much more than removing tariffs within the bloc. In the case of South Africa, the regional customs union SACU (consisting of South Africa, Botswana, Lesotho, Swaziland and Namibia) was originally formed in 1969. With the opening of South Africa and increased trade in the region, SACU has become potentially more important as a focus of trade expansion.

**Bloc expansion agreements:** The major example is the expansion of the EU to include new members in its periphery. The proliferation of regional agreements between the EU and countries in Eastern Europe was clearly part of the process of preparing these countries for integration into the EU, and should be viewed as part of the process of EU expansion. The NAFTA agreement has not been expanded to include new members, but the recent Central American Free Trade Agreement (CAFTA) can be seen as part of the process of consolidating the North American bloc. However, the North American bloc has not yet evolved into deeper integration, for example; there is little discussion of even forming a customs union in the region. EU expansion has invariably involved many elements of deeper integration that go far beyond issues of commodity trade, including major regional investment programmes to integrate less developed regions into the regional economy. There is little serious discussion about expanding MERCOSUR, but there has been growing interest in expanding SACU to include other neighboring countries in the region.

**Market access agreements:** Most of the recent trade agreements under discussion, many of them involving bilateral agreements between either the United States or EU and in particular developing countries, are not part of the expansion of an existing bloc, but instead are designed to provide additional access to markets. As such, they are potentially competitive with (and damaging to) efforts to achieve continued global

trade liberalization. For example, countries such as Chile are negotiating many such agreements, and are explicitly doing so to get increased access to large markets in the United States and Europe. Chile is not pursuing a strategy of joining one of

the existing trade blocs. The recent negotiations for a Free Trade Area of the Americas appear to be part of this pattern and do not appear to be designed to widen NAFTA into an integrated "American" economy.

Table 4

Typology of trade blocs		
	Shallow	Deep
Bloc formation	Yes	Evolutionary
Bloc expansion	Yes	At time of accession
Market access	Yes	Likely to be limited to "negative integration" (e.g. removal of technical barriers to trade)

In addition to these categories, one can add a dimension regarding the level of economic development of RTA members. In this approach, RTAs can be categorized as: North-North, North-South or South-South. "North" here means developed countries (i.e. members of the Organisation for Economic Co-operation and Development), and "South" means developing countries. Typically, South-South RTAs involve shallow integration and North-North RTAs involve deep integration. North-South RTAs often involve an element of deep integration and therefore offer potentially more gains to the South members than South-South RTAs.

The discussion of "depth" of integration above focuses on market integration. The concept, however, is not easy to measure and really involves more than facilitating the operation of markets. Of particular relevance for developing countries is the role of deep integration in facilitating the integration of production processes across national borders, which in turn potentially facilitates technology transfer, achieving economies of scale, widening markets, and increasing productivity. These issues broaden the scope of potential gains from trade beyond the usual approach in trade theory that focuses on border barriers to commodity trade.

## 7 Toward a checklist for evaluating RTAs

How do we begin to understand the potential for specific RTAs to generate the productivity gains potentially available through deep integration and avoid any trade diversion losses from shallow integration?

The first step is to identify what kind of RTA is being considered, starting from the historical typology of three broad types of RTA:

- Bloc formation;
- Bloc expansion;
- Market access.

Historically, these three types have had different implications for deep integration. Block formation and bloc expansion are likely to involve much more than border issues, as discussed above. In the case of bloc enlargement, new entrants have to accept the standards of the existing bloc as given, and adjust their own domestic economies to be compatible.

On the other hand, issues of deep integration in market access agreements tend to involve only provisions that enable goods from RTA members to be sold across borders within the RTA. Such provisions, while often involving questions of meeting domestic standards, can be viewed as removing barriers to movements of goods across borders, and hence can usually be measured in terms of entry costs, or the equivalent of a tariff. They can be seen as removing technical barriers to trade (or "negative integration" discussed further below).

Evaluating any RTA requires, in the first instance, an examination of whether the border barriers between RTA partners are likely to be seriously reduced. Issues of deep integration, while involving more than trade, are nonetheless predicated on the desire to facilitate increased trade. Given that the nature of border barriers cannot simply be summarized in terms of MFN tariffs, one needs to analyze how far the RTA goes to fulfill the spirit of GATT Article XXIV (and the General Agreement on Trade in Services (GATS) Article V) which is somewhat vague on the disciplines it imposes, essentially that an agreement should not raise external protection against non-members and that it should cover substantially all trade (increasingly taken to be 95 per cent of trade by value and 90 per cent of tariff lines). Evaluating the extent of such barriers and how they are reduced in an RTA requires consideration of the detailed characteristics of the RTA.

Such an examination is complex, time-consuming and requires specific knowledge of analytical

techniques and data sources. To help negotiators and their support teams a group at Sussex University (Evans *et al.* 2005) have developed a systematic analytical framework to help analyze any given agreement and derive robust diagnostic statistics which can be used to assess its likely economic impact. This is outlined in Annex 1 with particular emphasis on how to examine the characteristics of any given proposal for an RTA.

With such a framework it is possible to identify and evaluate:

- The pattern of economic costs and benefits from shallow integration;
- The degree of deep integration proposed and where it might generate productivity gains;
- Potential overlaps and conflicts with existing RTA and multilateral commitments.

Such a framework is however essentially the starting point for a thorough analysis. We have argued that the deep integration aspects of an RTA

may well be the most significant, but the devil is in the detail in these cases. The recent decision to include "environment" and "labor" in forthcoming United States RTAs could mean anything ranging from a simple requirement on the partners to sign International Labour Organization (ILO) conventions or multilateral environmental agreements as a condition of signing an RTA, to a binding commitment to implement certain specific measures in a manner acceptable to the United States, with trade measures as a penalty for non-compliance.

In Annex 1 we offer some ideas on how different kinds of provisions should be thought about. There is however not a lot that can be laid down by way of broad generalization.

In Module 2 we return to the core economic theory which has been discussed here in the context of trade creation and trade diversion. Once again we will find that case specific analysis is needed.

## READINGS

### References

- Burfisher, M., Robinson, S. and Thierfelder, K. (2004). "Regionalism: Old and New, Theory and Practice". *MTID Discussion Paper*, No. 65.
- European Commission (2006). "Global Europe – competing in the world". Communication from the European Commission to the Council, available online at: [http://trade.ec.europa.eu/doclib/docs/2006/october/tradoc\\_130376.pdf](http://trade.ec.europa.eu/doclib/docs/2006/october/tradoc_130376.pdf).
- Evans, D., Gasiorek, M., Holmes, P., Iacovone, L., Jackson, K., Robinson, S. and Rollo, J. (2005). *A Framework for Evaluating Regional Trade Agreements Involving Developing Countries*. Report for DfID.
- Inside U.S. Trade*, 10.01.2003, available online at: <http://www.insidetradetrade.com>.
- Medvedev, D. (2006). "Preferential Trade Agreements and Their Role in World Trade". *World Bank Policy Research Working Paper*, No. 4038.
- Oxfam (2007). "Signing Away the Future". *Oxfam Briefing Paper*, No. 101, available online at: [http://www.oxfam.org/en/policy/briefingpapers/bp101\\_regional\\_trade\\_agreements\\_0703](http://www.oxfam.org/en/policy/briefingpapers/bp101_regional_trade_agreements_0703).
- Panagariya, A. (2000). "Preferential Trade Liberalization: The Traditional Theory and New Developments". *Journal of Economic Literature*, Vol. 38, No. 2, pp. 287-331.
- Robinson, S. and Diaz-Bonilla, C. (2004). "The evolution of global trading blocs in the past forty years: Who trades what with whom, and why". Background paper for *World Bank Global Economic Prospects 2005*.
- World Bank (2005). *Global Economic Prospects 2005: Trade, Regionalism, and Development*, Washington, D.C.
- World Trade Organization (2002). "Committee on regional trade agreements, coverage, liberalisation process and transitional provisions in regional trade agreements". WTO Document WT/REG/W/46.
- World Trade Organization (2010). Regional Trade Agreements Information System (RTA-IS), available online at: <http://rtais.wto.org/ui/PublicMaintainRTAHome.aspx>.

### Further readings

- Akerlof, G. (1970). "The Market for 'Lemons': Quality, Uncertainty and the Market Mechanism". *Quarterly Journal of Economics*, No. 84, August, pp. 488-500.
- Antle, J. (1999). "Benefits and Costs of Food Safety Regulation". *Food Policy*, Vol. 24, No. 6, pp. 605-623.



- Baldwin, R. (1970). *Non-Tariff Distortions of International Trade*, Brookings Institution, Washington, D.C.
- Baldwin, R. (1999). "Frictional Trade Barriers, Developing Nations and a Two-Tiered World Trading System". Paper presented at the CEPR Workshop on New Issues in the World Trading System held in London on 19-20 February 1999.
- Baldwin, R. (2000). *Regulatory Protectionism, Developing Nations and a Two-Tier World Trade System*, Graduate Institute of International Studies, Geneva.
- Baldwin, R. and Cave, M. (1999). *Understanding Regulations: Theory, Strategy and Practice*, Oxford University Press, New York.
- Barret, K. (2000). "Applying the Precautionary Principle to Agricultural Biotechnology". *Working Paper*, Science and Environmental Health Network.
- Best, M. (1990). *The New Competition*, Polity Press.
- Bhagwati, J. (1996). *Trade and Environment: Exploring the Critical Linkages*. In: Bredahl M. et al., Eds. *Agriculture, Trade and Environment*, Westview Press.
- Bhagwati, J. and Hudec, R., Eds. (1996). *Fair Trade and Harmonisation: Prerequisites for Free Trade? – Vol. 1: Economics Analysis*, The MIT Press, Cambridge, Massachusetts.
- Brenton, P. and Manchin, M. (2003). "Making EU Trade Agreements Work: The Role of Rules of Origin". *The World Economy*, Vol. 26, No. 5, May, pp. 755-769(15).
- Bureau, J., Marette, S. and Schiavina, A. (1998). "Non-Tariff Trade Barriers and Consumers' Information: The Case of EU-US Trade Dispute". *European Review of Agricultural Economics*.
- Burfisher, M., Robinson, S. and Thierfelder, K. (2001). "The Impact of NAFTA on the United States". *Journal of Economic Perspectives*, Vol. 15, No. 1, pp. 125-144.
- Buzby, J. and Frenzen, P. (1999). "Food Safety and Product Liability". *Food Policy*, Vol. 24, No. 6, pp. 637-651.
- Casella, A. (1996). *Free Trade and Evolving Standards*. In: Bhagwati, J. and Hudec, R., Eds. *Fair Trade and Harmonisation: Prerequisites for Free Trade? – Vol. 1: Economic Analysis*, The MIT Press, Cambridge, Massachusetts.
- Caswell, J. and Mojuszka, E. (1996). "Using Informational Labelling to Influence the Market for Quality in Food Products". *American Journal of Agricultural Economics*, No. 78, pp. 1248-1253.
- Cato, J. (1998). *Economic Issues Associated with Seafood and Implementation of Seafood HACCP Programmes*, FAO, Rome.
- Cernat, L. (2001). "Assessing Regional Trade Arrangements: Are South-South RTAs More Trade Diverting?". *UNCTAD Policy Issues in International Trade and Commodities Study Series*, No. 16.
- Charnovitz, S. (1991). "Exploring the Environmental Exceptions to GATT Article XX". *Journal of World Trade*, Vol. 25, No. 5.
- Charnovitz, S. (2000). "The Supervision of Health and Biosafety Regulation by World Trade Rules". *Tulane Environmental Law Journal*.
- Chen, M. and Mattoo, A. (2004). "Regionalism in Standards: Good or Bad for Trade?". *World Bank Working Paper*, No. 3458.
- Codex Alimentarius Commission (1996). "Risk Analysis: Definitions, Procedures and Principles". Codex Committee on General Principles, CX/GP 96/3, 12th Session, 25-28 November 1996, Paris.
- Crutchfield, S., Buzby, J., Frenzen, P., Allshouse, J. and Roberts, D. (2000). "The Economics of Food Safety and International Trade in Food Products". Research Paper, United States Department of Agriculture.
- CUTS (1999). "Negotiating History of the Uruguay Round". *Briefing Paper*, No. 9, Centre for International Trade, Economics & Environment.
- Das, B. (1999). *The World Trade Organisation: A Guide to the Framework for International Trade*, Zed Books, London.
- Deardoff, A. (1984). *Testing Trade Theories* (Chapter 10). In: Jones, R. and Kenen, B., Eds. *Handbook of International Economics – Vol. 1*.
- Deardoff, A. (1998a). *Determinants of Bilateral Trade: Does Gravity Model Work in a Classical World?* In: Frankel J., Ed. *The Regionalization of the World Economy*, Chicago University Press.
- Deardoff, A. (1998b). "International Effects of National Regulatory Regimes". Presented at World Bank workshop held on 13 October 1998.
- Deardoff, A. (1999). "Non-Tariff Barriers and Domestic Regulations". Presented at World Bank on 6 April 1999.
- Dluhosch, B. (2000). *Industrial Location and Economic Integration: Centrifugal and Centripetal Forces in the New Europe*, Edward Elgar, Cheltenham.
- Dornelas, J., Nunes, M., and Oliveira Jr., O. (2001). "Bridging the Gap Between Technological Innovation and Effective Transfer of Technology". Working Paper.

- Esty, D. (1994). "Greening the GATT". Institute for International Economics, Washington, D.C.
- European Commission (1997). "The General Principle of Food Law in the European Union". COM (1997) 176 final, European Commission, Brussels.
- European Commission (2000a). "White Paper on Food Safety". COM (1999) 719 final, European Commission, Brussels.
- European Commission (2000b). "Communication from the Commission on the Precautionary Principle". COM (2000) 1, European Commission, Brussels.
- European Commission (2001). "Implementing Policy for External Trade in the Fields of Standards and Conformity Assessment: A Tool Box of Instruments". *Working Paper*, SEC (2001) 1570 of 28/09/01.
- Evans, D. (1989). *Alternative Perspectives on Trade and Development* (Chapter 14). In: Chenery, H. and Srinivasan, T., Eds. *Handbook of Development Economics*, North Holland, Amsterdam.
- Farber, D. and Hudec, R. (1996). *GATT Legal Restraints on Domestic Environmental Regulations*. In: Bhagwati, J. and Hudec, R., Eds. *Fair Trade and Harmonisation: Prerequisites for Free Trade? – Vol. 2: Legal Analysis*, The MIT Press, Cambridge, Massachusetts.
- Feenstra, R. (2004). *Advanced International Trade: Theory and Evidence*, Princeton University Press, Princeton and Oxford.
- Finger, J. and Schuler, P. (1999). *Implementation of Uruguay Round Commitments: The Development Challenge*, World Bank.
- Fiorentino, R., Verdeia, L. and Toqueboeuf, C. (2007). "The Changing Landscape of Regional Trade Agreements: 2006 Update". *WTO Discussion Paper*, No. 12, published online at: [http://www.wto.org/english/res\\_e/booksp\\_e/discussion\\_papers12a\\_e.pdf](http://www.wto.org/english/res_e/booksp_e/discussion_papers12a_e.pdf), and [http://www.wto.org/english/res\\_e/booksp\\_e/discussion\\_papers12b\\_e.pdf](http://www.wto.org/english/res_e/booksp_e/discussion_papers12b_e.pdf).
- Fischer, R. (1998). *Regulation as a Trade Issue from Chilean Perspective*. In: *Regulatory Reforms in the Global Economy: Asian and Latin American Perspectives*, OECD Proceedings.
- Fischer, R. and Serra, P. (2000). "Standards and Protection". *Journal of International Economics*.
- Food and Agricultural Organization (FAO) (1999). "Science Based Decisions, Harmonisation, Equivalence and Mutual Recognition". Agricultural Fact Sheet from the Conference on "International Food Trade Beyond 2000" held in Melbourne on 11-15 October 1999.
- FAO (2003). "Trade, Market Access And Food Safety In The Near East Region". Published online at: <http://www.fao.org/DOCREP/MEETING/007/ad388e/ad388e00.htm>.
- FAO and World Health Organization (WHO) (1995). *Application of Risk Analysis to Food Standards Issues*, WHO, Geneva.
- FAO and WHO (1997). Joint FAO/WHO Expert Committee on Food Additives, 17-26 June 1997, Rome.
- Francis, J. (1993). *The Politics of Regulation*, Blackwell Publishers, Cambridge, Massachusetts.
- Gandal, N. (2000). "Quantifying the Trade Impact of Compatibility Standards and Barriers: An Industrial Organization Perspective". Paper prepared for the World Bank workshop on Trade and Standards.
- Ganslandt, M. and Markusen, J. (2000). "Standards and Related Regulations in International Trade: A Modeling Approach". *NBER Working Paper*.
- Ganslandt, M. and Markusen, J. (2001). "National Standards and International Trade". *Working Paper*, No. 547, The Research Institute of Industrial Economics, Stockholm.
- Gascoine, D. (1999). "Harmonisation, Mutual Recognition and Equivalence: How and What is Attainable". Paper presented at the Conference on "International Food Trade Beyond 2000: Science-Based Decisions, Harmonisation, Equivalence and Mutual Recognition" held in Melbourne in October 1999.
- Gelhar, M. (1998). *Time-series Data for Merchandise Trade*. In: McDougall, R., Elbehri, A. and Troung, T., Eds. *Global Trade, Assistance and Protection: The GTAP 4 Data Base*, Center for Global Trade Analysis, Purdue University.
- General Agreement on Tariffs and Trade (1994). *The Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts*, Geneva.
- Ghoneim, A., Holmes, P. and Iacovone, L. (2004). "TBTs and the EuroMed – an empirical analysis". University of Sussex.
- Godard O., Gouyon, P., Henry, C. and Lagadeci, P. (2000). *Le principe de précaution: différents cas de figure et différents points de vue*, Mimeo.
- Greene, W. (1993). *Econometric Analysis – Second Edition*, Macmillan.
- Gupta, R. (2001). "Non-Tariffs Barriers or Disguised Protectionism". Briefing Paper, CUTS.
- Helpman, E. (1987). "Imperfect Competition and International Trade: Evidence from Fourteen Industrial Countries". *Journal of the Japanese and International Economy*, Vol. 1, No. 1, pp. 62-81.

- Henson, S. (1995). "Demand-Side Constraints on the Introduction of New Technologies: The case of Food Irradiation". *Food Policy*, No. 20, pp. 111-127.
- Henson, S., Brander, A. and Mitullah, W. (2000). "Food Safety Requirements and Food Exports from Developing Countries: The Case of Fish Exports from Kenya to the European Union". *American Journal of Agricultural Economics*, No. 5, pp. 1159-1169.
- Henson, S. and Caswell, J. (1999). "Food Safety Regulation: An Overview of Contemporary Issues". *Food Policy*, No. 24, pp. 589-603.
- Henson, S. and Heasman, M. (1998). "Food Safety Regulation and the Firm: Understanding the Compliance Process". *Food Policy*, No. 23, pp. 9-23.
- Henson, S. and Loader, R. (2001). "Barriers to Agricultural Exports from Developing Countries: The Role of Sanitary and Phytosanitary Requirements". *World Development*, Vol. 29, No. 1, pp. 85-102.
- Henson, S., Loader, R., Swinbank, A., Bredahl, M. and Lux, N. (2000). *Impact of Sanitary and Phytosanitary Measures on Developing Countries*, Centre for Food Economics Research, University of Reading.
- Herath, A. (2001). "Cost of Compliance of Sanitary and Phytosanitary Requirements in Beverages and Spices in Sri Lanka". Working Paper, CUTS.
- Holleran, E., Bredahl, M. and Zaibet, L. (1999). "Private Incentives for Adopting Food Safety and Quality Assurance". *Food Policy*, Vol. 24, No. 6, pp. 669-683.
- Hooker, N. (1999). "Food Safety and Trade in Food Products". *Food Policy*, No. 24, No. 6, pp. 653-668.
- Hooker, N. and Caswell, J. (1999). "A Framework for Evaluating Non-Tariff Barriers to Trade Related to Sanitary and Phytosanitary Regulation". *Journal of Agricultural Economics*, Vol. 50, No. 2, pp. 234-246.
- Howse, R. and Tuerk, E. (2001). *The WTO Impact on Internal Regulations: A Case Study of the Canada-EC Asbestos Dispute*. In: De Burca, G., and Scott, J., Eds. *The EU and the WTO: Legal and Constitutional Issues*, Hart, Oxford.
- Hufbauer, G., Kotschwar, B. and Wilson, J. (2000). "Trade, Standards and Development: Perspectives for Central America". Paper presented at the Workshop on "Trade Facilitation, Regulation, and Standards: The Development Challenge in Central America" held in Panama City on 27-29 June 2000.
- Iacovone, L. (2003). "Analysis and Impact of Sanitary and Phytosanitary Measures". Published online at: <http://www.cid.harvard.edu/cidtrade/Papers/iacovone.pdf>.
- James, S. (2000). "An Economic Analysis of Food Safety Issues Following the SPS Agreement: Lessons from the Hormones Dispute". *Policy Discussion Paper*, Centre for International Economic Studies, University of Adelaide.
- James, S. and Anderson, K. (1998). "On the Need for More Economic Assessment for Quarantine/SPS Policies". *Seminar Paper*, No. 98-02, Centre for International Economic Studies, University of Adelaide.
- James, W. and Umemoto, M. (1999). "Rules of Origin and the Competitive Position of Asian Textiles and Apparel Producers in the North American Market". *ICSEAD Working Paper Series*, Vol. 99-1, January.
- Lall, S. and Pietrobello, C. (2001). *Failing to Compete: Technology Development and Technology Systems in Africa*, Edward Elgar, Cheltenham.
- Larson, B. et al. (2002). "The Impact of Environmental Regulations on Exports: Case Study Results from Cyprus, Jordan, Morocco, Syria, Tunisia, and Turkey". *World Development*, Vol. 30, No. 6, pp. 1057-1072.
- Lawrence, R. (1996). *Regionalism, Multilateralism and Deeper Integration*, Brookings Institution, Washington, D.C.
- Leebron, D. (1996). *Lying Down with Procrustes: An Analysis of Harmonisation Claims*. In: Bhagwati, J., and Hudec, R., Eds. *Fair Trade and Harmonisation: Prerequisites for Free Trade? - Vol. 1: Economic Analysis*, The MIT Press, Cambridge, Massachusetts.
- Linneman, H. (1966). *An Econometric Study of International Trade Flows*, North Holland, Amsterdam.
- Loader, R. and Hobbs, J. (1999). "Strategic Responses to Food Safety Legislation". *Food Policy*, Vol. 24, No. 6, pp. 685-706.
- Maskus, K. and Wilson, J. (2000). "Quantifying the Impact of Technical Barriers to Trade: A Review of Past Attempts and the New Policy Context". Paper prepared for the Workshop on "Quantifying the Trade Effect of Standards and Regulatory Barriers: Is It Possible?" held at the World Bank on 27 April 2000.
- Mattoo, A. (2001). "Discriminatory Consequences of Non-Discriminatory Standards". *Journal of Economic Integration*, Vol. 16, No. 1, pp. 78-105.
- Mndeme Musonda, F. and Mbowe, W. (2001). "The Impact of Implementing SPS and TBT Agreements: The Case of Fish Export to European Union by Tanzania". Working Paper, Economic and Social Research Foundation.
- Neven, D. (2000). "Evaluating the Effects of Non-Tariffs Barriers: The Economic Analysis of Protection in WTO Disputes". Working Paper, University of Lausanne and CEPR.
- Newkirk, D. and Williamson, I. (2001). "Assessment of Egypt's Compliance with the WTO Agreements on Technical Barriers to Trade: The Application of Sanitary and Phytosanitary Measures". Report submitted to United States for International Development, Chemonics International Inc., Cairo.

- Nicolaidis, K. (1997). "Mutual Recognition of Regulatory Regimes: Some Lessons and Prospects". Published online at: <http://www.jeanmonnetprogram.org/papers/97/97/07.html>.
- OECD (1996). *Proceedings from the Conference on Consumer Product Safety Standard and Conformity Assessment: Their Effect on International Trade*, OECD, Paris.
- OECD (2003). "Environmental Requirements and Market Access", 27 November 2003, published online at: [http://www.oecd.org/document/13/0,3343,en\\_2649\\_34183\\_36661163\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/13/0,3343,en_2649_34183_36661163_1_1_1_1,00.html).
- Orden, D. and Romano, E. (1996). "The Avocado Dispute and Other Technical Barriers to Agricultural Trade Under NAFTA". Paper presented at the Conference on "NAFTA and Agriculture: Is the Experiment Working?" held in San Antonio, Texas.
- Otsuki, T., Wilson, J. and Sewadeh, M. (2000). *Saving two in a billion: A case study to quantify the trade effect of European food safety standards on African exports*, World Bank.
- Otsuki, T., Wilson, J. and Sewadeh, M. (2001). *A Race to the Top? A Case Study of Food Safety Standards and African Exports*, World Bank.
- Oyejide T., Ogunkola, E. and Bankole, S. (2000). "Quantifying the Trade Impact of Sanitary and Phytosanitary Standards: What is Known and Issues of Importance for Sub-Saharan Africa". Paper prepared at the Workshop on "Quantifying the Trade Effect of Standards and Regulatory Barriers: Is It Possible?" held at the World Bank on 27 April 2000.
- Paarlberg, P. and Lee, J. (1998). "Import Restrictions in the Presence of a Health Risk: An Illustration using FMD". *American Journal of Agricultural Economics*, Vol. 80, No. 1.
- Perdikis, N., Kerr, W. and Hobbs, J. (2000). *Can the WTO/GATT Agreements on Sanitary and Phytosanitary Measures and Technical Barriers to Trade be Renegotiated to Accommodate Agricultural Biotechnology?* In: Lesser, W., Ed. *Transitions in Agbiotech: Economics, Strategy and Policy*, Food Marketing Policy Centre.
- Pöyhönen, P. (1963). "A Tentative Model for the Flows of Trade Between Countries". *Weltwirtschaftliches Archiv*, Vol. 90, No. 1.
- Pollak, R. (1998). *Risk Assessment*. In: Newman, P., *The New Palgrave Dictionary of Economics and Law*.
- Rahman, M. (2001). *EU Ban on Shrimp Imports from Bangladesh: A Case Study on Market Access Problems Faced by LDCs*, CUTS.
- Roberts, D. (1998). "Implementation of the WTO Agreement on the Application of Sanitary and Phytosanitary Measures: The First Two Years". *Working Paper*, No. 98-4, International Agricultural Trade Research Consortium.
- Roberts, D. and Orden, D. (1997). "Determinants of Technical Barriers to Trade: The Case of U.S. Phytosanitary Restrictions on Mexican Avocados 1972-1995". International Agricultural Trade Research Consortium.
- Roberts, D., Orden, D. and Josling, T. (1999a). "A Framework for Analysing Technical Barriers in Agriculture Markets". *Technical Bulletin*, No. 1876, Market and Trade Economics Division, United States Department of Agriculture.
- Roberts, D., Orden, D. and Josling, T. (1999b). "WTO Disciplines on Technical Barriers to Agricultural Trade: Progress, Prospects and Implications for Developing Countries". Paper presented at the "Conference on Agriculture and The New Trade Agenda in the WTO 2000 Negotiations" held in Geneva on 1-2 October 1999.
- Robinson, S. and Thierfelder, K. (1999). "Trade Liberalization and Regional Integration: The Search for Large Numbers". *TMD Discussion Paper*, No. 54.
- Robinson, S. and Thierfelder, K. (2002). "Trade liberalization and regional integration: the search for large numbers". *Australian Journal of Agricultural and Resource Economics*, Vol. 46, No. 4, pp. 585-604.
- Sallie, J. (2000). "An Economic Analysis of Food Safety Issues Following the SPS Agreement: Lessons from the Hormone Beef Dispute". *Policy Discussion Paper*, Centre for International Economic Studies, University of Adelaide.
- Stanton, G. (1999). "A Review of the Operation of the SPS Agreement". Paper presented at the "Conference on Agriculture and the New Trade Agenda in the WTO 2000 Negotiations" held in Geneva on 1-2 October 1999.
- Stephenson, S. (1997). "Standards Conformity Assessment and Developing Countries". World Bank, published online at: <http://econ.worldbank.org/docs/398.pdf>.
- Stephenson, S. (1997). "Standards and Conformity Assessment as Nontariff Barriers to Trade". *Working Paper Series*, No. 1826, World Bank.
- Stolberg C. (2006). *Economic Integration and Production Structures: The Case of the EU-15 and the Central and Eastern European Countries*, DPhil thesis, University of Sussex.
- Sung, T. and Gibson, D. (2001). "Knowledge and Technology Transfer: Levels and Key Factors". Working Paper.
- Sykes, A. (1995). *Product Standards for International Integrated Goods Markets*, The Brookings Institute, Washington, D.C.
- The Economist* (1999a). Sticky Labels, 29 April 1999.
- The Economist* (1999b). Food for Thought, 17 July 1999.
- Thilmany, D. and Barrett, C. (1997). "Regulatory Barriers in an Integrating World Food Market". *Review of Agricultural Economics*, Vol. 19, No. 1, pp. 91-107.



- Thornsbury, S. (2000). "Sanitary and Phytosanitary Issues: Where does the WTO go from here?". *Working Paper*, Institute of Food and Agricultural Sciences, University of Florida.
- Tinbergen, J. (1962). *Shaping the World Economy: Suggestions for an International Economic Policy*, The Twentieth Century Fund, New York.
- Unnevehr, L. and Jensen, H. (1999). "The Economic Implications of Using HACCP as a Food Safety Regulatory Standard". *Food Policy*, Vol. 24, No. 6, pp. 625-635.
- Vogel, D. (1995). *Trading Up: Consumer and Environmental Regulation in a Global Economy*, Harvard University Press, Cambridge, Massachusetts.
- Wallner, K. (1998). "Mutual Recognition and the Strategic Use of International Standards.", *Working Paper*, Stockholm School of Economics.
- Walter-Jorgensen, A. and Vig Jensen, T. (2001). "EU Trade with Developing Countries". *Working Paper*, Institute of Agricultural and Fisheries Economics.
- Ward, H. (2000). "Science and Precaution in the Trading System". Seminar note, International Institute for Sustainable Development and Royal Institute of International Affairs.
- Weiler, J. (2000). "The Rule of Lawyers and the Ethos of Diplomats: Reflections on the Internal and External Legitimacy of WTO Dispute Settlement". *Harvard Jean Monnet Working Paper*, No. 9.
- Wienert, H. (1997). "Regulation and Industrial Competitiveness: A perspective for Regulatory Reform". Report presented to the Working Party of the Industry Committee, OECD, Paris.
- Wilson, J. (1999). *Can We Measure the Costs of Regulation and Technical Barriers to Trade in Goods?* (Chapter 2). In: *World Bank Research in Progress on Standards*, World Bank.
- Wilson, J. (2000). "The Development Challenge in Trade: Sanitary and Phytosanitary Standards". Statement prepared for the WTO Committee on Sanitary and Phytosanitary Standards, 21-22 June 2000.
- Wilson, J. and Otsuki, T. (2000). "Global Trade and Food Safety: Winners and Losers in a Fragmented System". *Research Paper*, World Bank.
- Winters, L. and Soloaga, I. (2001). "Regionalism in the Nineties: What Effect on Trade?". *North American Journal of Economics and Finance*, Vol. 12, No. 1, pp. 1-29.
- Winters, L. and Wang, Z. (1994). *Eastern Europe's International Trade*, Manchester University Press.
- World Bank (2001). *Standards, Developing Countries, and the Global Trade System* (Chapter 3). In: *Global Economic Prospects*.
- WTO (1994). *Description of the Agreement on the application of SPS measures*, World Trade Organization, Geneva.
- WTO (1998a). Submission Made by Bolivia about the Proposal by the European Community to Introduce Controls on Aflatoxin Contamination. Committee on Sanitary and Phytosanitary Measures, G/SPS/GEN/93.
- WTO (1998b). Submission Made by Australia about the Proposal by the European Community to Introduce Controls on Aflatoxin Contamination. Committee on Sanitary and Phytosanitary Measures, G/SPS/GEN/61.
- WTO (1998c). Submission Made by Senegal about the Proposal by the European Community to Introduce Controls on Aflatoxin Contamination. Committee on Sanitary and Phytosanitary Measures, G/SPS/GEN/55.
- WTO (1998d). Submission Made by Argentina about the Proposal by the European Community to Introduce Controls on Aflatoxin Contamination. Committee on Sanitary and Phytosanitary Measures, G/SPS/GEN/52.
- WTO (1998e). Submission Made by Malaysia about the Proposal by the European Community to Introduce Controls on Aflatoxin Contamination. Committee on Sanitary and Phytosanitary Measures, G/SPS/GEN/56.
- WTO (1998f). Submission Made by Brazil about the Proposal by the European Community to Introduce Controls on Aflatoxin Contamination. Committee on Sanitary and Phytosanitary Measures, G/SPS/GEN/58.
- WTO (1998g). Submission Made by India about the Proposal by the European Community to Introduce Controls on Aflatoxin Contamination. Committee on Sanitary and Phytosanitary Measures, G/SPS/GEN/54.
- WTO (1998h). Australia – Measures Affecting Importation of Salmon. WTO Appellate Body Decision, WT/DS18/AB/R, Geneva.
- WTO (1998i). EC – Measures concerning Meat and Meat Products (Hormones). Report of the Appellate Body, Geneva.
- WTO (1998j). EC – Measures concerning Meat and Meat Products (Hormones). Report of the Panel, Geneva.
- WTO (1998k). Japan – Measures Affecting Agricultural Products. Report of the Appellate Body, Geneva.
- WTO (1998l). Japan – Measures Affecting Agricultural Products. Report of the Panel, Geneva.
- WTO (2001). "Overview of the State-of-Play of WTO Disputes". 13 July 2001 Update, WTO Secretariat, Geneva.

Yeats, A. (1998). "Does MERCOSUR's Trade Performance Raise Concerns about the Effects of Regional Trade Agreements?". *World Bank Economic Review*, Vol. 12, No. 1, pp. 1-28.

Zahniser, S., Pick, D., Pompelli, G. and Gehlhar, M. (2002). "Regionalism in the Western Hemisphere and its Impact on U.S. Agricultural Exports: A Gravity Model Analysis". *American Journal of Agricultural Economics*, Vol. 84, No. 3, pp. 791-797.

Zarrilli, S. (1999). "WTO Sanitary and Phytosanitary Agreement: Issues for Developing Countries". Working Paper, South Centre, published online at: <http://www.nri.org/NRET/PWB/Reference.htm>.