A sluggish postcrisis, mega trade negotiations and value chains: scope for regional action
Latin America and the Caribbean in the World Economy is an annual report prepared by the Division of International Trade and Integration of ECLAC. The ECLAC subregional headquarters for the Caribbean, the ECLAC subregional headquarters in Mexico and the Commission’s Natural Resources and Infrastructure Division assisted with the preparation of this year’s edition.

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Notes
The following symbols are used in tables in this publication:
• Three dots (…) indicate that data are not available or are not separately reported.
• A dash (-) indicates a nil or insignificant quantity.
• A full stop (.) is used to indicate decimals.
• The word “dollars” refers to United States dollars, unless otherwise specified.
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The 2013 edition of Latin America and the Caribbean in the World Economy is subtitled “A sluggish postcrisis, mega trade negotiations and value chains: scope for regional action” and is made up of three chapters.

Chapter 1 reviews the main features of the persistently weak global economy and lacklustre world trade. Global GDP growth is projected at 3% in 2013, close to the 2012 figure. Against a backdrop of low growth and limited space for fiscal stimulus, several of the industrialized countries have attempted to boost their economies with massive monetary easing. This chapter considers the impact of these stimulus measures on the financial sector and the real economy, along with the negative externalities they may have for the developing countries. The situation in the main industrialized and emerging economies is also analysed, concluding with an outlook for a slight growth upturn in both groups in the second half of 2013. Indications are, however, that growth in the industrialized countries will be constrained over the next few years by high public debt levels, slow deleveraging in the financial sector, high unemployment and population ageing. Notwithstanding some tapering off of growth, the developing countries will continue to be the main drivers of the world economy throughout the rest of the decade.

The chapter then turns to global and regional trade trends and prospects. Trade at both levels has been hurt by weak global demand. After growing by just 2% in 2012, world trade is projected to increase by 2.5% in volume in 2013, well below the rates seen before the crisis of 2008. Thus, world trade will expand more slowly than global GDP for the second year running. Exports from Latin America and the Caribbean are forecast to grow in value terms by only 1.5% in 2013, close to the 2012 rate (1.4%), and with sharp differences between countries within the region. Import values will exceed the 2012 figure (3%) to post growth of 4.5%.

In this context, a number of “mega-regional” trade negotiations, as they are termed, have emerged across the world. These are examined in chapter II. Geared towards the creation of vast integrated economic areas, Asian, transatlantic or trans-Pacific in scope, these negotiations encompass economies that account for a large share of global GDP, population, trade and foreign direct investment. Another distinctive element in these processes is the breadth and complexity of the issues on their agenda, which cover several areas not addressed by agreements under the World Trade Organization or other prior instruments.

Chapter II considers the main changes in the organization of production and global trade associated with international production networks, which are at the heart of the current mega-regional negotiations. It goes on to review three processes which are of particular importance: the Transatlantic Trade and Investment Partnership between the United States and the European Union, the Trans-Pacific Partnership, which brings together 12 countries from Latin America, North America, Asia and Oceania, and the Regional Comprehensive Economic Partnership, formed by the 10 member countries of the Association of Southeast Asian Nations (ASEAN), together with Australia, China, India, Japan, New Zealand and the Republic of Korea.

The mega-regional negotiations under way will probably have a huge impact on the geographical distribution and governance of global trade and investment flows in the coming years. In practice, the magnitude of these initiatives, in terms of both the economic weight of the participants and their ambitious thematic agenda, could mean that by 2020 the rules of international trade will have been rewritten —outside the multilateral framework. Mega-regionalism thus challenges Latin America and the Caribbean to deepen its own regional integration and to upgrade its participation in the international economy, regardless of whether it is based on natural resources, manufacturing or services.

Chapter III looks at how the Latin American and Caribbean countries are positioned in international production networks and value chains. This analysis confirms the existence of two patterns: either strong links with the United States and the vast “Factory North America” or a marked trend towards subregional production networks. Examples
of the first pattern are Costa Rica and Mexico, which participate in production networks that include the electrical, electronic, automotive, aerospace and medical devices industries.

With respect to production networks existing within subregional integration schemes, intermediate goods value chains are well established in some country groupings. This is true of trade between Costa Rica, El Salvador, Guatemala and Honduras in Central America; between Colombia, Ecuador and Peru in the framework of the Andean Community; and between Argentina, Brazil and Uruguay in the framework of the Southern Common Market (MERCOSUR). The industries involved vary in each circuit, the most significant being the pharmaceutical industry in Central America, petrochemicals in the Andean countries and the automotive industry in MERCOSUR.

This chapter concludes with a brief analysis of the main factors underpinning participation in production networks and value chains, as well as the implications they have for integration. It is suggested that fostering value chains—and increasing the involvement of small and medium-sized enterprises—could act as a driving force for regional integration.
Summary

A. The weak global economy takes a toll on Latin American and Caribbean trade
B. Mega-regional negotiations: towards a new form of governance in world trade
C. Latin America and the Caribbean in value chains
A. The weak global economy takes a toll on Latin American and Caribbean trade

Well into the second half of 2013, the continuing weakness of the eurozone and a heavier-than-expected slowdown in emerging economies are stymieing the consolidation of the global economic recovery. In June, the United Nations lowered its global growth projection for the year to 3.1%, trimming 0.1 percentage points off its January calculation and taking the projection almost down to the 2012 figure (3%). China, India, the rest of emerging Asia and the Russian Federation are the economies which have slowed the most. Amid slacking global demand, these countries need to ease their reliance on exports and investment and try to leverage domestic consumption more. Yet even with their growth slowing, emerging economies will continue to account for more than half of global GDP growth in the coming years.

With consumption, investment and net exports remaining weak, several industrialized countries are trying to boost their economies through massive monetary stimulus. Until there are solid signs of fiscal consolidation and medium-term public debt is reduced, the fiscal space for short-term economic stimulus will continue to be limited. Central banks are holding their interest rates very low and applying the non-conventional monetary policy of quantitative easing. Under this policy, the central bank creates money to expand the monetary base (see figure 1), using the extra liquidity to purchase (primarily public) financial securities. This stronger demand for securities pushes their price up and reduces their yield. This enhances the appeal of other financial assets, such as stocks or bonds of private companies, thereby reducing the cost of corporate financing and stimulating private investment. Another upshot of this policy is currency depreciation, which boosts net exports. To one degree or another, these outcomes have been observed in countries that have engaged in quantitative easing.

Figure 1
Selected advanced economies: monetary base, 2007-2013
(Index: January 2007=100)


* The monetary base is defined as the sum of currency in circulation (notes and coins) and the reserve balances of commercial banks.
The United States is undergoing its third round of quantitative easing, with the Federal Reserve injecting US$ 85 billion dollars into the economy every month mainly through the purchase of Treasury bonds. Between September 2011 and December 2012, the Federal Reserve also sold short-term securities and bought long-term bonds to lower the interest rates on the latter (Operation Twist). In the United Kingdom, the Bank of England entered a fifth phase of asset purchases. In Japan, the central bank will double the monetary base between this year and next. The European Central Bank adopted a different policy, which consists of lending directly to banks on a fixed-rate full allotment basis.

The benefits of quantitative easing have been widely debated. According to the International Monetary Fund (IMF), these policies appear to have reduced banks’ vulnerability by enabling them to replenish their capital and reserves, and have improved the financial system’s short-term stability. Certain indicators of bank soundness have also improved. These effects are more evident in the United States than in Europe, however. No conclusive evidence exists on the impact of quantitative easing on consumption and investment. Despite the potential benefits, the prolonged application of quantitative easing presents several risks. First, with easy access to financing, banks are taking longer to repair their balance sheets. Second, there are signs that new financial bubbles could emerge, as evidenced, for example, by partial decoupling of stock market and real economy performance, significant investment in high-risk financial securities (junk bonds) and speculation in some commodity markets.

Another negative externality of quantitative easing has been greatly increased volatility of capital flows to emerging economies. Given the low returns in advanced countries, investors are seeking higher profits in emerging countries, which has contrasting effects on their economies. On the one hand, these capital inflows have boosted investment in companies operating in these countries and led to an expansion of credit. They have also pushed up the values of stock in listed firms, which could benefit consumption and investment. On the other hand, large capital inflows have fuelled currency appreciation in several emerging economies, slowing exports and boosting imports. In addition, the recent announcements by the Federal Reserve regarding a gradual withdrawal of monetary stimulus starting in the second half of 2013 have prompted outflows of capital from emerging economies and sharp depreciations in their currencies. Although currency depreciation can boost net exports, it also drives up inflation and could create balance-of-payments pressures.

Despite the strong monetary stimulus, the United States and Japan are expected to grow at a moderate rate of about 2% in 2013. In the United States, consumption is the fastest-growing component of final demand, thanks to the gradual deleveraging of households, an incipient recovery in property prices and profits in the stock market. Following the fairly buoyant situation in 2012, investment is scaling back in 2013, in part owing to the elimination of some tax exemptions. Fiscal spending cuts and tax increases, some of which are kicking in automatically as a result of budget sequestration, are eroding growth. The evidence suggests that the fiscal adjustment in the United States was greater than necessary and that the country’s revenue and spending structure hampers growth. Japan’s government is rolling out an ambitious package of measures including monetary expansion, strong fiscal stimulus and future economic reforms. The effects have been positive in terms of achieving exchange-rate depreciation, halting deflation and boosting economic growth and export volumes. Yet the fiscal austerity required to reduce public debt and open up other bottlenecks is likely to limit growth to about 1% in the coming years. And furthermore, the sharp exchange-rate depreciation is generating friction with some of Japan’s main trading partners.

The eurozone remains weak, despite a positive growth rate in the second quarter of 2013, after six straight quarters of recession. Several factors are limiting growth in the short and medium terms, especially in the peripheral countries of the eurozone, where consumption, investment and trade are still depressed by high unemployment, limited lending, social tensions and lack of confidence. Budget cuts also continue to undermine growth, although their recent easing has given countries more time to reach the targets set. The introduction of outright monetary transactions (OMT) by the European Central Bank has reduced the risk premiums on credit default swaps in the countries of the eurozone periphery. Germany has seen more positive trends in terms of employment, wage growth, access to credit, consumption and investment. Indeed, German fiscal accounts have benefited from the crisis in the Mediterranean area, which has provided access to financing at negative real interest rates as investors flee to quality, minimizing risk and even accepting negative returns.

Even though China’s pace of expansion has slackened, it is still expected to continue posting one of the highest growth rates worldwide in the coming years. The country’s GDP growth edged down from 7.8% in 2012 to 7.7% in the first quarter of 2013 and 7.5% in the second quarter. Among the various components of GDP, the heaviest slowdown was seen in net exports. The Chinese economy is in a transition phase as its growth engine shifts towards
domestic consumption in a process that is neither certain nor free from economic and political complexities. The authorities are seeking to reverse the trends of recent years, which saw consumption fall and investment soar in relation to GDP. In particular, boosting consumption requires workers to save less, which is a difficult proposition in the absence of a proper social safety net. Without adequate social security, households must save to finance their spending on education, health and pensions, to make up for the poor coverage of the public system.

Other emerging economies are experiencing a more marked slowdown than China. The Indian economy has been slowing since 2009, down to 5.1% in 2012 as a result of slack external demand, weak consumer spending and a heavy fiscal adjustment. Growth in the 10 countries of the Association of Southeast Asian Nations (ASEAN) is also less robust than it was pre-crisis, owing to lacklustre export growth due to dwindling demand from China, India and the eurozone, and lower prices for export commodities. In the Russian Federation, growth was sluggish in 2012 (3.4%) and is expected to decline even further in 2013 (2.9%). Brazil and South Africa, meanwhile, will register growth of less than 3% for the second consecutive year in 2013.

International trade is one of the areas in which the global slowdown is most evident. Growth in global trade volumes fell to 5.2% in 2011 and just 2% in 2012.¹ This decline was caused by the difficulties in the advanced economies, especially the eurozone. Indeed, when intra-European trade—which fell by 7% in value terms in 2012—is excluded, world trade volumes expanded by 3.2% in 2012. In a world of increasingly integrated production networks, low European demand affected the exports and imports of several emerging economies, particularly in Asia. Accordingly, in September 2013, the World Trade Organization trimmed its projection for world trade growth from 3.3% to 2.5%, which would make 2013 the second year in a row in which world trade will grow at below global GDP growth rates. In the past three decades, this has occurred only in crisis periods (see figure 2). In the first half of 2013, there was no clear trend in commodity prices: while prices fell for metals (copper and iron), they rose for some agricultural products, such as soybean, and held relatively steady for oil.

The performance of Latin American and Caribbean trade mirrors the weak international situation. On the basis of the trends seen in the first half of 2013 and the data available for the month of July 2013, exports are projected to edge up in value terms by just 1.5% over the year, similar to the 2012 rate (1.4%). This gain in value reflects a 3% increase by volume combined with a 1.5% reduction by price. Export prices are falling the most in the countries of the Caribbean Community (CARICOM), while export volumes are rising at above-average rates in the Southern Common Market (MERCOSUR) and Chile. The export products registering the steepest price drops are metals (affecting Chile and Peru in particular) and agricultural products such as bananas, coffee and sugar (affecting Guatemala, Honduras, Nicaragua and Panama).

**Table 1**

Latin America and the Caribbean: breakdown of projected growth in foreign trade by value and volume, 2013

(Percentage variation)

<table>
<thead>
<tr>
<th>Region, subregion or country</th>
<th>Exports</th>
<th></th>
<th>Imports</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Price</td>
<td>Volume</td>
<td>Value</td>
<td>Price</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>-1.5</td>
<td>3.0</td>
<td>1.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Latin America</td>
<td>-1.0</td>
<td>3.0</td>
<td>2.0</td>
<td>0.1</td>
</tr>
<tr>
<td>South America</td>
<td>-1.8</td>
<td>3.5</td>
<td>1.7</td>
<td>0.2</td>
</tr>
<tr>
<td>MERCOSUR a</td>
<td>-2.0</td>
<td>4.0</td>
<td>2.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Andean Community b</td>
<td>-1.5</td>
<td>1.3</td>
<td>-0.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Chile</td>
<td>-3.6</td>
<td>6.4</td>
<td>2.8</td>
<td>-1.0</td>
</tr>
<tr>
<td>Central America c</td>
<td>-2.7</td>
<td>3.3</td>
<td>0.5</td>
<td>-0.4</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.4</td>
<td>2.2</td>
<td>2.6</td>
<td>0.5</td>
</tr>
<tr>
<td>CARICOM d</td>
<td>-5.2</td>
<td>2.8</td>
<td>-8.1</td>
<td>...</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information from the countries for the period from January through July 2013.

a Includes Argentina, the Bolivarian Republic of Venezuela, Brazil, Paraguay and Uruguay.

b Includes Colombia, Ecuador, Peru and the Plurinational State of Bolivia.

c Includes Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

d Includes Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

Over a medium-term period (2004-2011), several commodity-exporting countries can attribute a significant portion of the growth in their gross national income (GNI) to terms of trade improvements. GNI is a better indicator than GDP for measuring the impact of terms of trade on a country's income since GDP does not necessarily tally with the amount of resources that the inhabitants have available for consumption or savings. Analysis of how terms of trade have contributed to disposable income in selected countries in the region since the 1980s shows that they were particularly significant in the period 2004-2011 (see figure 3) when they accounted for half of GNI growth in the Bolivarian Republic of Venezuela, 47% in Chile, 35% in Ecuador, 27% in Mexico and 22% in Brazil. These figures draw attention to a critical feature of the region's development: overdependence on international commodity price cycles.

**Figure 3**

Latin America (selected countries): breakdown of growth in gross national income, 1980-2011

(Percentages)

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of CEPALSTAT [online database] http://websie.eclac.cl/sisgen/ConsultaIntegrada.asp.

a The other factors include labour productivity, the use of labour and the net transfer of resources.

2 Not all revenues generated within a country (equivalent to GDP) stay there, since a portion is transferred abroad in payment of any factors of production owned by residents abroad, such as interest payments on loans and remittances of profits by foreign companies operating in the country. Similarly, a country's residents can receive remittances in the form of payment for factors located elsewhere in the world. Furthermore, revenues are contingent on changes in the terms of trade, which reflect the purchasing power of exports in relation to imports. Higher export prices, all other things being equal, boost the purchasing power of those exports, thereby increasing disposable income.
The short-term outlook will be affected by the possible escalation of the conflict in Syria. This crisis, especially if it were to involve other countries, would pose a serious risk to the global economy and trade. Indeed, increased tension in the Middle East would lead to oil price surge and volatility, which would hurt the trade balance of net oil importers. Another possible effect would be greater risk aversion on the part of international investors, which would push up the cost of international financing for developing countries.

A further challenge is achieving an orderly exit from quantitative easing in the advanced countries while avoiding massive capital outflows, uncontrolled depreciation or balance-of-payments crises in emerging and developing countries. Another risk associated with the withdrawal of monetary stimulus and the resulting higher interest rates is that it could cut short the economic recovery in the industrialized countries. The medium term will bring slow resolution of structural problems in industrialized countries and moderate growth in emerging countries, which will, nonetheless, be at least double the rate recorded in the industrialized countries. Most advanced countries need fiscal austerity to reduce their high public debt-to-GDP ratios and engage in other reforms, partly to accommodate ageing populations. Despite these common challenges, the United States seems to be the industrialized country with the highest growth potential, while growth in Japan and the eurozone will continue to be slowed by major structural problems. The two largest emerging economies, China and India, are likely to continue growing at rates of close to 7.5% and 5%, respectively.

In this global context, the export dynamics of each country in Latin America and the Caribbean will depend on its main markets and the composition of its export basket. Countries that export to China and the rest of Asia are likely to see higher growth in volume but a gradual shift in demand from commodities (whose prices will probably stagnate) to products with higher value added. The economies that export mainly to the United States, especially Mexico and the countries in Central America, will benefit from that country’s relatively sound recovery. Meanwhile, slow growth in Europe will dampen South American exports to this market.

This scenario of rather modest growth in industrialized economies should be examined in conjunction with the large-scale trade negotiations between the United States, Europe and Japan. These mega-negotiations could significantly boost trade and investment flows and will probably lead to the definition of new rules for trade and the operation and interaction of value chains. These issues are discussed in chapter II, which highlights the need to discuss various scenarios and the potential impact of these mega-agreements on regional development.

**B. Mega-regional negotiations: towards a new form of governance in world trade**

Since the early 2010s, and with particular intensity in recent months, a number of far-reaching trade negotiations have been in the works worldwide. Among them are a Transatlantic Trade and Investment Partnership agreement between the United States and the European Union; a Free Trade Agreement between the European Union and Japan; a Regional Comprehensive Economic Partnership among the 10 member countries of the Association of Southeast Asian Nations (ASEAN), Australia, India, New Zealand, China, Japan and the Republic of Korea; and a Free Trade Agreement among the latter three countries. These four processes (formally launched in 2013), come on top of the Trans-Pacific Partnership (TPP) negotiations under way since 2010 encompassing 12 countries of Latin America, North America, Asia and Oceania. All of these initiatives —referred to in the literature as mega-regional or mega-bilateral negotiations— are expected to have a profound impact on the global trade and investment architecture in the coming decades, especially in view of the continued impasse at the World Trade Organization (WTO) Doha Round.
While the burgeoning number of regional trade agreements has been a global trend since the 1990s, the recent mega-regional negotiations have features that set them apart from most of the existing agreements. First is the number and size of the economies concerned: all of them account for significant proportions of world output, population, trade and foreign direct investment (see figure 4). Second (and related to the above), all of these initiatives go beyond the essentially bilateral approach of most of the existing regional arrangements and aim to create vast integrated economic spaces, whether Asian, transatlantic or trans-Pacific. Third, the thematic agenda is far more extensive and complex than has traditionally been the case, including a significant number of areas not covered by the WTO agreements.

The emergence of mega-regionalism is partly a product of the profound transformations which have occurred in the past three decades in the way global production and trade are organized. Since the late 1980s, lower trade and foreign direct investment barriers worldwide, combined with falling transport costs and advances in information and communication technologies have spurred the development of North-South production and supply networks. In such networks, also known as value chains, multinational companies headquartered in developed countries move or outsource part of their production processes to developing countries or transition countries. This geographical fragmentation of production takes place through various channels; among them are foreign direct investment, trade in intermediate goods and service outsourcing. Simply put, the idea is to combine technology, innovation and know-how from developed countries (headquarter economies) with the lower cost of labour in developing countries (factory economies).

Despite the falling cost of transport, communication and data processing, coordinating production processes in a number of countries is still a complex task, especially when they are far apart. Trade within production networks, where a product can cross borders several times in various stages of production, is particularly sensitive to the costs arising from distance, including delivery delays. That is why the major value chains have a clear regional dimension. There are three major production networks (“factories”) in the world: Factory Europe (Germany being the hub), Factory North America (based in the United States) and Factory Asia (originally centred in Japan and more recently in China). The three “factories” have high rates of intraregional trade, of which intermediate goods are an important component, especially in the case of Factory Asia (see table 2). This reflects the vertical trade patterns that characterize today’s production networks.

The complex trade and investment relations within international production chains need a conducive policy environment in order to work. There must be disciplines to ensure (i) the free flow of goods, information, persons and capital involved in the operation of value chains; and (ii) the protection of property rights, both tangible and intangible, held by multinational companies participating in these chains. All these disciplines are aimed at generating the legal certainty investors need to undertake long-term investment. In light of the above, developing and transition countries seeking to enter international production networks have worked to create an environment that makes them attractive to multinational corporations that are at the head of value chains. To this end they have, besides unilaterally...
opening their economies to foreign trade and investment, signed investment promotion and protection agreements as well as deep trade agreements with a number of partners, in particular those that are at the core of international production networks (the European Union, Japan, the Republic of Korea and the United States). Deep agreements are those whose scope goes beyond the elimination of tariffs and other border obstacles to trade in goods by also addressing a range of behind-the-border regulatory barriers to the workings of value chains.

Some of the areas addressed in deep regional integration agreements are also regulated by the World Trade Organization. Among them are trade in services, intellectual property rights and public procurement (this last area by means of a plurilateral agreement). However, deep regional agreements tend to establish disciplines that are broader in scope than under multilateral agreements. Deep agreements, moreover, often contain legally binding obligations on a range of issues not currently regulated by WTO that are relevant to the functioning of value chains. These include the treatment of foreign investment, competition policy, government procurement, capital flows, environmental and labour regulations, measures relating to the granting of visas and regulatory convergence.

In the final analysis, the expansion of production networks has created a demand for governance that has increasingly come to be satisfied by deep trade and investment agreements, especially North-South ones. But this has resulted in fragmentation of the global trading system: each region has seen a different trade agreement pattern take root, reflecting the preferences of the economy located at the centre of the respective “factory”. It is in this context that the recent emergence of mega-regional projects and mega-bilateral projects should be understood. They aim to harmonize, or at least to make compatible, the rules by which the various global “factories” work, facilitating the operations of multinational corporations operating in North America, Europe and East and South-East Asia.

The mega-regional negotiations under way have several things in common, despite their differences. One major common issue is the emphasis on regulatory convergence between normative frameworks in the countries involved. This refers to both goods trade (for example, technical regulations on automotives and sanitary rules for agricultural products) and trade in services (for example, prudential standards for financial services). These efforts increasingly extend to issues not usually associated with trade, such as environmental and labour regimes, the protection of intellectual property and personal data in the digital environment, the operation of State owned enterprises, and the possibility of using capital controls. These issues all have a bearing on important areas of public policy.

As regulatory standards converge with those prevailing in developed countries, Latin American and Caribbean participants in these negotiations could find the policy space they currently enjoy much reduced. Access to Internet content, for example, is hugely important in a global economy in which knowledge and innovation are key drivers of current and future competitiveness. If intellectual property protection in the digital environment were to prevail over other considerations, such as access to culture and knowledge, in trade negotiations such as TPP, this could have far-reaching impacts for developing country parties to the negotiations, including those in Latin America. The major strides the region has made in increasing Internet coverage in the past few years will stop short of having a real impact in terms of fostering growth with equality if access to digital content becomes more restrictive than it is now.

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3 For example, the trade agreements negotiated by the United States, Japan and the European Union take a substantially different approach to rules on investment, services, intellectual property and dispute settlement (see O. Rosales and S. Sáez (comps.), “Temas controversiales en negociaciones comerciales Norte-Sur”, Libros de la CEPAL, No. 106 (LC/G.2417-P), Santiago Chile, ECLAC, August 2010).
The mega-regional negotiations now under way will likely have a marked impact on the geographical distribution and governance of global trade and investment flows in the coming years. In practice, the magnitude of these initiatives, both in terms of the economic weight of the participants and in terms of their ambitious thematic agenda, could mean that by 2020 the rules of international trade will have been rewritten. But unlike the most recent major negotiations of this kind at the global level (the GATT Uruguay Round, completed in 1994), this time the new rules will all have been negotiated outside the multilateral framework and among a limited number of countries, primarily those more closely linked to production networks. In other words, regionally negotiated rules will become de facto world standards.

The emergence of mega-regional agreements could further reduce the viability of the Doha Round, whose agenda (set more than a decade ago) does not include several important governance issues relating to value chains. The existence of mega-regional agreements could also lead WTO to focus more on negotiating plurilateral agreements. In fact, in 2013 plurilateral negotiations are to kick off on trade in services, in addition to existing negotiations for extending the Information Technology Agreement, and the recent United States proposal to negotiate a plurilateral agreement to liberalize trade in environmental goods. Over the medium term, the conclusion of mega-regional negotiations would open space for WTO to regain its centrality in defining the rules of global trade. The next step after the conclusion of such agreements would be to attempt to make their outcomes compatible and eventually multilateralize them, a task for which WTO is the natural forum. Moreover, there are issues of great interest to developing countries (such as agricultural subsidies and abuse of antidumping measures in industrialized ones) that are not on the agenda of current mega-regional agreements. WTO is, then, still the only forum available for reaching agreements on these issues.

The implications of mega-regionalism for Latin America and the Caribbean are varied and complex, and depend, among other factors, on the production and export structure of each country and subregion, as well as their respective strategies for international economic integration. For example, Mexico, the countries of Central America and the Dominican Republic are closely linked to production networks centred in the United States: these ties have been strengthened by the North American Free Trade Agreement (NAFTA) and the Dominican Republic-Central America-United States Free Trade Agreement (CAFTA-Dominican Republic). And all of these countries have signed free trade agreements with the European Union. Accordingly, the parallel involvement of the United States in negotiations aimed at creating transatlantic and trans-Pacific free trade areas holds attractive trade and investment opportunities for these countries.

In the case of Mexico, the planned negotiations for expanding its free trade agreement with the European Union open a space for its eventual incorporation into the trade treaty between the United States and the European Union itself. And since the European Union is also in advanced negotiations for a similar agreement with Canada, in the medium term there could be movement towards an integrated transatlantic space encompassing the three NAFTA members that could take in the Central American countries as well. The cumulation of origin and the harmonization of rules that this process would bring about would open significant opportunities for the countries of Mesoamerica and the Caribbean to join transatlantic value chains. This possibility would also, in principle, be open to those countries of South America that have trade agreements with both the European Union and the United States. But it should not be forgotten that rules negotiated between two highly developed partners are not necessarily the best for or easily complied with by the countries of the region.

The various mega-regional negotiations under way, especially those between the United States and the European Union, could hasten the conclusion of negotiations for a trade agreement between the European Union and the Southern Common Market (MERCOSUR), which resumed in 2010 but have made little progress. The conclusion of the Transatlantic Trade and Investment Partnership (TTIP) could, in fact, make MERCOSUR agricultural exporters less competitive than their United States competitors in the European market. For Argentina, the Bolivarian Republic of Venezuela, Brazil and Uruguay, this would be compounded by the loss of Generalized System of Preferences (GSP) benefits in the European Union, as a result of their classification as upper-middle-income countries by the World Bank for three consecutive years.

The potential implications of TPP and the Regional Comprehensive Economic Partnership for the region are not as clear. On the one hand, the production linkages between Latin America and the Caribbean and Asia are less developed than those with the United States and Europe, reflecting a trade pattern that is markedly inter-industry. On the other hand, few countries of the region have trade agreements with both the United States and the main Asian economies. Those that do could, in principle, benefit from deeper integration with Asian and trans-Pacific value chains, although this would hinge on their production and export patterns.
The three countries of Latin America participating in TPP are an example. Mexico has built a modality of international integration strongly grounded in participation in value chains. This has put it in competition against a number of Asian economies, as is reflected in its large trade deficit with Asia. But this situation also opens alternatives for complementarity and cooperation, taking advantage of Mexico’s proximity and privileged access to the United States market. In contrast, Chile and Peru have positioned themselves as exporters of raw materials to Asia, with little sign of intra-industry trade. In fact, there has been little change in their export profile to Asia after the entry into force of the agreements the two countries have concluded with Asian countries.

Finally, mega-regional agreements are aimed at establishing governance mechanisms that meet the needs of value chains based in North America, East and South-East Asia and Europe. But production is much less integrated among the Latin American and Caribbean economies, and their economic integration agreements are less far-reaching. Mega-regionalism thus challenges Latin America and the Caribbean to deepen its own regional integration and to upgrade its participation in the international economy, regardless of whether it is based on natural resources, manufacturing or services. Obviously, there are differences of opinion over the best strategies for achieving this. What there can be no doubt about, however, is the pressing need to upgrade the region’s infrastructure in terms of logistics and transport, trade facilitation and multi-country initiatives to support innovation, training and SMEs. Progress in these directions would boost intraregional trade and increase its intra-industry component. This is where the challenge to regional integration seems to lie today: how to create the conditions for forming regional and subregional value chains to stimulate competitiveness and innovation and in which there is a viable place for SMEs.

C. Latin America and the Caribbean in value chains

An analysis of how the Latin American and Caribbean countries are positioned in value chains using available global trade data\(^4\) shows that their participation in production networks follows two distinctive patterns: either strong links with the United States and the vast Factory North America or a marked trend towards subregional production networks.

Among the value chains orientated towards Factory North America, Mexico and Costa Rica stand out as heavily engaged in production networks in the electrical goods and electronics, automotive, chemicals and petrochemicals and aerospace industries, as well as in the machinery and equipment and medical equipment and supplies sectors. Over the 2010-2011 period, these two countries’ seven largest industries accounted for between 95% and 98% of their total exports of intermediate goods to the United States (see table 3).

\(^4\) To identify how deeply the region’s countries are engaged in value chains, indices of intra-industrial trade in all intermediate, semi-finished and industrial goods were calculated to the three-digit level. The groups of industries with the largest presence in value chains were identified by the degree of intra-industry specialization in their bilateral trade with all partners, especially those with links to the world’s “great factories” (Factory North America, Factory Europe and Factory Asia) and in their intraregional trade. Chapter III presents the methodological criteria for analysis of the individual case studies in greater detail. A more comprehensive analytical approach would require interconnected input-output matrices (IOMs) for the countries of the region, but such information is unfortunately not available, or is not updated sufficiently often.
Table 3
Costa Rica and Mexico: presence of major industries in the “Factory North America” value chain
(Percentages of total exports of intermediate goods to the United States)

<table>
<thead>
<tr>
<th>Industries</th>
<th>Mexico</th>
<th>Costa Rica</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrics and electronics</td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>Automotive (and auto parts)</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>Aerospace</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Steel and metalworking</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>Chemicals and petrochemicals</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Medical equipment</td>
<td>7</td>
<td>39</td>
</tr>
<tr>
<td><strong>Seven main industries</strong></td>
<td><strong>95</strong></td>
<td><strong>98</strong></td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the United Nations Commodity Trade Statistics Database (COMTRADE).

A characteristic that these sectors share is the presence of—chiefly intensive— intra-industry trade, particularly in medium- and high-technology products. Another feature of trade within these production networks is its ability to create direct and indirect employment since it has the effect of widening the range of ancillary service providers with links to these sectors (design, consultancy, financial services, accounting, legal services, transport and freight, and electricity, water and gas).

Costa Rica and other Central American countries, especially Honduras and El Salvador, are closely bound into the United States textile-spinning and garment value chain. This trade relationship provides these countries with a source of foreign exchange and jobs but creates little value added and leaves them greatly dependent on imported inputs from the United States, the main supplier of raw materials used in the manufacture of garments in Central America for re-export back in the opposite direction. The exporters in the sector are North American or Asian multinationals that take advantage of the subregion’s proximity to the United States and lower labour costs to outsource labour-intensive manufacturing processes while maintaining control over the more sophisticated parts of the value chain (design, marketing and distribution).

With respect to production networks within the subregional integration blocs, value chains in intermediate goods can be found within certain groupings of countries in Latin America and the Caribbean, namely Costa Rica, El Salvador, Honduras and Guatemala in the Central American Common Market (CACM), Colombia, Ecuador and Peru in the Andean Community, and Argentina, Brazil and Uruguay in the Southern Common Market (MERCOSUR). This pattern excludes certain countries whose trade relations with their subregional partners are mainly inter-industrial in nature, i.e. Nicaragua in CACM, the Plurinational State of Bolivia in the Andean Community, and the Bolivarian Republic of Venezuela in MERCOSUR. Table 4 provides a breakdown of the major industrial sectors making up production networks in these subregional integration schemes.

The two largest industries in the subregional value chains examined are the chemicals and petrochemicals and steel and metalworking industries, which underpin a whole range of regionally important intermediate sectors and industries. One of these is plastics, for which the chemicals and petrochemicals industry provides materials for products such as pipes, bottles, and containers. The steel industry, meanwhile, serves the aluminium and steel products sector (with rods, bars, angles and profiles), for example. The wide variety of products in these two comprehensive value chains is linked to infrastructure and housing projects, which in turn create jobs and act as a driving force in the economy. A large proportion of the products of both industries are subsequently used in various processes in end-use sectors such as toy-making, footwear, agribusiness, pharmaceuticals and textiles and garments. Together, these industries account for about 50% of total exports of intermediate goods within the subregional blocs, and as much as 60% in the Andean Community (see table 4). The South American countries with the largest petrochemicals industries are Argentina, Brazil, and, to a lesser extent, Colombia.

In MERCOSUR, unlike in CACM and the Andean Community, trade relations are dominated by the automotive and auto parts and machinery and equipment industries. This is particularly true of trade between Argentina and Brazil, and also to a lesser extent between these two countries and Uruguay. Both industries have seized the opportunities offered by the sheer size of the enlarged internal market, tariff protection, and managed investment and manufacturing decision-making on the part of multinationals. Trade within the subregional blocs accounts for a relatively large share of these value chains. However, a significant proportion of the intermediate inputs required by Brazil’s industrial sector is imported from further afield, chiefly from China and other Asian countries.
Table 4
Subregional integration blocs: main industries in subregional value chains
(Percentages of total intraregional exports of intermediate goods)

<table>
<thead>
<tr>
<th>Industries</th>
<th>MERCOSUR</th>
<th>CACM</th>
<th>Andean Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agribusiness</td>
<td>3</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Textiles and garments</td>
<td>2</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Paper and cardboard</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>3</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Chemicals and petrochemicals</td>
<td>33</td>
<td>33</td>
<td>37</td>
</tr>
<tr>
<td>Steel and metalworking</td>
<td>16</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Electrical goods and electronics</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Automotive (and auto parts)</td>
<td>24</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Other industries</td>
<td>2</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td><strong>5 main industries</strong></td>
<td><strong>87</strong></td>
<td><strong>85</strong></td>
<td><strong>85</strong></td>
</tr>
<tr>
<td><strong>All industries</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the United Nations Commodity Trade Statistics Database (COMTRADE).

In CACM and the Andean Community, the pharmaceuticals (medicinal products and serums and dressings) and chemicals industries (toiletries, cosmetics and cleaning products) are of particular importance in trade relations, with these products accounting for almost 40% of trade within each of these blocs.

Although the value chains in electrical goods and electronics and in machinery and equipment weigh heavily in intra-regional trade, their share of total exports of intermediate goods from the Andean Community and CACM is no more than 4% and 1%, respectively. Only in MERCOSUR, where the machinery and equipment industry accounts for 8% of exports of intermediate goods, do these value chains make up a significant proportion of exports (see table 4 and figure 5).

In the light industries sector (agribusiness, textiles and garments and paper and cardboard) CACM and the Andean Community have a significant volume of trade in intermediate goods. They also show a large proportion of reciprocal trade, except in the garments chain, which has strong ties to Factory North America (see figure 5). The denim sector, in which input materials are sent to garment factories in Ecuador and Peru, is a good example of how such value chains work in this subregion. Examples in Central America are the dairy, confectionery, processed cereals and milled flour sectors, as well as processed goods in general.
What is striking here is the low level of trade within the subregional blocs in the electrical goods and electronics industry, which, as noted earlier, falls short of 4% of total trade in intermediate goods in any of the three blocs. In this industry, the bulk of exports go outside the region, particularly to the United States, and to other subregional blocs. In Brazil, in particular, much of the industry’s exports go to the rest of South America.

The economies of the Caribbean subregion show only a low degree of integration into value chains and limited intra-industrial trade. Trade here is mostly inter-industrial in nature, with Trinidad and Tobago providing the lion’s share of manufacturers serving the subregion’s smaller economies.

Empirical analysis of how economic agents participate in value chains —using trade microdata from countries where it is available— frequently shows that exporting SMEs consistently make up a high proportion of total exporters but provide only a small share of total exports. This points to the clear market predominance of a small number of large companies, which account for over 80% of the value of exports in the automotive parts value chain in Argentina, Brazil and Colombia, for example. The high concentration in the chain is evident in the fact that between 70% and 89% of all exporters in these countries are SMEs.

An equivalent analysis of light industry exports between countries in the subregional integration blocs shows that, although there are on the whole slightly fewer SMEs exporting within the blocs than exporting to the world at large, they account for a larger share of total exports, especially in the processed products and fuels and textiles and garment industries in Colombia and Guatemala. This highlights the importance of the subregional blocs as export markets for SMEs in these sectors.

This analysis also demonstrates the strikingly different ways in which the countries of Latin America and the Caribbean participate in production networks and regional and global value chains. A distinction needs to be made between Mexico and Central America, on the one hand, and South America and the Caribbean, on the other. The former group of countries are full and active participants in various value chains focused on the United States, both in goods (in the automotive, electronics and garment sectors, among others) and in services (call centres, information and communications technologies and other cross-border services). In the latter group, production networks and value chains are, with some exceptions, at an embryonic stage.

Both exogenous and endogenous factors affect the integration of the region’s countries into value chains and networks. Exogenous factors include characteristics such as a country’s geography, the size of its market and its natural resources. Endogenous factors are those which can be influenced by the action of public or private bodies —industrial or trade policy, for instance. Given the marked differences among key factors in the creation and development of value chains, it is important to distinguish between industrial networks, service chains and natural-resource-based networks.

With respect to natural-resource-based networks, the challenge lies in moving the companies involved towards links of the chain that embed more value added by means of local capacity-building in training and research and development and diverse activities to encourage use of ancillary services (quality control, logistics, product design, and so forth).

Empirical evidence indicates that a key factor in the creation of industrial networks is geographical proximity to a major manufacturing power, usually the largest and most technologically advanced country in its region. Such manufacturing giants tend to outsource certain (usually labour-intensive) processes to neighbouring countries, usually with a view to benefiting from their lower labour and operating costs. This is the role that the United States has played in North America in paving the way for the creation of the value chains that now include Mexico and Central America.

In South America, Brazil is ideally placed to play this role. However, since it imports little in the way of intermediate goods from other countries in the region (only 5% of its industrial inputs are imported) it is failing to absorb a significant quantity of intermediate industrial inputs from the rest of South America, with the exception of certain products from Argentina and, to a lesser extent, its MERCOSUR partners.

The endogenous factors most likely to help countries enter natural-resource-based and industrial value chains as exporters include the following:

- Tax policies designed to stimulate exports, a tool traditionally used in the region, particularly in free-trade zones. Beginning in 2016, under WTO rules the challenge lies in moving the companies involved towards links of the chain that embed more value added by means of local capacity-building in training and research and development and diverse activities to encourage use of ancillary services (quality control, logistics, product design, and so forth). Such policies will have to focus on other factors that are not directly linked to exporting as such.

5 As of January 2016, WTO member countries still applying tax exemptions related to export performance will no longer be allowed to do so.
The provision of adequate human capital, including engineers, technical experts and PhD-level specialists from first-rate universities and cutting-edge research institutes.

Domestic policies aimed at improving the business climate and the performance of domestic companies, particularly to end credit access problems, by attracting and promoting foreign direct investment and cutting red tape for access to foreign trade (trade facilitation).

The removal of cross-border trade barriers, particularly by addressing the serious deficiencies in highway infrastructure, the insufficient number of border crossings and the lack of policy coordination concerning customs unification and transport.

Coordinated moves to facilitate trade within the subregion’s customs services, particularly with regard to sanitary and phytosanitary matters.

Increasing the presence of Latin American companies in value chains and helping them enter sectors with greater value added may improve access to advanced technologies and best practices in global manufacturing. Joining value chains also means access to world-class inputs and services. The goods and services offered by countries and companies in these chains are therefore likely to have a competitive advantage in the global marketplace. However, realizing these potential benefits depends on the countries implementing an integrated package of domestic policies to increase productivity and reduce productivity gaps between sectors and companies of differing sizes.

This means making strides towards structural change in the sense of modernizing the manufacturing base, gradually incorporating SMEs along the way and providing them with support in overcoming major challenges in terms of training, partnerships, access to credit and technology, quality certification, traceability and reducing their carbon footprint, to name but a few. Addressing this series of challenges provides an opportunity to modernize regional cooperation and integration structures by shifting their focus towards these areas and launching multinational initiatives for these purposes. Coordinated progress on these issues is more likely to further regional integration and to develop subregional value chains than debates on trade policy or tariff elimination. This is a major piece of unfinished business in the process of regional integration.
The weak global economy takes a toll on Latin American and Caribbean trade

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Bibliography
A. Introduction

Projections at midyear 2013 suggest that the global economy will grow by less than forecast at the beginning of the year, despite improved financial conditions. The slowdown in emerging economies during the first half of the year led several international organizations to scale back their growth forecasts for the global economy this year. Between January and July 2013, the International Monetary Fund (IMF) (2013a) and United Nations (2013a) lowered their projections by between 0.1 percentage points and 0.2 percentage points, to 3.1%. This rate is the same as for 2012 and well below the annual average (4.8%) for the pre-crisis period (2003-2007). In the coming years, the global economy is expected to grow by about 4%, with developing countries accounting for the largest share. By contrast, the contribution of advanced economies will be limited by their persistent structural problems.

This year has been characterized by favourable financial conditions but a weak real economy, especially in industrialized countries. The central banks of the United States, Japan and the United Kingdom have injected large amounts of liquidity into the economy by buying government bonds and other assets. This policy, called monetary stimulus or quantitative easing, has brought down interest rates and contributed to large gains in the stock markets of these countries. The impact of this policy on the real economy has been questioned since it has produced new bubbles, for example in high-risk securities (junk bonds) and real-estate markets in the United States and other countries. Furthermore, quantitative easing has increased the volatility of financial flows, which flooded into emerging economies in 2011 and 2012. Over the course of 2013, capital flowed out of emerging economies in anticipation of a probable withdrawal of monetary stimulus in the United States towards the end of the year. These capital inflows and outflows led to sharp appreciations and depreciations, respectively, of the exchange rates of emerging economies.

Between April and June 2013, the eurozone recorded its first quarter of positive growth (1.2%) after a recession that lasted a year and a half. It took longer than expected to exit the recession (a fact that remains to be confirmed in the coming months) owing to slack demand, weakened by high and persistent unemployment, fiscal austerity, a credit crunch (especially in peripheral countries) and general uncertainty. Between January and July 2013, IMF and the United Nations dramatically reduced their projections for the eurozone. Cyprus, a eurozone member, suffered a severe banking crisis and received a partial bailout in March 2013. A mechanism introduced by the European Central Bank, outright monetary transactions (OMT), drove down risk premiums on sovereign bonds of the countries in the eurozone periphery. However, the resolution of bottlenecks (fiscal consolidation and high unemployment, among other problems) will weigh heavily on growth in the coming years.

Despite a massive monetary stimulus, the performance of the United States economy has improved only marginally. After growing by 2.8% in 2012, the country’s economy slowed in the first half of 2013 owing mainly to the automatic cuts (budget sequestration) that began in March 2013 and a drop in net exports. The costs and benefits for the financial sector and the real economy of the third round of quantitative easing that is currently under way have been widely debated. Expectations for 2014 include fewer budget cuts, stronger private consumption and investment, and growth nearing its potential of about 2.5%. This encouraging projection depends largely on Congress reaching an agreement to extend the time to implement the budget cuts needed to reduce the United States debt-to-GDP ratio.

In Japan, the novel economic policy of Prime Minister Shinzo Abe (referred to as “Abenomics”) seems to be achieving its aim, at least in the short term. This set of measures aims to double the monetary base in two years, introduce a strong fiscal stimulus and implement economic reforms. The impact has been positive in terms of halting deflation, boosting economic growth and exports, and prompting a stock market boom. Yet the fiscal austerity required to rein back public debt and eliminate other bottlenecks would reduce growth to 1.3% in the coming years.
The pace of growth in the largest emerging economies is faltering as their growth model shows signs of fatigue and demand from industrialized countries has dropped. China’s economy grew by 7.8% in 2012 and seems to be slowing further in 2013, particularly in the external sector, construction and foreign direct investment (FDI). At the same time, there are concerns about the rapid rise in lending and, in particular, the solvency of the unregulated financial system. In this context, the government announced a modest package of reforms in mid-2013, restricted credit growth and froze the construction of public buildings for the next five years. The biggest challenge facing the Chinese economy is moving from a growth model based on (public) investment and exports to one in which domestic consumption plays a greater role. India grew by 5.1% in 2012 and is expected to maintain this pace of growth in the coming years. The other three BRICS countries face greater challenges on the back of low growth in 2012: Brazil (0.9%), the Russian Federation (3.4%) and South Africa (2.5%). Weak international demand and lower commodity prices explain part of the decline in growth in these countries.

The global economic slowdown has been most apparent in the area of global trade. In 2012 and the first half of 2013, world trade volume expanded by 1.9% and 1.8%, respectively, and was outpaced by world GDP growth. This lacklustre growth is explained by the recession and reduced demand in the eurozone, which slowed trade in developing countries and drove down the prices of various metal products and some other commodities. Global trade is expected to pick up somewhat in the second half of 2013 and in 2014. In this setting, several countries are looking for ways to boost trade and expand their role in global value chains, for example, by negotiating plurilateral agreements (see chapter II).

Latin American trade has been hit by the weak international environment. During the first half of 2013, the value of Latin American exports fell by 1.7%, owing to a 0.6% decline in export volume and a 1.1% drop in its export prices. The sharpest falls were seen in exports to the European Union (7.9%), the United States (3.6%) and China (0.2%). In the first six months of the year, the steepest price drops were seen in coffee, sugar and bananas. For the second half of 2013, exports are expected to rise by 5% in value terms, which is partly attributable to the low export base in the year-earlier period. For the year as a whole, export value is projected to rise by 1.5%, which is a slight improvement on the 1.4% recorded in 2012 but falls far short of the 23.5% surge between 2010 and 2011. In the first half of 2013, imports increased by 4.7% in value terms on the back of increased private consumption in most Latin American countries. For 2013 as a whole, growth of 4.5% is projected, with import growth outpacing exports as the region’s trade surplus continues to narrow.

Recovery from the crisis has taken longer than for previous crises owing to the recent slowdown in the global economy and world trade. Although five years have passed since the start of the financial crisis, world trade has only just recovered its previous level. Trade rebounded faster after other crises, such as the Asian crisis in 1998 and the dot.com crisis in 2001. In the Great Depression of the 1930s, the low point for trade was reached four years after the onset of the crisis (see figure I.1A).

The scenario differs very widely from country to country as they emerge from the crisis. China is one of the countries that best weathered the crisis, maintaining robust levels of growth and seeing an almost 80% rise in its per capita income between 2007 and 2014. Other advanced countries, such as Canada, Germany, Japan and the United States, have barely recovered from the crisis and their levels of per capita GDP are only slightly higher than in 2007. Yet others, particularly in southern Europe, saw their per capita GDP shrink as a result of stubborn structural complications that, as of mid-2013, kept them still mired in recession (see figure I.1B).

Various indicators suggest that the slowdown bottomed out in mid-2013 and that the global economy could rebound slightly between the second half of 2013 and 2014. After three years of sluggish growth, industrial output is expected to reach its lowest level in 2013, and then the trend is expected to reverse, especially in advanced countries (see figure I.2B). Global growth should pick up slightly in 2014 as the economies of the United States, Japan and possibly Europe improve in relative terms (see figure I.2A). The contribution of advanced countries to global growth would therefore go from a third in 2013 to half in 2014, as developing economies lose momentum.

The prospect of a slight upturn in the global economy is threatened by various factors. In the short term, there is a risk of a possible escalation of the conflict in Syria. Increased tension in the Middle East could lead to a surge in oil prices, which would hurt the trade balance of net oil importers. Another risk is the possible destabilizing effects of the withdrawal of quantitative easing in the United States. These effects could include higher interest rates, economic
slowdown and exchange-rate appreciation. Emerging economies could face currency depreciation and speculative capital outflows. In particular, developing countries with a wide current account deficit would have to raise interest rates to fund it, which would undermine growth. In short, global financial markets would become more volatile as quantitative easing is scaled back. Other challenges include maintaining growth in countries following the exit from quantitative easing, a possible banking crisis in the eurozone, and the lack of an agreement in the United States on raising the public debt ceiling.

Another source of concern for Latin America and its foreign trade is the possibility of further slowdown in the Chinese economy. Nomura (2013) estimates that a 1-percentage-point contraction in Chinese GDP could drag down GDP growth in Latin America by 0.5 percentage points. Brazil and Chile are the Latin American countries that would be hit the hardest. Lower growth in China has a direct impact on export volumes from the region to China and on the prices of export commodities, particularly metals and minerals. These lower prices would have a knock-on effect on investment, revenues, the exchange rate, inflation and future growth. Furthermore, lower Chinese demand exerts downward pressure on growth in the United States, which in turn harms Latin American exports to this country.

Figure I.1
Selected countries: world trade and post-crisis recovery

A. Post-crisis world trade
(Number of months)

B. Per capita GDP, 2014 *
(Percentages with respect to the level in 2007)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of International Monetary Fund (IMF), World Economic Outlook Update, An Update of the Key WEO Projections, Washington, D.C., April 2013.

* Projections.
For the rest of this decade, growth in the industrialized countries will be low for several reasons. Most of these countries require several years of fiscal austerity to reduce their huge public debts, which were equivalent to 220% of GDP in Japan, 189% in Greece, 147% in Portugal, 144% in Italy and 110% in the United States in 2012 (OECD, 2013). According to some authors, such as Reinhart and Rogoff (2010), growth in countries with high levels of public debt may be very low. Another manifestation of the lasting eurozone crisis is the long process of bank deleveraging, which restricts credit growth and causes persistently high unemployment, depressed wages, loss of investment in physical and human capital, cuts in social benefits, erosion of social capital and a deterioration in income distribution.

Another factor holding back growth in advanced countries is population ageing: as their inactive population increases, so too will pension and health costs. To boost trade and their economies, the United States, Japan, the eurozone countries and some developing countries are negotiating megaregional trade agreements (see chapter II).

Global growth will be concentrated in the emerging economies of Asia, and the centre of the global economy will continue to shift from North to South and from the Atlantic to the Pacific. IMF (2013b) growth projections to 2018 indicate that industrialized countries will grow by an average of 2.3% per year, compared with 5.9% for developing countries. Within the latter group, China will have the highest average annual growth, at 8.4%. Developing countries will account for three quarters of global growth. In this period, China and India alone will be responsible for 40%. The world’s economic hub is therefore shifting towards developing Asia. The faster pace of growth in the South will speed its annual import volume growth, as well, to 7.7% for the South as a whole and 10.5% for China. In advanced countries, imports will grow by only 4.7%.
In this global context, the future quality and growth of Latin American trade depend considerably on the creation of regional value chains and the region’s links with China and the rest of Asia. World trade is increasingly built on value chains, which partly determine the growth and, in particular, the value added content of trade flows. Mexico and some countries in Central America are already integrated into North American chains, especially in the lower value-added links. South America and the Caribbean, by contrast, have formed few regional chains. Nevertheless, the two subregions have great potential in this regard insofar as they promote deeper regional trade in goods and services, along with investments in logistics and increased mobility of persons. These chains would above all add value to primary goods and some industrial products and services exported to the expanding markets in Asia (see chapter III).

**B. Slow growth in the industrialized countries**

1. The favourable financial situation contrasts with the weak real economy

The financial scenario over the past year has been dominated by the actions of central banks. In several industrialized countries, central banks have pursued an expansionary monetary policy to facilitate access to credit and stimulate growth. In the United States, the Federal Reserve has maintained a near-zero policy rate since late 2009. Japan’s central bank has applied a negative rate, while its counterparts in the eurozone and the United Kingdom adopted slightly higher rates, close to 0.5%. The European Central Bank raised its rate in 2011, when the situation was unfavourable but inflation expectations were higher, and subsequently reduced its rate several times between late 2011 and 2013 (see figure I.3A).

With interest rates at historical lows, some central banks have adopted non-conventional measures to boost access to credit and growth. The principal measure is quantitative easing. Under this policy, central banks purchase financial securities, which are added to their balance sheet, thus expanding the monetary base. The securities purchased include public debt and other assets, including mortgage-backed securities. This drives up demand for assets and brings down their yield and cost, as reflected by the interest rate. As a policy it thus reduces the cost of money and facilitates access to credit for consumers and businesses, which stimulates consumption and investment.

The United States and the United Kingdom have been the leading proponents of quantitative easing. In the United States, the Federal Reserve began to implement the third round of quantitative easing in September 2012 with monthly purchases of US$ 40 billion worth of treasury bonds. In December 2012, the monthly amount was increased to US$ 85 billion. In the United Kingdom, the central bank entered the fifth phase of asset purchases worth £ 50 billion (US$ 78 billion) in July 2012. Total purchases since March 2009 total £ 375 billion (US$ 591 billion).

The non-conventional monetary policy applied in the eurozone was different, though it was also classified as quantitative easing by some specialists. Since the start of the 2008 crisis, the European Central Bank has been lending funds directly to banks through fixed-rate tenders on a full allotment basis. The other temporary liquidity mechanisms for banks are main refinancing operations (MRO) and long-term refinancing operations (LTRO). As the two types of financing have led to the dramatic expansion of the European Central Bank’s balance sheet since late 2011, this mechanism could be considered an indirect quantitative easing policy.

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1. The monetary base, narrowly defined, is referred to as M0, and is made up of coins and banknotes in the national currency that are in circulation. A broader definition is M1, which includes M0 plus private-sector demand deposits in national currency held in the financial sector.
2. The first round of quantitative expansion took place between November 2008 and March 2010, and the second, between November 2010 and June 2011.
3. Since banks in the eurozone and Japan are relatively larger than in the United States and the United Kingdom, central banks chose to inject liquidity into the financial system directly instead of buying sovereign bonds (Fawley and Neeley, 2013).
The Bank of Japan has implemented the most recent and aggressive quantitative easing policy. It began in April 2013 by setting out to double the current monetary base, equivalent to 30% of GDP, by the end of 2014, primarily by purchasing government bonds and private securities worth US$ 1.4 billion. Relative to the size of its economy, Japan’s stimulus is larger than that of the United States or the United Kingdom (see figure I.3B). The main objective is to spur inflation and achieve an annual rate of 2% as soon as possible. A secondary goal is to double the average maturity of the Bank of Japan’s public debt portfolio from three years to more than six years.

**Figure I.3**
United States, Japan, United Kingdom and eurozone: monetary policy rate and monetary base expansion

A. Monetary policy rate, 2007-2013
(Percentages)

B. Monetary base expansion, 2008-2013
(Billions of dollars and percentages of GDP)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of International Monetary Fund (IMF), International Financial Statistics (IFS) [online] http://www.imf.org/external/data.htm and information from the central banks of the United States, Japan, the United Kingdom and the eurozone.

The benefits of quantitative easing and other non-conventional monetary initiatives have been widely debated. According to the Global Financial Stability Report, published by IMF in April 2013, these policies appear to have reduced banks’ vulnerability and have improved the financial system’s short-term stability. Certain indicators of bank soundness have also improved, though banks may need longer to fully repair their balance sheets.

Monetary stimulus in the form of quantitative easing has given a huge boost to stock markets. Expanding the monetary base directly increases the demand for and price of financial securities such as stocks and bonds. In the United States, the stock index has shown an immediate response to the successive rounds of monetary easing (see figure I.4). Wall Street suffered sharp falls at the end of the first and second rounds and was very sensitive to announcements regarding the conditions for winding down the third round in mid-2013. In the United Kingdom, too, quantitative easing boosted the stock market.
In 2012 and 2013 the behaviour of financial markets (for example, stock exchanges) diverged even further from the real economy in advanced markets. This decoupling presents a paradox, because robust financial markets push up asset values and improve the terms of access to financing, which should stimulate consumption and investment. However, the majority of consumers have seen scant improvement in their situation: in the United States, for example, the unemployment rate has fallen slowly and the labour participation rate has declined (see figure I.5). In the eurozone, the unemployment rate rose in 2012 and 2013, particularly in the peripheral countries. This, in turn, makes businesses reluctant to step up investment without first seeing higher sales. The anaemic economic situation is largely reflected in the quarterly GDP growth rates in the United Kingdom and the eurozone.

Sharp liquidity increases can also create new financial bubbles. The decoupling of the performance of stock markets, bonds and the real economy could be a sign that a financial bubble is forming. Furthermore, very low interest rates are encouraging investors to invest increasingly in high-risk financial securities (junk bonds) and banks are increasing their leverage — two factors that contributed significantly to the 2008 financial crisis. Property values also rose by more than 10% over the past year in the United States, while speculative capital flows may have played a role in real-estate bubbles in Australia, Singapore, Taiwan (Province of China) and the United Kingdom.

The possible negative impacts, in financial and real terms, of ending quantitative easing is a source of great concern. The prices of sovereign bonds could plummet if central banks were to sell these off, causing huge losses for the central banks themselves and pushing up long-term interest rates. This would, in turn, drive up the cost of consumption and investment, hampering economic recovery. Another possible consequence would be a massive return of capital flows from emerging economies, to the detriment of their stock exchanges, exchange rates, interest rates and current accounts.

2. The eurozone’s challenging fiscal and financial outlook

In the second quarter of 2013, the eurozone recorded positive growth for the first time in a year and a half, though the differences between member countries were marked. Italy and Spain remain in recession owing to the fiscal adjustment, low consumer and investor confidence and lack of access to credit. Meanwhile, Germany and some of the Nordic countries performed more positively. The unrelenting increase in unemployment in the eurozone, especially in the peripheral countries, is causing families to lose confidence and restrict consumption.
In May 2013, the deadline for countries to reduce their fiscal deficits was extended, with a view to curbing the recessionary effect of budget cuts. In 2012, massive budget cuts in the eurozone periphery (over 6% in Greece and Portugal and 4% in Spain) had a distinctly negative impact on growth, public services and poverty. In May 2013, the European Commission granted an additional two years to Spain, France, Poland and Slovenia and one year to Belgium, the Netherlands and Portugal to reduce their fiscal deficit to 3% of GDP. These more moderate adjustments have the full support of IMF, which acknowledged that it had underestimated the social and economic impacts. Despite this longer grace period, fiscal adjustment in the peripheral countries is still under way. For example, Spain would have to make cuts equivalent to 5.5% of GDP over the next three years to achieve the deficit target.

Outright monetary transactions (OMTs) were a key tool introduced by the European Central Bank in August 2012 to calm financial markets in the eurozone. Under this mechanism the European Central Bank could buy sovereign bonds in secondary markets in cases where countries faced soaring financing costs. Its introduction reduced risk premiums on credit default swaps in the countries of the eurozone periphery. To date, the European Central Bank has not yet applied this mechanism.

European banks still pose a systemic risk. The liabilities of eurozone banks (33 trillion euros) are equivalent to three and a half times the eurozone’s GDP. This is much higher than the corresponding comparison for Australia,

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4 IMF (2013d) criticizes its own handling of the Greek crisis in 2010. In particular, it acknowledges that it underestimated the negative effects that austerity policies would have in the country in terms of a deeper recession and exceptionally high unemployment.
exports were negative in the first quarter, as the year-on-year fall in exports was greater than for imports (see figure I.6B).

In connection with the latter, shale gas exploitation has lowered the cost of energy (see box I.1). Net investment also increased, particularly in the residential and energy segments. In connection with the latter, shale gas exploitation has lowered the cost of energy (see figure I.6B).

Increased net investment contributed to the recovery of the real-estate market. Investment also increased, particularly in the residential and energy segments. In connection with the latter, shale gas exploitation has lowered the cost of energy (see figure I.6B).

In 2013, the United States economy was modest. GDP grew by 1.1% in the first quarter and 2.5% in the third quarter of 2013. The main driver of growth was private consumption, which advanced at its fastest pace in two years, owing in part to the gradual decline in unemployment and to the increase in credit and consumer confidence. This contributed to the recovery of the real-estate market. Investment also increased, particularly in the residential and energy segments. In connection with the latter, shale gas exploitation has lowered the cost of energy (see figure I.6B).

In the first half of 2013, growth in the United States economy was modest. GDP grew by 1.1% in the first quarter and 2.5% in the third quarter of 2013. The main driver of growth was private consumption, which advanced at its fastest pace in two years, owing in part to the gradual decline in unemployment and to the increase in credit and consumer confidence. This contributed to the recovery of the real-estate market. Investment also increased, particularly in the residential and energy segments. In connection with the latter, shale gas exploitation has lowered the cost of energy (see figure I.6B).

Lower demand caused trade within the European Union to fall sharply. In 2012, intra-European exports fell by 7% and extra-European exports held steady. In the first quarter of 2013, the former contracted by 4% and the latter went up by 3%. The countries that depend the least on the European market (accounting for less than a 60% share in total exports) are France, Finland, Germany, Italy and Sweden.

3. The United States: budget cuts put a brake on growth

In recent years, and the difficulties involved in protecting the intellectual property rights of United States companies in China.

Two recent trends are making the United States an increasingly attractive production location. First, domestic energy costs are falling, thanks to the technological advances that have made possible the large-scale exploitation of vast shale gas reservoirs throughout the United States. The price of gas dropped by 57% between 2007 and 2012, according to the Bureau of Labor Statistics. Energy-intensive industries, such as chemicals, paper and cardboard, primary metals and non-metallic minerals, would benefit most from this trend. PricewaterhouseCoopers (2011) projects that 1 million new jobs could be created in manufacturing by 2025, thanks to these lower costs. Second, a new wave of robotization is expected to start by the end of this decade, which would automate production processes and reduce operating costs. An example of this new wave is the increasing use of 3D printing technology.

As at mid-2013, reshoring has so far been limited to specific cases, but it is expected to gather momentum, even though United States companies will undoubtedly leave a significant proportion of their activities in China. Two recent examples of reshoring are the relocation of a Ford Motor Company light truck manufacturing plant from Mexico to Ohio, and the transfer of two General Electric home appliance manufacturing plants from China and Mexico to Kentucky. At present, however, companies do not locate their entire production chain in one place, but rather take advantage of the best each country or region has to offer for each production link. As it is also vital to be close to customers in the most important markets, China is no longer seen just as a manufacturing location, but also as a large developing market where companies must have a presence.

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The fiscal cliff has been a significant drag on the economy this year, even though a last-minute deal was reached to halve its size. On 2 January 2013, Congress passed the American Taxpayer Relief Act, the main elements of which are the permanent extension of tax cuts for low- and middle-income groups and the suspension of the same for higher-income groups, the elimination of the 2% earned income tax credit, and the two-month postponement of several automatic spending cuts under the Budget Control Act of 2011 (sequestration). Since Congress failed to agree on an alternative strategy to cut the deficit, sequestration came into force automatically on 1 March 2013. In the short term, the overall impact of these measures is expected to be a reduction in the government deficit from 8.6% of GDP in 2012 to 5.9% of GDP in 2013, which would shrink GDP growth by about 1.75 percentage points this year (see figure I.6A) (IMF, 2013a; Bank of Canada, 2013). What is more, broad cuts in education, science and infrastructure could restrict potential future growth.

Unemployment has declined steadily, owing partly to a lower labour-market participation rate. In the medium term, the industrial sector could be a new source of employment. After peaking at 10% in October 2009, the unemployment rate edged slowly down to 7.4% in July 2013. Part of this decrease is explained by the falling labour-market participation rate, which went from 65.7% in mid-2009 to 63.4% in July 2013. New job creation of was another factor, even though the number of new jobs created in the first half of 2013 fell relative to the figures for 2011 and 2012. New jobs are being created not only in services, but also in the manufacturing sector, which is becoming much more competitive thanks to lower energy costs and a new wave of robotization (see box I.1).
The United States economy faces a number of challenges in the coming years. The main one, in the short term, is the timing of the exit from quantitative easing: too soon could hurt the fragile economic recovery, but too late could cause heavy financial losses and significant turbulence in international financial markets. Another challenge is fiscal consolidation to stabilize the public debt-to-GDP ratio, against the backdrop of rising costs associated with public health (Medicare and Medicaid) and education. In particular, Congress needs to reach an agreement on a complex combination of spending cuts and tax increases without endangering growth and income equality. The country also faces a decline in innovation, demonstrated indirectly by the lower contribution of total factor productivity and directly by the stagnation of spending on research and development and the number of patents.

4. Abenomics: a fresh approach in Japan

In 2013, the Japanese economy rebounded from its third recession in less than five years. GDP grew by only 1% per year on average in the decade leading up to the global financial crisis in 2008, and the country suffered a recession in 2008 and 2009. After rallying in 2010, the country went through another recession in 2011 caused, in part, by an earthquake. The post-earthquake recovery petered out over the course of 2012 and Japan slid back into negative growth for two quarters. Output and exports picked up in the first half of 2013. Business confidence is improving in part because of the rise in exports following the yen's sharp depreciation. The unemployment rate in June 2013 (3.9%) was the lowest since October 2008. In view of this momentum, several international organizations have revised upwards their growth forecasts for 2013. The United Nations (2013a), for example, increased its projection from 0.6% in January 2013 to 1.3% in June 2013.

This renewed growth is mainly attributable to an unprecedented set of economic policy measures referred to as “Abenomics”, which consist of three parts. The first is a large fiscal stimulus amounting to 10.3 trillion yen (2.2% of GDP), half of which is to be devoted to improving infrastructure. The government also increased spending on post-earthquake reconstruction by 4.4 trillion yen in the budget for 2013. This additional expenditure will widen the fiscal deficit to more than 10% of GDP. The second part consists of a massive monetary stimulus by doubling the monetary base with a view to boosting inflation to 2% over a two-year horizon. This should reduce interest rates and risk premiums and stimulate investment and consumption. The third component is a structural reform package announced in June 2013 to promote growth. It includes tax incentives for investment, the privatization of some infrastructure, the negotiation of free trade agreements (in particular, Japan joined the Trans-Pacific Partnership (TPP) negotiations in July 2013), energy sector reform and measures to facilitate business creation. The details of these measures have yet to be agreed, following the victory of the party of Prime Minister Abe in the upper house of parliament in July 2013.

Notwithstanding the short-term gains, Abenomics is an uncertain and risky strategy. Public debt reached 220% of GDP back in 2012, and the larger fiscal deficit this year (10.3% of GDP, according to OECD (2013)) will make it even more difficult to achieve the target of 3.2% by 2015. If the Government fails to stabilize its debt, financing costs could rise. The marked depreciation of the yen promotes exports, but also generates friction with trading partners that export similar products.

In the medium term, annual growth of just 1.3% a year is projected for the Japanese economy. Several factors weigh on future growth. The Government needs to implement decisive fiscal austerity measures in order to ease the high public debt burden. One such measure is raising the consumption tax from 5% to 8% in April 2014 and again to 10% in October 2015. Another challenge is implementing profound structural reforms in order to stimulate growth in the manufacturing sector, make the service sector more flexible, promote labour participation and improve education.
C. Developing economies are losing momentum

1. The BRICS countries

The cycle of expansion is weakening in emerging economies, including in the BRICS countries. Many emerging economies experienced a slowdown in 2012 and the first half of 2013 compared with the two previous post-crisis years (2010 and 2011) and the pre-crisis period (2003-2008). In 2012, Brazil grew by just 0.9%, the Russian Federation by 3.4%, India by 5.1%, China by 7.8% and South Africa by 3.6% (see figure I.7A). For 2013, even lower rates of growth are projected for China and the Russian Federation, while the other three members of the BRICS are expected to pick up slightly. Other developing countries also saw slower growth, including Indonesia, Turkey and the transition economies of Eastern Europe.

A number of factors are responsible for the lower growth rates recorded recently in the BRICS countries. In response to the above-target inflation expectations in several overheating economies in 2010 and 2011, central banks raised monetary interest rates in late 2011, which in turn slowed growth. Another factor is that the degree of decoupling from the advanced countries was lower than expected. The difficulties in the eurozone and Japan and the weak performance of the United States reduced demand for imports and foreign direct investment in emerging economies. Weakening international demand also affected commodity prices, which was a drag on the growth in the export value of these products for the emerging economies.

One source of instability has been the inflows and outflows of speculative capital, partly as a result of the monetary expansion policies in the United States, Japan and the United Kingdom. For example, it is estimated that between 30% and 40% of the increase in the monetary base in the first and second rounds of quantative easing in the United States left the country as speculative capital flows (Saran, 2013). On the one hand, such capital inflows led to increased investments in businesses in these countries and credit expansion, along with a higher valuation of listed firms (see figures I.7B and I.7D), with potential benefits for consumption and investment. On the other hand, these capital inflows contributed to the appreciation of the BRICS currencies, which slowed exports and boosted imports. With the improved performance of the United States economy, rising interest rates and the likely tapering of quantitative easing in the near future, capital was withdrawn from BRICS, prompting sharp depreciations of their currencies especially in mid-2013 (see figure I.7C).

The BRICS countries have expressed concern regarding this issue on several occasions. In 2010, Brazil used the term “currency war” in connection with the appreciation of the Brazilian currency against the dollar partly attributable to the first round of quantitative easing in the United States. In March 2012, the BRICS countries stated in the Delhi Declaration that these policies were exacerbating the volatility of financial flows and commodity prices. In February 2013, the finance ministers and central bank presidents of the Group of 20 countries made a commitment in Moscow to refrain from competitive devaluations. Nevertheless, the United States continued with its third round of quantitative easing, and Japan also began implementing a large-scale monetary expansion policy.

The presidents of the BRICS countries held their fifth annual meeting in Durban, South Africa, on 26 and 27 March 2013 and decided to create a joint development bank. This bank would be the group’s first formal institution; it would finance long-term infrastructure projects in the BRICS countries and, in the future, in other developing countries. Negotiations began on the amount of capital that the bank will have and the share of each country, as well as the bank’s governance and location, among other issues. Another outcome of the meeting was the agreement to establish a contingent reserve arrangement (CRA) with an initial size of US$ 100 billion, in order to help the BRICS countries to mitigate short-term liquidity pressures. The group also came to an agreement on the provision of development support for the African continent.\(^5\)

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\(^5\) The title of the meeting in Durban was “BRICS and Africa: Partnership for Development, Integration and Industrialisation”. The five countries offered their cooperation to seek synergies between investment in infrastructure and the manufacturing and agricultural sectors in Africa. Two cooperation and co-financing agreements were signed: one for infrastructure and the other for sustainable development.
2. The challenges of rebalancing China’s economy

In the first half of 2013, China’s economy showed clear signs of a slight economic slowdown (see figure I.8A). GDP growth slowed from 7.7% in the first quarter to 7.5% in the second, pulled down mainly by the secondary sector. From January to July 2013, industrial production grew by less than 10%. The manufacturing slowdown was confirmed by the purchasing managers indices in the first seven months of the year, which showed less optimism regarding future growth prospects. Services grew faster than the average rate for the economy: retail sales surged by about 13% in recent months, while transport was up by 9.3% in the first seven months of the year. The tertiary sector also had the highest rate of investment in the first half of the year, with a year-on-year increase of 23%, compared with 16% in the secondary sector. The growth of services, which are largely non-tradable, is a sign that the Chinese growth model is shifting to domestic consumption as an engine of growth, in line with the strategy defined by the authorities.

Early in the second half of 2013, some signs suggested that the slowdown could be coming to an end. Indeed, several indicators improved in July, including those for industrial production, imports, real estate investment and FDI recovery.
Comparing the figures for recent years, the slowdown in China’s trade and foreign direct investment is remarkable. Exports from January to July 2013 grew at an annualized rate of just 5.1%, while imports rose by 10.9% in the same period. Imports fell in the case of some countries of origin (Brazil, India, Japan, the Philippines and the Russian Federation) and products (grain, aluminum, copper and iron, machinery and vehicles). If these trends continue, it is likely that China’s trade surplus will continue to narrow in relation to its average over the last few years, owing to the smaller increase in global demand and continuing imports of consumer goods. China’s slowing imports of metals and certain other raw materials played a part in the drop in world prices. China’s copper consumption, for example, shrank by 6.8% in the first quarter 2013, which could bring down the price of copper by more than 10% this year compared with 2012. A similar pattern is seen in relation to iron and steel. In the first half of 2013, FDI grew by just 4.9% with respect to the same period in 2012.

The financial sector was one source of domestic concern as rapid credit growth and concomitant solvency issues led to an unexpected liquidity crisis. In recent months, private lending continued to grow rapidly (at over 20%), as did the money supply, which in turn threatened to drive up inflation expectations. The macroeconomic conditions and regulatory changes (to avoid lending to barely solvent companies or institutions), along with a late intervention by the People’s Bank of China, caused a liquidity crisis that sent the interbank rate skyrocketing in mid-June (see figure I.8B). The People’s Bank of China managed to calm the banking market by offering liquidity directly to the largest banks, thus reducing the credit risk associated with lending to smaller commercial banks. In order to curb credit growth, the government is increasing restrictions on lending, which will fuel the debate on risk, banks’ financial fragility and the public debt of local and regional governments. Shadow banking is a particular source of concern in this connection.

With the slowdown in the export sector, the biggest challenge for Chinese growth is to reorient the growth model towards domestic consumption. The authorities are seeking to reverse the trends of recent years, which saw the consumption share of GDP decline while the contribution of investment soared, in large part because of the large public stimulus in response to the financial crisis. Although consumption rose by a cumulative 12.8% to July 2013 owing to higher household income (up by 9.6% in 2012 and 6.5% in the first half of 2013 in urban households, and by a little more in rural areas), it has not grown by enough to offset weaknesses in other sectors and falls short of the government’s target (14.5% in 2013). Conferring a more prominent role on domestic consumption and the tertiary sector poses unprecedented challenges in an economy that is used to pursuing growth on the basis of investment and exports. In particular, increased consumption requires workers to save less. This is difficult, since saving is fundamental to finance spending on education, health and pensions given the inadequate coverage of the public system.

To avoid a sharper-than-expected slowdown, the government adopted a modest package of measures in July 2013. In contrast to the large stimulus package of 2008 that sought to prevent the financial crisis from taking an even greater toll on the economy, this package consists of several reforms to boost the private sector: eliminating taxes on businesses with sales of less than 20,000 yuan (US$ 3,250); cutting paperwork time and costs for export firms; and providing new financial products for private investors to encourage their participation in the expansion of the country’s railway network. Another measure was the Bank of China’s decision to liberalize interest rates on savings is fundamental to finance spending on education, health and pensions given the inadequate coverage of the public system.

The last year has seen a sharp rise in lending and poor allocation of credit. In part this stems from the 2008 stimulus plan that sought to sustain growth in the worst phase of the global financial crisis. Between 2008 and 2013, the credit-to-GDP ratio expanded from 120% to 200%. As a consequence, credit is being channelled through structures that are not part of the balance sheet of financial institutions. These loans are financing housing and infrastructure projects promoted by local governments; the frequent refinancing of these loans suggests that some may be unrecoverable.
3. Growth is moderating in the rest of Asia

Growth in India has been slowing since 2009, to 5.1% in 2012; for 2013 and beyond the economy is seen as unlikely to return to pre-crisis growth rates. The pace of growth of 2012 was the slowest in a decade, owing to low external demand, weak consumption and an aggressive fiscal adjustment (United Nations, 2013b). Economic growth this year could outpace last year’s by as much as half a percentage point as the service sector rebounds.

The 10 countries of the Association of Southeast Asian Nations (ASEAN) are expected to grow an average 5% in 2013, which is similar to the pace in 2011 and 2012 but slower than in the pre-crisis years. All of the countries have been hit by sagging exports owing to weaker demand from China, India and the eurozone area and lower prices for export commodities like coffee. But in the Philippines and other economies, the shrinking external sector is being offset by private consumption, which accounts for more than 50% of GDP thanks to lower unemployment and rising wages. The four largest ASEAN economies have seen surging foreign direct investment and fixed-capital investment in 2013, and governments stepped up fiscal spending. But these countries are experiencing increased capital flow volatility: massive monetary expansion in the United States and Japan has sparked substantial capital inflows and exchange rate appreciation. In July 2013, announcement of a possible stimulus tapering in the United States triggered capital outflows, currency depreciation and stock market slides.

Projections for the ASEAN economies for the next 20 years are positive. Indonesia, Viet Nam, Malaysia, the Philippines and Thailand are expected to be among the major economies of the world. Singapore and Brunei Darussalam will continue to increase their already-high per capita income. And Cambodia, Lao People’s Democratic Republic
and Myanmar will see rapidly improving social indicators. These prospects are enhanced by new trade negotiations in the area on, for example, the Regional Comprehensive Economic Partnership among the countries referred to as ASEAN+6 and the free trade agreement between the European Union and Japan (discussed in chapter III), which are enhancing production integration in the area and boosting productivity (ECLAC, 2013a).

The ongoing emergence of the economies of Asia is one of the hallmarks of the twenty-first century. Estimates are that this region will contribute nearly 60% of the growth of global output by 2025. By that same year 4 of the 10 largest economies in the world are expected to be in Asia: China, India, Indonesia and Japan. By 2030, East Asia is expected to account for 23% of global GDP, topping Europe (22.5%) and North America (19.2%) (Okamura, Onuma, and Takehama, 2010).

Asia’s economic success can be attributed in part to the medium- and long-term development strategies adopted by a number of countries for different reasons. In 2012, the government of Australia laid out a road map for further integration with Asia, stressing the role of innovation in this effort. In China, the government is seeking to reorient its growth model towards domestic consumption. Indonesia has set about to remake itself with a view to joining the group of the top 10 major economies of the world by 2025. In 2013 Japan defined a set of long-term economic, fiscal and monetary strategies for breaking the deflationary, low-growth cycle. In the Republic of Korea, the new administration’s directives seek to build a more skilled labour force and promote inclusive and sustainable development. Lastly, Singapore is stressing boosting workforce competencies, deepening entrepreneurship and leveraging its role as a global and regional hub city.

The national strategies of the Asian countries have a number of things in common. In a global context in which innovation and knowledge are becoming the main drivers of economic progress, the strategies taking shape in Asia stress investing in science and technology and developing human capital through quality education at all levels. A number of these strategies target greater economic integration and regional cooperation and put various trade initiatives front and centre in this regard (see table I.1).

<table>
<thead>
<tr>
<th>Strategy document</th>
<th>Innovation and technology</th>
<th>Investment in human capital</th>
<th>Trade and regional integration policies (Emergence of Asia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australia in the Asian Century White Paper (2012-2025) National Research Investment Plan (2012-2013)</td>
<td>Join the group of the 10 most innovative countries worldwide by 2025 Promote partnerships in innovation, in particular with Asian countries</td>
<td>Build Asian culture in schools and in the public and private sectors by requiring the learning of at least one priority Asian language Raise the standing of the education system to be one of the top five worldwide by 2025 Invest 5.4 million Australian dollars in higher education and research in 2013</td>
</tr>
<tr>
<td>China</td>
<td>Hu Jintao’s report to the Eighteenth National Congress of the Communist Party of China (2013-2020)</td>
<td>Increase R&amp;D spending to 2.5% of GDP by 2020 Increase contribution of science and technology to economic growth to 60% Reduce imported technology to 30% by 2020</td>
<td>Raise the education level of the entire population Train innovative professionals Develop preschool education and modern vocational education Require completion of full secondary education cycle</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Masterplan for Acceleration and Expansion of Indonesia Economic Development (MP3EI) (2011-2025)</td>
<td>Increase R&amp;D funding to 1% of GDP in 2014 and 3% in 2025</td>
<td>Align study areas and programmes with the economic development potential of each economic corridor Promote community higher education institutions for training competent mid-level professionals</td>
</tr>
<tr>
<td>Japan</td>
<td>Revitalization strategy (2013-2020)</td>
<td>Make Japan number one in innovation worldwide by 2018 Boost technology transfer, doubling university-industry partnerships by 2030</td>
<td>Cut long-term unemployment by 20% by 2018 and increase job mobility to 9% Boost the employment rate of women (aged 25-44 years) to 73% by 2020 Achieve 10 universities ranked in the top 100 worldwide by 2018</td>
</tr>
</tbody>
</table>
D. The impact of weak global demand on international trade

1. Trade growth to stand still in 2013

World trade underperformed in 2012, expanding by less than the global economy. After a strong post-crisis rebound in 2010, growth in global trade volumes fell to 5.2% in 2011 and just 2% in 2012 (WTO, 2013) (see figure I.9). This lacklustre performance was caused by difficulties in the advanced economies, especially in the eurozone, where high and rising unemployment, fiscal austerity and a credit crunch ate into demand for imports. Excluding intra-European trade (which declined by 7% in value terms), global trade volumes were up by 3.2%. In a world increasingly made up of value chains, sluggish demand in Europe was a drag on the exports and imports of a number of developing countries. In Asia, China’s exports posted the sharpest growth, while India and Japan saw theirs fall. Africa was the only region where imports climbed by more than 10% in 2012. In value terms, world trade has virtually stalled, with the price of commodities, such as cotton, coffee, coal and iron, plummeting by more than 20%.

Figure I.9

World, North and South: trade volume growth, 2008-2013

(January 2008 index=100)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of information from the Netherlands Bureau of Economic Policy Analysis (CPB).
Global trade in services increased by 2% in value terms in 2012, with significant differences between countries. United States exports rose by 4%, while European countries saw declines that, in Greece and Portugal, exceeded 16%. Developing countries posted the strongest export growth rates: between 5% and 6% in 2012. At the global level, the sectors that grew the most were information technology and information services (6%), construction services (3%) and other business services (2%). Exports fell in some sectors, such as financial services (-4%) (WTO, 2013).

September 2013 brought a downward adjustment of global trade growth projections for 2013, which are expected to be only marginally higher than in 2012. WTO trimmed 0.8 percentage points off its April 2013 projection, to 2.5% for the entire year, owing primarily to the prolonged recession in the eurozone and the slowdown in emerging economies. Thus, 2013 would be the second year in a row that global trade has grown more slowly than global GDP, marking a break with the pattern seen since the mid-1980s, when trade grew at almost double the pace of GDP. The United Nations (2013a) estimated that the volume of world trade in 2013 would have been 30% higher had there not been a financial crisis.

Many countries and regions saw very different trade trends in the first five months of 2013 compared with 2012. Between January and June 2013, export volumes in all countries and regions grew more slowly than during the same period in 2012, with the exception of emerging Asia. The sharpest drop in the first half of this year was seen in Japan, where year-on-year growth in volumes slowed to 8.3% owing to sluggish demand in Europe and the United States. The dollar price of Japanese exports fell by 8.4% during the same period, owing mainly to the 21% exchange-rate depreciation of the Japanese yen against the United States dollar. Imports fell in the advanced countries and expanded in the developing regions between January and June 2013. In short, the United States, Japan, Africa and the Middle East recorded a slowdown in exports and imports in the first half of 2013 compared with 2012, while the opposite happened in the eurozone and emerging Asia (see figure I.10).

![Figure I.10](image)

**Figure I.10**

**Selected countries and regions: trade performance, 2012 and 2013**

(Percentages)

A. Exports

B. Imports

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of information from the Netherlands Bureau of Economic Policy Analysis (CPB).
Commodity prices moved up and down in opposite directions throughout 2012, so the overall commodity price index closed the year at levels similar to year-end 2011 (see figure I.11). In the first half of 2012, the prices of most of these commodities posted negative variations. This was particularly the case with energy products and metals, which were hit by the deepening eurozone crisis and a slowdown in emerging economies, especially China. By contrast, during the second half of the year climate factors that reduced the supply of certain agricultural products (such as maize, wheat and soybeans), political instability in several oil-producing countries, and new expansionary monetary measures in the European Union and the United States drove commodity group prices up.

![Figure I.11](Commodity prices, January 2009 to July 2013 (Monthly indices, 2005 average=100))

The widest variation in prices for 2012 as a whole was in food, which rose by some 11% between year-end 2011 and December 2012. Energy products slid 3.5% during the period; there was virtually no change in minerals and metals (see table I.2, column 3). But a look at the average price indices for each year shows drops in all groups of non-energy products, with the sharpest declines in minerals and metals (around 17%) and agricultural raw materials (some 13%). Energy products posted a very slight increase (0.7%). As a result of these variations, the overall average commodity price index for 2012 was 3.2% lower than for the previous year (see table I.2, column 6).

![Table I.2](Commodity prices: overall index and by commodity group, 2012 and 2013 (Percentage rate of change))

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from International Monetary Fund (IMF), IMF Primary Commodity Prices.
There is no clear commodity price trend for the first half of 2013, although there was a general downtrend in the closing months of the period. The main contributing factors have to do with stagnation in the eurozone countries and the slowdown in China, which have revived concerns about global economic prospects for the year. This has been compounded by the rebounding supply of certain agricultural products, although stocks of several of them are still low.

For the main commodity exports of the countries of Latin America and the Caribbean, the widest variations were in iron, with the average annual price dropping 23% (see figure I.12). Like other metals, iron was hit by China’s economic slowdown and concerns as to global economic growth, compounded by an increase in the supply of iron. These factors also affected the price of copper, which slumped nearly 10% over the average for 2011. Soybeans rose 11% during the period as adverse weather conditions in several countries ate into supply. The price of oil was affected by political instability in a number of producing countries and by uncertainty as to the performance of the global economy. These factors fed ups and downs throughout 2012, with an average value barely 1% higher than the previous year.

The price of iron surged in the first quarter of 2013, driven largely by a major stock build-up in China, the largest consumer of iron. Although cooling Chinese demand, concerns as to the performance of the global economy and further increases in supply reversed this increase in the second quarter, the average price of iron for the semester was still up 18% compared with the average for the previous six months (see figure I.14). By contrast, these factors were reflected in copper price trends, which fell by nearly 4%. The average price of soybeans slumped as well, by almost 8%, as supply recovered. There was virtually no change in the average price of oil. Here, too, this was owing to up and down movements during the period pulling in opposite directions (in response to weak demand, increasing supply, stock build-up and continuing geopolitical tensions in the Middle East).

Commodity prices are expected to dip slightly for 2013 as a whole. International agencies and organizations such as the Economist Intelligence Unit, the International Monetary Fund and the World Bank project that the prices of most of these products will close the year down slightly from the previous year. The main reasons are demand weaknesses stemming from the still fragile recovery in the advanced economies and the slowdown in China, coupled with a rebounding supply of agricultural products hit by adverse weather conditions in 2012. But some agricultural products are still subject to upward pressures associated with structural demand factors (in particular, population growth and urbanization in developing countries, and biofuel production), plus the risk of potential supply-side constraints related to new climate problems, because stocks of many of these products are at all-time lows (EIU, 2013). Crude oil is also subject to supply risks arising from geopolitical tensions in various producing countries. For metals, the greatest risks are linked to the performance of the Chinese economy.
2. **Trade policy**

In November 2013 it will be 12 years since the start of the World Trade Organization Doha Round. Although negotiations have been essentially stalled for several years, WTO members are making an effort to reach some agreements during the ninth session of the Ministerial Conference, which will be held in Bali, Indonesia, in December 2013. The main focus is an eventual agreement on trade facilitation (see box I.2).

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**Box I.2**

Preparations for the ninth session of the Ministerial Conference of the World Trade Organization

The ninth session of the World Trade Organization (WTO) Ministerial Conference, to be held in Bali, Indonesia, from 3 to 6 December 2013, will be marked by the Doha Round impasse after 12 years of negotiations and by the emergence of mega-regional trade negotiations. In this context, the outcome of the Bali meeting is critical to the effectiveness of WTO as a forum for negotiation and for drafting new trade rules.

The central goal set for Bali by several countries is to reach a trade facilitation agreement that will expedite the cross-border movement of goods. To that end, the idea is to improve articles V, VIII and X of the General Agreement on Tariffs and Trade (GATT).a The negotiations will also seek to enhance technical assistance and support for capacity-building in developing countries and facilitate cooperation between customs and other competent authorities on these issues. According to some estimates, a multilateral agreement in this area could increase global exports by between US$ 33 billion and US$ 100 billion per year and boost world GDP by US$ 67 billion per year (Moïse, Orliac and Minor, 2011; Mann, Otsuki and Wilson, 2004).b While trade facilitation is part of the Doha Round agenda, the countries that are pushing for an agreement on this matter in Bali have proposed that it be implemented regardless of what happens in the other areas of negotiation.

There are still a number of obstacles in the path of a trade facilitation agreement in Bali. For example, there are not yet enough commitments on technical assistance and capacity-building in developing countries. Many of these countries have expressed their concern at the prospect of having to take on costly and hard-to-implement obligations. And the developed countries (in particular, the United States) have called for any trade facilitation commitments that are negotiated to be clear and legally binding. In July 2013, there were still many sticking points, including customs cooperation, transit, pre-shipment inspection, customs agents and consularization fees.

Trade facilitation is not the only item on which it is hoped that agreements will be reached in Bali. In the area of agriculture, a group of 33 developing countries led by India and Indonesia has proposed that developing countries be exempted from the commitment to lower their subsidies for purchasing food from farmers at prices that are above international levels, for distribution to vulnerable populations. This is in addition to the proposal put forth by another group of developing countries (the G20, led by Brazil), for the developed countries to halve their agricultural export subsidies by the end of 2013. The United States and the European Union, both of which have extensive agricultural subsidy programmes, have resisted this proposal. Also on the Bali agenda are a range of topics related to development and most-favoured-nation treatment for developing and less developed countries.

After the August recess, WTO members will have only three months to try to reach agreements that may be formalized in Bali. These efforts will be guided by the new WTO Director-General, Brazil’s Roberto Azevêdo, who will take office on 1 September 2013.

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As international production chains take root there is growing demand for new rules regulating trade and foreign direct investment within value chains. These rules often concern matters not addressed by World Trade Organization (WTO) agreements. This, combined with the stubborn Doha Round impasse, has given rise to new sets of broad regional and trans-regional negotiations in what has been referred to as mega-regionalism. Chapter II provides an overview of the main factors behind this phenomenon and of some of the main mega-regional negotiations under way.

The recent increase in the number of protectionist measures has been a negative signal for world trade, although their impact still seems limited. Between June 2012 and May 2013, governments around the world adopted 431 trade restrictive measures; 183 more were in the process of being adopted. Group of Twenty (G20) countries were responsible for 65% of the trade restrictive measures implemented during this period. Trade defence measures (26% of the total) were the most frequently employed (anti-dumping duties, countervailing duties and safeguards), followed by subsidies and bailouts (22%) and tariff hikes (15%). The country most affected has been China, whose trade interests have been negatively impacted almost 1,000 times by the actions of its trading partners since November 2008 (Everett, 2013).
The WTO Dispute Settlement Body (DSB) has remained very active, handling 14 new disputes between September 2012 and August 2013. It is still the most important forum in the world for the resolution of trade disputes. Changes in global trade (owing to sustainable development, the emergence of global value chains, and the growing role of China and other emerging economies in the new world order) have expanded the DSB agenda from a strictly trade-policy oriented approach to challenges of public policies aimed at regulating these issues. Box I.3 looks at some of the most significant cases that are currently pending in the DSB.

Box I.3
Recent trade disputes at the World Trade Organization

(i) Trade disputes relating to environmental policies and goods

In recent years, several countries have implemented public policies aimed at promoting the renewable energy sector by means of regulated-tariff and local-content requirements. Canada’s Ontario province requires that renewable-energy companies seeking to benefit from certain rates must use solar photovoltaic or wind power equipment with a minimum local content ranging from 25% to 60%. The European Union and Japan brought cases against Canada concerning these measures, which seek to promote local producers. In May 2013 the Appellate Body ruled that the measures adopted by Canada resulted in preferential treatment for local producers and were therefore inconsistent with national-treatment commitments under GATT and the Agreement on Trade-Related Investment Measures. There are two other ongoing disputes over similar measures focused on solar energy: one initiated by China against the European Union in November 2012 and another filed by the United States against India in February 2013.

(ii) Suits relating to public health protection

In 2011, Australia enacted legislation requiring plain packaging for all tobacco products in order to decrease consumption and protect public health. In May 2013, Cuba challenged these measures; the Dominican Republic, Honduras and Ukraine had already done so in 2012. Cuba holds that the measure is inconsistent with GATT, the Agreement on Technical Barriers to Trade and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). These challenges reveal the delicate balance between the multilateral trading system and the protection of public health. At the writing, a panel had been set up to handle the dispute filed by Ukraine; consultations are under way concerning the other challenges.

(iii) China’s ongoing participation in the Dispute Settlement Body

China has been a party in 6 of the 14 cases initiated in the World Trade Organization (WTO) since September 2012. This has been the pattern in recent years: after playing a rather passive role early in its WTO membership, China has become one of the main users of the dispute settlement mechanism (mainly as respondent).

During 2012-2013 China filed two cases. One was with the United States with regard to the use of trade safeguard instruments against its exports based on measures targeting non-market-based economies. The other was with Canada with respect to European regulated-tariff measures (see point (i) above). China has been named in four disputes, reflecting growing concern among its trading partners about its State-owned enterprises and the methods used by China to impose duties. With regard to State-owned enterprises (or those with special privileges), the United States requested consultations regarding Chinese measures giving preference to automobile and autoparts companies, and Mexico requested consultations concerning support for producers and exporters of apparel and textiles. Japan and the European Union both recently filed complaints against anti-dumping duties imposed by China on stainless steel seamless tubes.

(iv) Participation by Latin America and the Caribbean

A number of intraregional disputes emerged during 2012-2013. In December 2012, Panama requested consultations with Argentina on measures relating to trade in goods and services. Although there are three ongoing cases in which Argentina is being sued by the United States, the European Union and Japan for requiring import licences, this case was the first to broaden the scope of the dispute to include regulations that impact trade in services. Panama claims that these measures, which affect taxes, financial services and registration of companies, are contrary to commitments under the General Agreement on Trade in Services and GATT. A panel to examine this issue has been established but not yet composed.

Argentina has been especially active in the Dispute Settlement Body over the past year. In addition to these four disputes in which Argentina is a respondent, there are four others where it is the complainant. These include two cases against the European Union with respect to measures on the importation of biodiesel and two cases against the United States with regard to the import of lemons, livestock and meat. This period is Argentina’s most active in terms of complaints since it joined to the World Trade Organization.

In June 2013 Panama requested consultations with Colombia on its implementation of compound tariffs on imports of textiles, apparel and footwear. Panama claims that these measures are inconsistent with Colombia’s commitments under GATT. This is the third case filed by Panama against Colombia affecting bilateral trade in this area in the past six years.

Lastly, in April 2013 Guatemala requested consultations with Peru on the imposition of an additional duty on imports of certain agricultural products such as rice, sugar, maize, milk and some dairy products. Guatemala holds that the measures taken by Peru are inconsistent with GATT, the Agreement on Agriculture and the Agreement on Customs Valuation. In July 2013 a panel was formed to rule on this dispute.

E. Latin American and Caribbean trade

1. Foreign trade in the first half of 2013

During the first half of 2013, the value of goods exports from Latin America and the Caribbean were down by 1.7% compared with the same period in 2012 (corresponding to a 1.1% drop in prices and a 0.6% reduction in volume). Prices fell the most in Chile, Central America and the Southern Common Market (MERCOSUR). Regional goods imports rose by 4.7% on the back of a 0.5% contraction in prices and a 5.3% increase in volumes. The largest increases were observed in South America and the Caribbean. Overall, the biggest boost to imports came from increased volumes, since prices dipped, except in Chile and MERCOSUR, where prices fell by more than the regional average (see figure I.13).

Only six countries recorded positive growth in the value of their goods exports in the first half of the year: Argentina, El Salvador, Mexico, Paraguay, the Plurinational State of Bolivia and Uruguay. Of this group, the Plurinational State of Bolivia and Paraguay stand out in particular. In the former, the value of natural gas exports (the country’s main export, accounting for 50% of its total export bill) increased by 21%. In the latter, agricultural exports, especially soybeans, shot up by over 60%. Other countries saw negative growth in exports, with the largest declines in Guatemala, Honduras, Peru, Nicaragua and the Bolivarian Republic of Venezuela. Only four countries experienced a reduction in the value of goods imports (Guatemala, Honduras, Nicaragua and Peru) (see table I.3).
In addition to the overall drop in exports to the European Union caused by weak demand in that region, the negative export growth rates recorded in 10 of the 16 countries included in table I.3 also reflect the effects of lower domestic demand in Latin America and the Caribbean. Indeed, there has been a drop in intraregional trade across the board (see table I.3).

Table I.3
Latin America: foreign trade of goods by main destinations, January to June 2013
(Percentage rate of growth over the year-earlier period)

<table>
<thead>
<tr>
<th>Region or country</th>
<th>Exports</th>
<th></th>
<th>Imports</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Latin America and the Caribbean</td>
<td>United States</td>
<td>European Union</td>
<td>Asia</td>
<td>World</td>
<td>Latin America and the Caribbean</td>
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<tr>
<td>Latin America</td>
<td>-6.1</td>
<td>-3.6</td>
<td>-7.9</td>
<td>5.0</td>
<td>-1.7</td>
<td>-6.0</td>
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<td>-1.9</td>
<td>-17.7</td>
<td>14.8</td>
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<td>-0.3</td>
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<td>10.3</td>
<td>11.1</td>
<td>-4.5</td>
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<td>3.4</td>
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<td>-6.6</td>
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</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information from the countries.

By destination, goods exports from Latin America and the Caribbean to the European Union and to other countries in the region declined by the most during the first half of the year, contracting by 7.9% and 6.1%, respectively. The smallest reductions were in goods exported to Asia (except China), specifically the ASEAN countries and Japan, which offset the lower growth in the value of exports to China, which, after expanding by 13% in the first half of 2012, declined marginally (0.2%) in the first half of 2013. The value of exports to the United States fell by 3.6% during the same period. Mexico, the region’s leading supplier of goods to the United States, saw a slight upturn in the value of its exports to that market (1.6%).

In terms of products, the highest increases were observed in exports of agricultural products, particularly soybean complex (seeds, grains, oils and oilcakes) and frozen meat.

As for imports, despite the slowdown seen in the countries in the region, imports from outside the region increased, while those from other countries within the region decreased by 6%. This is a reflection of the greater procyclicality of intraregional trade, especially the highly demand-elastic manufactures component. Demand was hit hard by slackening economic activity in Europe and the United States (see table I.4).

8 There has been a notable expansion in exports from Paraguay and Uruguay to China. In addition to soybeans, frozen meat exports have increased exponentially (Uruguay XXI, 2013).
Table I.4
Latin America: foreign trade in goods, first half of 2011 to first half of 2013
(Percentage rate of growth over the year-earlier period)

<table>
<thead>
<tr>
<th></th>
<th>Exports (January to June)</th>
<th>Exports (January to June)</th>
<th>Exports (January to June)</th>
<th>Imports (January to June)</th>
<th>Imports (January to June)</th>
<th>Imports (January to June)</th>
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<td>3.9</td>
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<td>-7.9</td>
<td>21.9</td>
<td>10.9</td>
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<td>5.0</td>
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<td>4.6</td>
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<td>11.9</td>
<td>0.5</td>
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<tr>
<td>Other countries in Asia</td>
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<tr>
<td>Latin America</td>
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<td>3.4</td>
<td>-6.1</td>
<td>29.6</td>
<td>1.1</td>
<td>-6.0</td>
</tr>
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</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information from the countries.

2. Foreign trade growth projections for 2013

Considering the pattern of foreign trade in the region in the first half of 2013 and the information available up to July for Argentina, Brazil, Chile, Mexico and the Plurinational State of Bolivia, the value of regional exports is projected to increase by 1.5% for the full year and that of imports by 4.5%. The values for Latin America (that is, without the countries of the Caribbean Community (CARICOM)) would be 2% and 3.7% higher, respectively. These figures are lower than the preliminary forecasts presented by ECLAC with the information available for the first four months of the year, which were for increases of 4% and 6%, respectively (ECLAC, 2013b). The figures for the latter part of the first half-year (May and June) showed a decline in the region’s external trade figures, due mainly to continuing uncertainty and persistently sluggish external demand, especially in the European Union, China, the region itself and, to a lesser extent, in the United States.

Goods exports picked up during the second half of the year by around 4.5%, recovering from the slow performance in the first half. Despite this, exports from the region will be less buoyant than imports. For the second year in a row, export values from Latin America and the Caribbean will rise by less than 2% (see table I.5).

For the year as a whole, the most significant increases in export values are expected in Argentina, El Salvador, Paraguay, Plurinational State of Bolivia and Uruguay, which are the countries that recorded the most vigorous growth in the first half-year. The sharpest decreases are expected in the CARICOM countries, Brazil, Cuba, Guatemala and Peru, with the low growth attributable especially to declines in Brazil and Peru, which accounted for 23% and 4%, respectively, of the region’s export bill. In terms of destinations, exports bound for the European Union are expected to decline by 6% and those for the United States by 3%.

In the second half of 2013, imports are expected to continue to rise by around 4%, although purchases will be down in Argentina, Brazil, Chile, Paraguay, Plurinational State of Bolivia and various Central American countries. In the latter subregion, the historical monthly figures show a significant slowdown, especially in the first quarter of the year (SIECA, 2013) (see table I.5).

During the first half of 2013, the region accumulated a trading surplus of close to US$ 9 billion, concentrated mainly in the South American countries. For 2013 as a whole, the higher import bill will result in a dramatic fall in the region’s surplus position to US$ 8 billion, down from US$ 41 billion in 2012. The only countries with trade surpluses will be Argentina, Bolivarian Republic of Venezuela, Brazil, Chile and, to a lesser degree, Colombia.
### Table I.5
**Latin America and the Caribbean: foreign trade in goods, 2012 and 2013**
*(Percentage rate of growth over the year-earlier period)*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>January-June</td>
<td>July-December</td>
<td>January-June</td>
<td>July-December</td>
<td>January-June</td>
<td>July-December</td>
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<td>3.0</td>
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</tr>
<tr>
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<td>2.0</td>
<td>3.6</td>
<td>3.9</td>
<td>3.5</td>
</tr>
<tr>
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<td>2.1</td>
<td>0.4</td>
<td>6.3</td>
<td>4.1</td>
</tr>
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<td>-7.3</td>
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<td>6.3</td>
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<td>3.1</td>
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<td>11.1</td>
<td>-0.1</td>
<td>7.8</td>
<td>10.0</td>
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<td>0.1</td>
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<td>5.9</td>
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<td>-30.9</td>
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</tbody>
</table>

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information from the countries.

a Preliminary figures issued by the statistical offices, customs and central banks of the countries of the region.

b ECLAC projections.

c Owing to the lack of official data, the basic information was obtained from mirror statistics of the countries that present information on a monthly basis (United States and the countries of the European Union and of Latin America and the Caribbean) and from statistics published by the International Monetary Fund (IMF).

In terms of products, the sharpest falls in exports are expected to occur in the mining and petroleum sector, and to be of the order of 6% for the region as a whole, the countries most affected being Brazil, the leading iron-ore exporter, and Chile and Peru, the leading copper exporters. Even if the export value of petroleum trends upward (because of higher prices in the September to December period or geopolitical tensions in the Middle East), the higher value of mineral and oil exports will not be sufficient to offset the sharp drops in price and volume (-9.4% in value terms) observed in the first half of the year (see table I.6). Petroleum exports from Argentina, Bolivarian Republic of Venezuela, Brazil, Colombia and Ecuador have recorded much lower values. The most marked declines in export volumes were seen in Brazil, where crude oil exports fell by half in the period January-July 2013, compared with the same period of 2012. The main destinations that experienced this sharp reduction in value and volume were the United States, China and India, the main markets for this product (SECEX, 2013). The highest rises are expected to occur in exports of agricultural produce and livestock, and manufactures (see table I.6).

In 2013, growth in exports is expected to be driven by greater volumes, as prices will remain at comparatively low levels. Figure I.14 shows the historical price index of the ten main export products from the region and projections for the period 2013-2015. In the recent past, price levels have been systematically above those recorded in the 1980s and 1990s. This is true even when real price values are taken into account (ECLAC, 2012).
Table I.6
Latin America: foreign trade in goods by main sector, 2012 and 2013
(Percentage rate of growth over the year-earlier period)

<table>
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<td>Manufactures</td>
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</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information from the countries.

a Preliminary figures issued by the statistical offices, customs and central banks in the countries of the region.
b ECLAC projections.

Figure I.14
Latin America and the Caribbean: prices of principal exports\(\textsuperscript{a}\)
(Index 2005=100)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the World Bank, the International Monetary Fund (IMF) and the Organization for Economic Cooperation and Development (OECD).

\(\textsuperscript{a}\) The data for 2014 and 2015 are projections.
Export volumes performed better than prices in all the countries of the region except the Plurinational State of Bolivia. MERCOSUR countries faced more moderate prices for the soybean complex as well as for iron, especially in the case of Brazil. Chile and Peru sustained sharper drops than the average owing to the steep fall in the price of copper (one of their main exports), which is forecast to be of the order of 6% in 2013. Among the Central American countries, the most significant price reductions occurred in exports of coffee, sugar and bananas. In the case of the latter, the accumulated price decline in the first half-year was 12% (Central Bank of Honduras, 2013). Export prices for gold and silver, especially from Honduras and Nicaragua, declined by 15% and 23%, respectively.

In the case of imports, the most noteworthy increase has been in volume terms. More stable oil prices in the first half of the year, coupled with less expensive food and agricultural products such as wheat, maize, rice and oilseeds, will result in price declines in Chile and the countries of Central America. The currency appreciation had an impact on the higher volumes imported (see table I.7).

### Table I.7

<table>
<thead>
<tr>
<th>Region/subregion/country</th>
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<th>Imports</th>
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<td>Volume</td>
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<td>14.0</td>
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<td>Colombia</td>
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<tr>
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<tr>
<td>Caribbean Community (CARICOM)</td>
<td>-5.2</td>
<td>-2.8</td>
</tr>
</tbody>
</table>

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC) on the basis of official information from the countries for the period January-July 2013.

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9 Export prices for natural gas from the Plurinational State of Bolivia remained above the international average owing to long term contracts signed by companies with their main consumers within the region: Argentina and Brazil. The contract with Brazil expires on 31 December 2019.
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B. International production networks and their impact on mega-regionalism
C. Transatlantic Trade and Investment Partnership agreement negotiations
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   2. Transatlantic trade and investment
   3. Potential economic impacts of the Transatlantic Trade and Investment Partnership
   4. Main contents
D. Trans-Pacific Partnership negotiations
   1. Background
   2. Main contents
   3. Negotiation challenges and outlook
E. Regional Comprehensive Economic Partnership
F. Conclusions
Bibliography
A. Introduction

Since the early 2010s, and with particular intensity in recent months, a number of far-reaching trade negotiations have been in the works worldwide. Among them are a Transatlantic Trade and Investment Partnership agreement between the United States and the European Union; a Free Trade Agreement between the European Union and Japan; a Regional Comprehensive Economic Partnership among the 10 member countries of the Association of Southeast Asian Nations (ASEAN), Australia, India, New Zealand, China, Japan and the Republic of Korea; and a Free Trade Agreement among the latter three countries. These four processes (formally launched in 2013), come on top of the Trans-Pacific Partnership (TPP) negotiations under way since 2010 encompassing 12 countries of Latin America, North America, Asia and Oceania. All of these initiatives — referred to in the literature as mega-regional or mega-bilateral negotiations — are expected to have a profound impact on the global trade and investment architecture in the coming decades, especially in view of the continued impasse at the World Trade Organization (WTO) Doha Round.

While the burgeoning number of regional trade agreements has been a global trend since the 1990s, the recent mega-regional negotiations have features that set them apart from most of the existing agreements. First is the number and size of the economies concerned: all of them account for significant proportions of world output, population, trade and foreign direct investment (see table II.1 and figure II.1). Second (and related to the above), all of these initiatives go beyond the essentially bilateral approach of most of the existing regional arrangements and aim to create vast integrated economic spaces, whether Asian, transatlantic or trans-Pacific. Third, the thematic agenda is far more extensive and complex than has traditionally been the case, including a significant number of areas not covered by the WTO agreements.

Table II.1

<table>
<thead>
<tr>
<th>Grouping</th>
<th>Number of Countries</th>
<th>Population</th>
<th>GDP</th>
<th>Goods exports</th>
<th>Goods imports</th>
<th>Foreign direct investment inflows</th>
<th>Foreign direct investment outflows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Comprehensive Economic Partnership</td>
<td>16</td>
<td>3,398</td>
<td>21,189</td>
<td>5,236</td>
<td>5,232</td>
<td>329</td>
<td>325</td>
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<td>Trans-Pacific Partnership</td>
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<td>7,92</td>
<td>27,558</td>
<td>4,339</td>
<td>5,188</td>
<td>406</td>
<td>609</td>
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<td>Transatlantic Trade and Investment Partnership</td>
<td>29</td>
<td>6,30</td>
<td>22,548</td>
<td>6,602</td>
<td>6,823</td>
<td>260</td>
<td>446</td>
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<tr>
<td>Free Trade Agreement European Union-Japan</td>
<td>29</td>
<td>6,30</td>
<td>22,548</td>
<td>6,602</td>
<td>6,823</td>
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<td>446</td>
</tr>
<tr>
<td>World</td>
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<td>71,707</td>
<td>18,401</td>
<td>18,601</td>
<td>1,351</td>
<td>1,391</td>
<td></td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of International Monetary Fund (IMF), World Economic Outlook Database, for population and GDP; April 2013; World Trade Organization (WTO) for exports and imports; and United Nations Conference on Trade and Development (UNCTAD), for foreign direct investment.

1 By mid-June 2013, 282 regional trade agreement were in force and had been reported to the World Trade Organization; 22 of them (8%) entered into force before 1990. See WTO, Welcome to the Regional Trade Agreements Information System (RTA-IS) [online] http://rtiais.wto.org/UI/PublicPreDelRepByElf.aspx [date of reference: 17 June 2013].

2 According to Acharya (2013), 81% of the regional trade agreements in force as of March 2013 are bilateral.
Section B of this chapter reviews the main changes in how production and trade are organized; these changes are at the root of the mega-regional negotiations currently taking place. Sections C, D and E look at three negotiations that are particularly important because of the economic weight of the participants and their position in international supply chains: Transatlantic Trade and Investment Partnership, Trans-Pacific Partnership, and Regional Comprehensive Economic Partnership, respectively. Lastly, section F sets out a number of conclusions.

**B. International production networks and their impact on mega-regionalism**

Since the late 1980s, lower trade and foreign direct investment barriers worldwide, combined with falling transport costs and advances in information and communication technologies, have spurred the development of North-South production and supply networks. In such networks, also known as value chains, multinational companies headquartered in developed countries move or outsource part of their production processes to developing countries or transition countries. This geographical fragmentation of production takes place through various channels; among them are foreign direct investment, trade in intermediate goods and service outsourcing.

Simply put, the idea is to combine technology, innovation and know-how from developed countries (headquarter economies) with the lower cost of labour in developing countries (factory economies) (Baldwin, 2012, p. 5).

3 At the time of writing this chapter, the Trans-Pacific Partnership negotiations have been under way for more than three years; Regional Comprehensive Economic Partnership and Transatlantic Trade and Investment Partnership talks have only just begun. For all three, neither the text nor any other content of the negotiations has been made public. That is why the analysis set out in this chapter is based on secondary sources such as academic journals, reports prepared by the governments of the participating countries and news reports.
Integration into international production networks (particularly but not exclusively in their more knowledge-intensive segments) can bring a number of benefits to developing countries. One of the biggest is the potential for access to new technologies or business know-how that can boost the sophistication of their production and export base (Lim and Kimura, 2010). Participation in value chains can also be a powerful tool for the internationalization of small and medium-sized enterprises, which can gain access to these chains through direct or indirect exports, that is, by supplying goods or services to larger export firms. Wignaraja (2012) presented evidence in this regard for five ASEAN member countries, showing that the highest rates of small and medium-sized enterprise participation in production networks were in Malaysia and Thailand. It is precisely these two countries in the sample that are more fully integrated in such networks.

In industries characterized by production networks (for example, the automotive, aviation, electronics and garment industries), final goods are, increasingly, not produced in just one country. Research and design, manufacture of parts and components, assembly, marketing and distribution are carried out in a number of countries through the interaction of multiple companies (or subsidiaries of a single multinational one). So, rather than specializing in the production of final goods from beginning to end, countries are starting to specialize in certain tasks or segments of the production process. As a correlate, the import content of export products is increasing. Between 1995 and 2007 the ratio between global exports measured in value added terms and their gross value fell from 78% to 71%. In other words, the re-export of intermediate inputs accounts for almost 30% of total trade (WTO, 2013, p. 82).

Despite the falling cost of transport, communication and data processing, coordinating production processes in a number of countries is still a complex task, especially when they are far apart. Trade within production networks, where a product can cross borders several times in various stages of production, is particularly sensitive to the costs arising from distance, including delivery delays. That is why the major value chains have a clear regional dimension (WTO, 2011, p. 112; Lim and Kimura, p. 6; Bianchi and Szpak, 2013, p. 5). There are three major production networks (“factories”) in the world: Factory Europe (Germany being the hub), Factory North America (based in the United States) and Factory Asia (originally centred in Japan and more recently in China) (Baldwin, 2012, p. 5). The three “factories” have high rates of intraregional trade (see table II.2), of which intermediate goods are an important component, especially in the case of Factory Asia (see figure II.2). This reflects the vertical trade patterns that characterize today’s production networks.

Each “factory” is a highly integrated economic space. In the case of Factory Europe, the core is the single market comprising the 28 members of the European Union with its four freedoms (free movement of goods, services, persons and capital). The member countries of the European Free Trade Association (Iceland, Liechtenstein, Norway and Switzerland) are also part of the single market; Turkey has since 1995 had a customs union agreement with the European Union. Comprising this production macro-region are several economies in North Africa and the Middle East, as well as a number of former Soviet republics. Since 2011 the European Union has been negotiating what are called deep and comprehensive free trade areas with Armenia, Georgia, Morocco, Moldova and Ukraine; Egypt, Jordan and Tunisia are expected to be added.

### Table II.2

<table>
<thead>
<tr>
<th></th>
<th></th>
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<td>European Union</td>
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<td>64.4</td>
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<td>49.4</td>
<td>49.7</td>
<td>50.5</td>
</tr>
</tbody>
</table>


* a Includes China, Japan, the Republic of Korea the 10 member countries of the Association of Southeast Asian Nations (ASEAN), Hong Kong Special Administrative Region of China, and Taiwan Province of China.

There is a difference between production networks and supply chains. The former tend to be primarily regional; the latter are usually global in scope. For example, Latin American countries such as Brazil, Chile and Peru are major suppliers of iron and copper used in a number of Asian industrial production networks.

In this chapter, the definition of intermediate goods is the one used in Fung, García-Herrero and Siu (2009). This includes the products listed as “Parts of...” in revision 2 of the Standard International Trade Classification (SITC), such as textiles, machinery and transport equipment, manufactures of metals and other manufactures.

Croatia formally became European Union member number 28 on 1 July 2013.

Switzerland participates partially in the single market.
to the list soon. The idea behind these agreements is the gradual integration of those countries into the European Union’s single market. That is why they encompass advanced disciplines in areas such as investment, trade in services, government procurement and technical standards.

**Figure II.2**

**Selected groupings: proportion of intermediate goods in intraregional exports, 2000-2012**

(Percentage of total value of intraregional exports)

![Graph showing selected groupings of intermediate goods in intraregional exports, 2000-2012](image)

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations, United Nations Commodity Trade Statistics Database (COMTRADE).

*Includes China, Japan, the Republic of Korea, the 10 member countries of the Association of Southeast Asian Nations (ASEAN), Hong Kong Special Administrative Region of China, and Taiwan Province of China.*

By the 1960s, Factory North America was already operating between Canada and the United States, especially through binational production networks in the automobile sector. But its scope expanded substantially with the 1994 entry into force of the North American Free Trade Agreement (NAFTA), which linked the two economies with Mexico. This spurred the development of production linkages between Mexico and the United States, particularly through the establishment of assembly plants or maquilas in sectors such as automobiles, clothing and electronics. The countries of Central America are part of this economic space too; they are linked to Mexico and the United States by free trade agreements with each (in the latter case the Dominican Republic is included as well).

Factory Asia usually means the economic space made up of China, Hong Kong Special Administrative Region of China, Japan, the Republic of Korea, Taiwan Province of China and the 10 members of ASEAN. These economies of East and South-East Asia are closely linked by industrial production networks. This integration dates back to the 1980s, when Japanese multinationals began offshoring certain operations as they sought lower labour costs and greater proximity to key natural resources. Particularly since its accession to the World Trade Organization in 2001, China has displaced Japan as the hub of Factory Asia and become the chief assembler worldwide of a wide range of final consumer goods using intermediate goods imported from the rest of the region (WTO/IDE-JETRO, 2011, p. 74).

The complex trade and investment relations within international production chains need a conducive policy environment in order to work. There must be disciplines to ensure (i) the free flow of goods, information, persons and capital involved in the operation of value chains; and (ii) the protection of property rights, both tangible and intangible, held by multinational companies participating in these chains. The first kind of discipline includes the liberalization of infrastructure services (transport, logistics, telecommunications, financial services and the like), the international mobility of capital, and the lowering of tariff and non-tariff barriers to trade in intermediate goods and the export of raw materials. Among the disciplines of the second type are those relating to the protection of the various categories of intellectual property (such as patents, trademarks and industrial designs), as well as those that provide certain guarantees to foreign investors, such as mechanisms for settling disputes between investors and the State, timely and adequate compensation in case of expropriation, and freedom to repatriate capital and profits (Baldwin, 2012, p. 15).

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In light of the above, developing and transition countries seeking to enter international production networks have worked to create an environment that makes them attractive to multinational corporations that are at the head of value chains. To this end they have, besides unilaterally opening their economies to foreign trade and investment, signed investment promotion and protection agreements as well as deep trade agreements with a number of partners, in particular those that are at the core of international production networks (the European Union, Japan, the Republic of Korea and the United States). Deep agreements are those whose scope goes beyond the elimination of tariffs and other border obstacles to trade in goods by also addressing a range of behind-the-border regulatory barriers to the workings of value chains.

Some of the areas addressed in deep regional integration agreements are also regulated by the World Trade Organization. Among them are trade in services and intellectual property rights. However, these agreements tend to establish disciplines that are broader in scope—the so-called WTO-plus obligations—than under multilateral agreements. And deep agreements tend to contain legally binding obligations on a range of issues not currently regulated by WTO (so-called WTO-X) that are relevant to the functioning of value chains. These include the treatment of foreign investment, competition policy, government procurement, capital flows, environmental and labour regulations and measures relating to the granting of visas (Horn, Mavroidis and Sapir, 2010; WTO, 2011, pages 128-145).\(^9\)

The main exception (relatively speaking) to this pattern is China. Like other developing economies seeking integration in international production networks, China went through a marked process of unilateral opening that started back in the late 1970s. The levels of openness achieved by China after more than two decades of reforms were reflected in its Protocol of Accession to WTO in 2001. Subsequently, China has signed numerous free trade agreements, both within and outside of Asia (ECLAC, 2012a, p. 44).\(^10\) However, they tend to be considerably less deep than those negotiated by the European Union, Japan, the Republic of Korea or the United States.

In practice, the vast size of the Chinese economy has meant that China has not so far needed to sign deep integration agreements (beyond the obligations acquired upon acceding to WTO) in order to attract foreign investment and gain a prominent role in international production chains. But this seems to be changing. On the one hand, in July 2013 China agreed to initiate negotiations with the United States for signing a broad agreement on the promotion and protection of investments.\(^11\) On the other hand, China is currently negotiating its accession to the WTO Agreement on Government Procurement, whose members up to now are almost exclusively industrialized countries and newly industrializing Asian economies. It also remains to be seen how ready China is to undertake more demanding commitments in areas such as services, investment and intellectual property in the context of the ongoing negotiations on a trilateral free trade agreement with Japan and the Republic of Korea, as well as in the broader framework of the Regional Comprehensive Economic Partnership.

In the final analysis, the expansion of production networks has created a demand for governance that has increasingly come to be satisfied by deep trade and investment agreements,\(^12\) especially North-South ones (WTO, 2011, pages 111-113 and 145-150). This trend has been boosted by the continuing impasse at the World Trade Organization Doha Round negotiations. But the result has been fragmentation of the global trading system: each region has seen a different trade agreement pattern take root, reflecting the preferences of the economy located at the centre of the respective “factory”. Accordingly, the agreements negotiated by the European Union with the countries in its immediate geographic environment are similar among themselves but differ in major aspects from the family of free trade agreements negotiated by the United States with a number of countries of Latin America and Canada (Acharya, 2013, p. 160). In Asia, the fragmentation is even greater; there are several families of trade agreements, in particular the ones negotiated by ASEAN, China, Japan and the Republic of Korea. It is in this context that the recent emergence of mega-regional projects and mega-bilateral projects should be understood. They aim to harmonize, or at least to

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9. The WTO Agreement on Trade-Related Investment Measures prohibits the use of certain performance requirements applicable to foreign investment. The General Agreement on Trade in Services contains some rules applicable to foreign direct investment aimed at the provision of a service. But the World Trade Organization does not have a comprehensive agreement on foreign direct investment.

10. These include agreements with three countries of Latin America: Chile (2005), Peru (2009) and Costa Rica (2010).


12. Among the latter, the agreements on the promotion and protection of investments are the most common tool. Worldwide, 2,857 such agreements had been signed by the end of 2012 (UNCTAD 2013, p. 101). More and more, deep trade agreements contain disciplines on investment similar to those in investment promotion and protection agreements.
make compatible, the rules by which the various global “factories” work, facilitating the operations of multinational corporations operating in North America, Europe and East and South-East Asia.

**C. Transatlantic Trade and Investment Partnership agreement negotiations**

1. **Background**

In February 2013 the European Union and the United States announced their intention to negotiate a “twenty-first-century” free trade agreement —the Transatlantic Trade and Investment Partnership— with the aim of creating a fully integrated transatlantic market. These negotiations have a number of precedents, such as the New Transatlantic Marketplace Agreement proposed in the late 1990s, which was not successful, and the Framework for Advancing Transatlantic Economic Integration, signed in 2007.

The intention to launch Transatlantic Trade and Investment Partnership (TTIP) negotiations was announced following release of the final report of the High Level Working Group on Jobs and Growth. The report concluded that it would be of mutual benefit to sign a trade agreement covering liberalization of goods and services, investment and regulatory harmonization. The parties have committed to ensuring that the agreement reflects the specificity of the transatlantic relationship and attains deeper levels of integration than previous trade agreements did.

Beyond its economic weight and likely impact on the global agenda, TTIP is of particular interest: unlike other major negotiations that look to Asia (such as TPP and the Regional Comprehensive Economic Partnership), it is Atlantic-oriented. Its purpose is to renew and strengthen the partnership between the United States and Europe (which has been a decisive factor in the course of economic history and global policy over the past two centuries) and to revitalize the leadership role of both in the governance of world trade. Another hallmark of TTIP is that, unlike other regional agreements, it is a negotiation between two major economies with equal levels of development.

2. **Transatlantic trade and investment**

In 2012, trade in goods between the United States and the European Union reached US$ 655 billion; since 2000 it has consistently run a surplus in favour of the latter (see figure II.3). Each party is the other's primary trading partner; daily trade in goods and services between them amounts to US$ 2.7 billion (High Level Working Group on Jobs and Growth, 2013). Despite weak growth in recent years, both economies have a high consumption capacity; per capita income is nearly US$ 50,000 in the United States and averages US$ 32,000 in countries of the European Union (Galston, 2013).

Trade between North America and Europe has fallen as a share of the global total over the past three decades, from 7.8% in 1980 to 4.8% in 2011 (WTO, 2013). But the United States exports three times the number of products to the European Union than it does to China, while the amount exported by the European Union to the United States in 2011 was twice its exports to China. In the United States, 45 of the 50 states exported more to Europe than to China in 2012 (Galston, 2013). Subsidiaries of European companies generated approximately 3 million jobs in the United States in 2010 (USTR, 2013b); subsidiaries of United States companies generated 4.1 million jobs in Europe that same year (Barefoot, 2012). The main transatlantic trade sectors are industrial: machinery and transport equipment, followed by chemicals, fuels and mining products. In all of them, the European Union runs a surplus (see table II.3).
The United States and the European Union are the world’s major economies. In 2011, 38% of United States service exports went to the European Union; 41% of its imports came from Europe (Galston, 2013). Trade is quite balanced, with a surplus for the United States through 2010 and the European Union posting a surplus in 2011 (see table II.4).

### Table II.4
European Union Service trade with the United States, 2009-2011  
(Billions of euros)

<table>
<thead>
<tr>
<th>Year</th>
<th>European Union exports</th>
<th>European Union imports</th>
<th>Trade balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>119.1</td>
<td>123.9</td>
<td>-4.8</td>
</tr>
<tr>
<td>2010</td>
<td>127.1</td>
<td>130.5</td>
<td>-3.4</td>
</tr>
<tr>
<td>2011</td>
<td>145.5</td>
<td>140.1</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the European Commission.

Bilateral investment is the engine of the transatlantic relationship. Cumulative foreign direct investment between the two parties amounted to US$ 3.7 trillion in 2011 (High Level Working Group on Jobs and Growth, 2013). Europe has received 56% of the foreign direct investment flowing from the United States since 2000; the emergence of China in the world economy has not substantially changed this pattern. For example, between 2000 and the third quarter of 2012, the United States invested in the Netherlands 14 times more than in China, and 11 times more in the United Kingdom. Seventy-one per cent of the FDI received by the United States in 2011 came from Europe (Hamilton and Quinlan, 2013). Bilateral trade and investment generate some 13 million jobs in the European Union and the United States (USTR, 2013a).
Intra-industry trade is substantial in virtually all sectors of transatlantic trade, as evidenced by the high Grubel-Lloyd index values (see table II.5).\(^\text{13}\) This is a biregional value chain success story, both two-way and towards third markets. A significant proportion of trade between the two regions consists of intra-firm transfers. In 2009, intra-firm trade accounted for 61% of United States imports from the European Union and 31% of its exports to the latter (Hamilton and Quinlan, 2011).

| Table II.5 |
|---|---|---|
| **Grubel-Lloyd index of intra-industry trade between the United States and the European Union** |
| **European Union exports (billions of dollars)** | **European Union imports (billions of dollars)** | **Grubel-Lloyd index** |
| Industrial goods | 207.564 | 167.568 | 0.89 |
| Chemicals, rubber and other synthetics | 55.811 | 42.575 | 0.87 |
| Machinery and equipment | 47.184 | 37.617 | 0.89 |
| Motor vehicles and parts | 19.032 | 7.677 | 0.57 |
| Vehicle manufactures | 16.626 | 28.238 | 0.74 |
| Mineral oil and coal products | 13.476 | 11.542 | 0.92 |
| Other sectors | 12.909 | 5.633 | 0.61 |
| Services | 118.547 | 98.783 | 0.91 |
| Economic services | 27.672 | 29.471 | 0.97 |
| Financial services | 21.348 | 19.457 | 0.95 |
| Food and beverages | 16.359 | 9.390 | 0.73 |
| Alcoholic beverages and tobacco | 9.542 | 1.092 | 0.21 |
| Food | 2.999 | 2.259 | 0.86 |

\(^\text{13}\) The Grubel-Lloyd index measures intra-industry trade between two countries in a given sector. In intra-industry trade, both countries export to each other outputs from the same sector. Index values range from 0 (when trade is 100% inter-industry) and 1 (when it is entirely intra-industry).

3. **Potential economic impacts of the Transatlantic Trade and Investment Partnership**

**a) Bilateral impact**

Although trade tariffs between the European Union and the United States are comparatively low (no more than 2%-3% on average), the high volume of trade makes the potential economic impact of TTIP high. Using a computable general equilibrium model, Erixon and Bauer (2010) projected that full liberalization of transatlantic trade could mean a 0.99%-1.33% GDP gain for the United States and a 0.32%-0.47% GDP gain for the European Union, in a dynamic scenario (considering productivity gains and lower trade costs). In the same scenario, bilateral exports would increase by 18% for the European Union and 17% for the United States.

Eighty per cent of the potential gains from TTIP would come from lower bureaucratic and regulatory barrier costs and the liberalization of trade in services and the government procurement market (CEPR, 2013). Tariff elimination per se would not bring significant changes in employment, but this outcome would be different if non-tariff barriers were removed. In such a scenario, the unemployment rate would fall and real wages would rise. The increase in employment would be especially marked in more productive medium-sized companies that still do not export to the other partner (Felbermayr and others, 2013).

Long-term trade gains between members of the agreement would be at least 79% from relocation of firms and increased intra-industry trade, whereas diversion would impact third countries, especially those that already have preferential agreements and regimes with the European Union and the United States (Felbermayr and others, 2013). Among them are the developing countries that export higher technology-content manufactures to those markets.
(b) Global impact

The Transatlantic Trade and Investment Partnership could have a substantial impact at the global level, in that greater economic growth in the United States and the European Union would boost global output and trade. According to a study (CEPR, 2013), this agreement would increase global income by almost 100 billion euros. The net effect as of 2027 would be between 0.7% and 1.4% of the output of all countries not parties to the agreement, with the potential diversion of trade being offset by the positive impact of lower non-tariff barriers and greater convergence of global standards.

Greater regulatory compatibility in the main markets will have a profound impact on developing countries, as the trend will be towards lower non-tariff barriers and more standardized global trade rules. On the one hand, this could benefit the countries that already have adjusted their exports to the existing regulatory requirements in those markets, because harmonization would mean more uniform production processes and lower transaction costs. On the other hand, meeting more demanding standards could result in market access difficulties and potential additional costs for exporters that are not in line with the new standards.

The United States and the European Union are economic heavyweights, so TTIP will help shape new rules on emerging issues in global trade. This could be a contribution to the multilateral agenda, but it could work against the relevance of existing multilateral institutions. The outcome of the negotiations will directly and indirectly impact standards and disciplines for third countries that were not parties to them because any agreements between the European Union and the United States could become de facto global standards, especially where regulatory issues are concerned.

4. Main contents

The High Level Working Group on Jobs and Growth recommended negotiation of a comprehensive agreement pursuing three major goals. These are (i) eliminate or reduce barriers (tariff and non-tariff) to trade in goods and services, to investment and to access for one party’s suppliers to the procurement processes of the other party; (ii) improve compatibility between the regulations and standards of both parties (what is called “regulatory convergence”); and (iii) enhance cooperation in the development of rules and principles on global issues of mutual interest (High Level Working Group on Jobs and Growth, 2013).

The first pillar of TTIP is access to the market for goods and services, investment and government procurement. In this area, both the United States and the European Union are seeking higher levels of openness than those taken on by either side in any previous trade agreement. While tariffs are already low, the fact that goods make up approximately 65% of bilateral trade means that any tariff reduction will have a major impact on flows.

The second pillar of the agreement, as proposed by the High Level Working Group on Jobs and Growth, is regulatory convergence. This is of particular importance because most of the current barriers to transatlantic trade in goods and services stem from discrepancies between internal regulations of both parties. Notable examples include automobiles, agricultural products, chemicals, pharmaceuticals and cosmetics, and various types of financial services.

According to the European Commission, there are several ways to lower regulatory barriers to transatlantic trade without relinquishing the levels of protection that each party had been defined in such areas as safety, health, environmental protection and financial stability. One option is mutual recognition of the regulations of the parties when they are similar enough in terms of outcomes. The objective here would be for a product that complies with the applicable requirement in its market of origin (for example, motor vehicle safety standards) to be marketable in the territory of the other party without having to meet additional requirements. Another option is that both parties bring their regulatory regimes more in line with existing international standards. An example would be phased approximation among each party’s regulatory frameworks in the chemicals sector, the United States Toxic Substances Control Act (TSCA) and the European Union Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). Lastly, both parties can strengthen their cooperation in the development of new regulatory regimes so as to reduce unnecessary discrepancies in the future. An example would be the development of common safety and environmental standards for electric cars (European Commission, 2013).
The third pillar of the agreement pertains to the regulation of issues that are of interest not only for transatlantic trade, but also for global trade governance overall. These negotiations give the United States and the European Union an opportunity to agree on new disciplines on issues of common interest that are at present insufficiently regulated in WTO agreements. Both parties can thus establish de facto global standards and influence the future agenda of multilateral negotiations. In this context, some of the issues highlighted by the High Level Working Group on Jobs and Growth are trade in raw materials and energy, operations of State-owned enterprises and what are called localization barriers to trade. These three issues tie into concerns expressed by both the United States and the European Union on steps taken by China in recent years. These include restrictions on the export of certain raw materials and of technology transfer requirements for foreign companies wishing to invest in China.

TTIP negotiations have a number of challenges to surmount. Each partner has its own previously-negotiated trade agreement blueprint with different approaches and emphasis. While their economies have a similarly high level of development, differences remain in their approach to various issues, often as a result of cultural differences (see box II.1).

Box II.1

Negotiations on the Transatlantic Trade and Investment Partnership: main areas of potential disagreement

In agriculture, negotiations are complicated by the existence of products that are highly protected by both sides, with tariff peaks that in 2011 reached 205% in the European Union and 350% in the United States (WTO, 2012b). Both parties heavily subsidize their agricultural sectors. Neither the United States nor the European Union has made significant commitments on agricultural subsidies, either in previous bilateral agreements, or in the framework of the Doha Round at WTO. There are also major differences between the United States and the European Union on regulatory issues affecting trade in agricultural products. For example, the European Union has an extremely restrictive policy on the marketing of genetically modified crops within its territory, owing to their possible effects on human and animal health. These crops are very important in United States agriculture and their global production is controlled by United States multinationals. The European Union also restricts the use of hormones in livestock production and in processes such as the chlorine sterilization of slaughtered chickens, which are accepted practices in the United States. Another complex issue linked to the agricultural sector is that of biofuels, of which exports from the United States to the European Union have surged in recent years. However, they are subject to regulatory restrictions such as the European Commission’s Directive on renewable energy, and surcharges resulting from the application of antidumping and countervailing duties. On trade in services, it is not yet known whether negotiations will be conducted under a positive list approach (as is usually followed by the European Union) or a negative list approach (as is habitual in the United States). Both parties have offensive interests, but also strong defensive sensitivities. Among the latter is the European Union’s audiovisual sector, which France managed to have excluded from the European Commission’s negotiating mandate, seeking to protect its system of screen quotas and subsidies for the local audiovisual industry. In the United States, the maritime cabotage sector is reserved by law (under the Jones Act of 1920) for ships that are United States flagged and owned exclusively by United States citizens and crewed by citizens and permanent residents of the country. The parties also differ on the scope of negotiations on financial services. The European Union wishes to address various areas in which the regulatory framework is different on either side of the Atlantic; the United States has indicated that it prefers to hold these talks in other forums, such as the Group of 20 (World Trade Online, 2013e).

The European Union has a more open government procurement regime than the United States (Galston, 2013). The United States regime has limited commitments to liberalization at sub-federal level (in other words, states and local governments) and features various preference programmes for United States suppliers, collectively known as “Buy American”: Public procurement will therefore be another complex area of the negotiations.

Both the European Union and the United States have high intellectual property protection standards, so this issue should not, in principle, be problematic in TTIP negotiations. However, the parties hold opposing positions in relation to the specific issue of geographical indications for foods, wines and spirits (for example, feta cheese, Parmesan, Parma ham and champagne). Whereas the European Union maintains that only the European producers in the corresponding regions have the right to use these names, the United States argues that many of these names are now generic and can therefore be used by producers outside Europe.

Negotiations under the chapter on data flows and privacy may be affected by the recent reports relating to digital surveillance programmes carried out by the United States on European territory. To address European concerns, it was agreed to open parallel talks between the United States and the European Commission (which has jurisdiction over rights relating to the privacy of personal data), as well as with the Member States of the European Union (which have jurisdiction over national security) (World Trade Online, 2013d). The content of this chapter may also be affected by the European Parliament resolution approved in July 2013 on the review of the EU-US Safe Harbor Framework Agreement, a bilateral agreement that entered into force in 1998 and governs flows of data transmitted from the European Union to the United States for commercial purposes. The issue of State aid will likely prove difficult to address under TTIP not only on account of the agricultural subsidy regimes maintained by both parties, but also because of the long-running dispute over subsidies to the aeronautical industry.


14 These barriers are measures designed to protect, favour or stimulate domestic industries, services providers, or intellectual property at the expense of imported goods, services, or foreign-owned or foreign-developed intellectual property (High Level Working Group, 2013).
The United States and the European Union have set the goal of concluding TTIP negotiations in 2015. This will depend on the pace at which they address the main differences between the parties. If both insist on their initial demands for some of the issues that separate them, it will be difficult to move forward and there might be no agreement. However, the current negotiations have gotten a substantial push from the private sector on both sides of the Atlantic, with a pragmatic approach focused above all on constructively addressing regulatory issues and non-tariff barriers. It remains to be seen to what extent this view is embraced by the negotiating teams, making smooth negotiations a priority.

**D. Trans-Pacific Partnership negotiations**

**1. Background**

The direct antecedent of the Trans-Pacific Partnership (TPP) negotiations is the Trans-Pacific Economic Partnership agreement signed in 2005 between Brunei Darussalam, Chile, New Zealand and Singapore (also known by the acronym P4). In late 2008, the United States expressed its interest in acceding to that agreement; negotiations for expansion were formally launched in March 2010. New participants have been acceding since then, the number having grown to 12 (see diagram II.1). The entry of Canada and Mexico in 2012 and Japan in 2013 has boosted the economic weight of this grouping and its potential relevance for the operation of Asian and trans-Pacific value chains. Participating governments are aiming, in principle, to conclude the negotiations in October 2013, when the Asia-Pacific Economic Cooperation (APEC) economic leaders’ meeting is to be held in Indonesia. Given the complexity of the negotiations, however, they are likely to continue into 2014 (World Trade Online, 2013b).

Diagram II.1

**Entry of new participants into Trans-Pacific Partnership negotiations**

- 2005: Brunei Darussalam, Chile, New Zealand, Singapore
- 2010: Australia, United States, Malaysia, Peru, Viet Nam
- 2012: Canada, Mexico
- 2013: Japan

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information.

The United States has taken the lead in the TPP negotiations since they began in 2010, drastically changing the original nature of the P4. In fact, until the recent announcement of the launch of negotiations with the European Union, TPP was unquestionably the main international trade negotiation initiative of the United States. This negotiation is set in the context of a strategic focus defined by the Obama administration to boost the presence of the United States in Asia and the Pacific. Specifically, the United States authorities have expressed the wish that TPP be a “twenty-first-century agreement” and set a high standard for the governance of trade and investment relations in the context of value chains.\(^{15}\) They have also pointed out that the partnership should be open to the incorporation of new members from the Pacific basin, making it a vehicle for gradually moving towards the establishment of a vast trans-Pacific free trade area.\(^{16}\) In this context, several Pacific rim States, including Colombia, Costa Rica, the Republic of Korea and Thailand, have at various times expressed an interest in acceding to TPP.

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\(^{15}\) For a critical view, see Gupta (2013).

\(^{16}\) The establishment of a Free Trade Area of the Asia-Pacific (FTAAP) has been for years a long-term project in the framework of APEC. At their summit in November 2010, APEC forum leaders noted that the FTAAP should be built on the basis of the trade negotiations underway at the regional level, including the Trans-Pacific Partnership and the ASEAN+3 and ASEAN+6 initiatives. See “Pathways to FTAAP” [online] http://www.apec.org/Meeting-Papers/Leaders-Declarations/2010/2010_aelm/pathways-to-ftaap.aspx [date of reference: 1 July 2013].
Trade in goods among the 12 TPP countries in 2012 totalled US$ 2 billion, equivalent to 46% of their exports worldwide (see table II.6). The share of the individual members’ worldwide exports going to TPP countries ranges from 30% for Japan to 83% for Mexico. This high proportion is explained mainly by the size of the United States market, which took in 94% of Mexico’s exports to TPP countries in 2012. The same is true in the case of Canada, with the United States accounting for 94% of Canadian exports to TPP countries that year.

<table>
<thead>
<tr>
<th>Country</th>
<th>Australia</th>
<th>Brunei Darussalam</th>
<th>Canada</th>
<th>Chile</th>
<th>United States</th>
<th>Japan</th>
<th>Malaysia</th>
<th>Mexico</th>
<th>New Zealand</th>
<th>Peru</th>
<th>Singapore</th>
<th>Viet Nam</th>
<th>Total TPP agreement</th>
<th>Total world</th>
<th>TPP (percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>37</td>
<td>1 726</td>
<td>444</td>
<td>9 516</td>
<td>49 690</td>
<td>5 256</td>
<td>910</td>
<td>7 666</td>
<td>146</td>
<td>7 374</td>
<td>1 849</td>
<td>84 804</td>
<td>256 243</td>
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<td></td>
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<tr>
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<td>969</td>
<td>1</td>
<td>0</td>
<td>95</td>
<td>5 738</td>
<td>89</td>
<td>0</td>
<td>661</td>
<td>0</td>
<td>233</td>
<td>8 379</td>
<td>13 001</td>
<td>64.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
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<td>4</td>
<td>790</td>
<td>337 830</td>
<td>10 361</td>
<td>784</td>
<td>5 393</td>
<td>385</td>
<td>537</td>
<td>896</td>
<td>370</td>
<td>359 391</td>
<td>453 381</td>
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<tr>
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<td>1 283</td>
<td>9 630</td>
<td>8 384</td>
<td>209</td>
<td>1 346</td>
<td>40</td>
<td>1 813</td>
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<td>372</td>
<td>24 386</td>
<td>78 277</td>
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<td>157</td>
<td>291 675</td>
<td>18 896</td>
<td>70 043</td>
<td>12 851</td>
<td>216 331</td>
<td>3 120</td>
<td>9 357</td>
<td>30 537</td>
<td>4 623</td>
<td>688 771</td>
<td>1 545 565</td>
<td>44.6</td>
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<tr>
<td>Japan</td>
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<td>188</td>
<td>10 263</td>
<td>1 992</td>
<td>142 040</td>
<td>17 701</td>
<td>10 483</td>
<td>1 961</td>
<td>1 038</td>
<td>23 306</td>
<td>10 741</td>
<td>238 133</td>
<td>798 568</td>
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<tr>
<td>Malaysia</td>
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<td>692</td>
<td>948</td>
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<td>19 719</td>
<td>26 846</td>
<td>1 481</td>
<td>1 169</td>
<td>114</td>
<td>30 909</td>
<td>3 822</td>
<td>95 258</td>
<td>227 303</td>
<td>41.9</td>
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<tr>
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<td>2 252</td>
<td>288 148</td>
<td>2 614</td>
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<td>1 173</td>
<td>1 169</td>
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<td>3 822</td>
<td>95 258</td>
<td>227 303</td>
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<tr>
<td>New Zealand</td>
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<td>455</td>
<td>62</td>
<td>3 420</td>
<td>2 588</td>
<td>715</td>
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<td>109</td>
<td>681</td>
<td>364</td>
<td>16 561</td>
<td>37 092</td>
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<tr>
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<td>3 688</td>
<td>1 881</td>
<td>6 673</td>
<td>2 542</td>
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<td>14 883</td>
<td>38 654</td>
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<tr>
<td>Singapore</td>
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<td>1 542</td>
<td>1 194</td>
<td>58</td>
<td>22 626</td>
<td>18 093</td>
<td>50 311</td>
<td>1 192</td>
<td>2 087</td>
<td>42</td>
<td>10 395</td>
<td>124 666</td>
<td>408 393</td>
<td>30.5</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>3 241</td>
<td>17</td>
<td>1 157</td>
<td>169</td>
<td>19 668</td>
<td>13 050</td>
<td>4 496</td>
<td>883</td>
<td>184</td>
<td>0</td>
<td>2 388</td>
<td>45 043</td>
<td>110 795</td>
<td>40.7</td>
<td></td>
</tr>
<tr>
<td>Total TPP agreement</td>
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<td>2 647</td>
<td>323 319</td>
<td>26 670</td>
<td>859 765</td>
<td>209 949</td>
<td>92 638</td>
<td>238 486</td>
<td>17 407</td>
<td>14 684</td>
<td>97 101</td>
<td>33 264</td>
<td>2 087 650</td>
<td>4 338 099</td>
<td>46.3</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations, United Nations Commodity Trade Statistics Database (COMTRADE) and International Monetary Fund (IMF), Direction of Trade Statistics (DOTS) database for Peru and Viet Nam.

Participants in the TPP negotiations are already linked by a dense network of around 25 trade agreements. These include bilateral and plurilateral agreements (in particular the Association of Southeast Asian Nations Free Trade Area, the free trade agreements signed by this grouping with Japan and with Australia and New Zealand, NAFTA and the P4 itself). Out of the 66 potential bilateral relations, only one third (22) is not already covered by an agreement, and several pairs of countries are linked by two, or even three, agreements (see table II.7).17 Trade between the TPP countries not covered by other agreements is less than one fifth of the total (see table II.8). Among the relationships not yet covered by agreements, the most important in terms of trade flows are those that link the United States to Japan, Malaysia and Viet Nam, in that order.

2. Main contents

The agreement currently under negotiation has 29 chapters. Some of them have to do with traditional topics such as tariffs, rules of origin, technical barriers to trade, sanitary and phytosanitary measures, trade defence measures, trade in services and investment. Other chapters deal with “twenty-first-century” issues that heretofore have not been high on the trade agreement agenda, such as regulatory convergence and cross-border data flows. The items that, on the basis of the information available, could be among the main critical negotiating points are reviewed below.

(a) Access to the goods market and rules of origin

In this area, the negotiations seek to eliminate tariffs on goods trade between the participating countries by creating a vast free trade area. In many cases, this means plurilateralizing the tariff phaseout schedules contained in the agreements that currently link these countries. Bilateral and plurilateral negotiations to that end are under way. While the United States and Peru have preferred the bilateral approach, the rest of the participants have opted for a plurilateral one.

17 Two of these agreements are under negotiation (between Australia and Japan and between Canada and Japan), and a third had been signed but has not yet entered into force (between Chile and Viet Nam). All the others are in force.
### Table II.7

<table>
<thead>
<tr>
<th>Australia</th>
<th>Brunei Darussalam</th>
<th>Canada</th>
<th>Chile</th>
<th>United States</th>
<th>Japan</th>
<th>Malaysia</th>
<th>Mexico</th>
<th>New Zealand</th>
<th>Peru</th>
<th>Singapore</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td>AANZFTA RCEP</td>
<td>P4</td>
<td>FTA</td>
<td>NAFTA</td>
<td>FTA</td>
<td>FTA</td>
<td>FTA</td>
<td>FTA</td>
<td>FTA</td>
<td>NAFTA</td>
<td>P4</td>
<td>AFTA RCEP</td>
</tr>
</tbody>
</table>

### Table II.8

<table>
<thead>
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<th>Amount</th>
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<td>100.0</td>
</tr>
<tr>
<td>1 151.3</td>
<td>57.2</td>
</tr>
<tr>
<td>471.9</td>
<td>23.5</td>
</tr>
<tr>
<td>386.6</td>
<td>19.2</td>
</tr>
</tbody>
</table>

### Source

Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information.

### Note

- AFTA: Association of Southeast Asian Nations Free Trade Area.
- ANZCERTA: Australia New Zealand Closer Economic Agreement.
- P4: Trans-Pacific Strategic Economic Partnership Agreement between Brunei Darussalam, Chile, New Zealand and Singapore.
- RCEP: Regional Comprehensive Economic Partnership.
- NAFTA: North American Free Trade Agreement.
- AFTA: ASEAN-Japan Free Trade Agreement.
- FTAA: ASEAN-Australia-New Zealand Trade Area Agreement.
- NAFTA: North American Free Trade Agreement.

- Under negotiation.
- Agreement signed but not yet in force.

Along with eliminating tariffs, establishing a free trade area among the 12 participating countries entails a common set of rules of origin and cumulation of origin. The latter means that inputs originating from a TPP member country (for example, Peru) included in a final good exported by another member (for example, Mexico) to a third member (for example, the United States) are regarded as originating in the country that exported the final good. The concept of cumulation of origin has been generally accepted by the TPP participants, although there can be exceptions in areas of particular sensitivity. Cumulation of origin is one of the potential major gains that TPP holds for the countries involved, in that it fosters the production integration of their economies.

The goal of eliminating tariffs on goods trade between TPP members does not mean that most of the participants in the negotiations do not have defensive sensitivities in specific sectors or products. Several of the more politically complex cases involve the United States, which is under considerable domestic pressure to not open the textile, garment or footwear sectors with Viet Nam (see box II.2), the automobile industry with Japan, the dairy product sector with New Zealand or the sugar industry with Australia. The formal admission of Japan into the negotiations will add some complexities in the area of market access because of its well-known defensive sensitivities concerning agriculture. As for manufacturing, some of the regulatory and distribution barriers that Japan allegedly maintains and that would negatively affect access to its market for imported cars have proven to be a sticking point. These barriers have been especially criticized by the United States automotive industry.
This chapter, in general, has not triggered much controversy, but a major exception is Australia’s position vis-à-vis the investor-State dispute settlement mechanism. Such provisions (which enable a foreign investor who feels its rights have been violated to directly sue the host State in an international tribunal) are standard in investment promotion and protection agreements between developed and developing countries. Investor-State dispute settlement is addressed as well in the chapters on investment in all of the free trade agreements signed by the United States to date, except for the one with Australia (which opposed the provision). The current disagreement focuses on Australia’s opposition to accepting that such a mechanism should apply to it in the framework of TPP. The United States holds that the provision should apply to all members of the partnership.

18 The most frequently used arbitral forum in these cases is the International Centre for Settlement of Investment Disputes (ICSID), an international institution headquartered in Washington, D.C. that is part of the World Bank Group. Another important forum is the United Nations Commission on International Trade Law (UNCITRAL).
An Australian Government Productivity Commission report spells out criticisms of the investor-State dispute settlement mechanism that underlie Australia’s current position. These include the possibility of the host State being hesitant to regulate for fear of being sued in international tribunals (regulatory chill), as well as concerns about the arbitration process itself. These include institutional bias, conflicts of interest, lack of transparency and excessive damage awards for foreign investors (Productivity Commission of the Australian Government, 2010, pp. 271-273). The three Latin American participants in TPP already accepted the investor-State dispute settlement mechanism in their respective free trade agreements with the United States, so this item is not among the most sensitive for them in the framework of TPP.

(c) Intellectual property

Since the 1980s the United States has pursued a policy of steadily increasing levels of intellectual property protection in its free trade agreements. This reflects how important creation- and knowledge-based industries are in the United States economy, as well as their political clout. As a result, intellectual property protections in trade agreements negotiated by the United States increasingly go beyond those set out in the World Trade Organization Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS) A variety of intellectual property rights-linked industries in the United States, such as pharmaceuticals and the audiovisual sector, have expressed interest in setting a new, higher standard of protection in the framework of the Trans-Pacific Partnership. But, to a greater or lesser extent, most of the participants in the negotiations have defensive sensitivities in this area. This is true of the three Latin American participants, which previously had to make substantial concessions in the area of intellectual property in their respective free trade treaties with the United States. Accordingly, this chapter is now regarded as the most controversial.19

One sticking point is the proposal put forth by the United States that criminal penalties be established for intentional trademark counterfeiting and copyright piracy “on a commercial scale”, even when there is no direct or indirect financial gain. According to the proposal, importing counterfeit labels and packaging and making recordings in cinemas would be subject to criminal penalties as well.

Another traditionally controversial topic in free trade agreements negotiated by the United States is intellectual property associated with medicines. The United States has proposed in the TPP agreement a mechanism that would offer pharmaceutical companies a set of benefits if they seek approval to bring new medicines to the market within an agreed time frame or access window (USTR, 2011a). These benefits would include extension of patent terms and test data exclusivity, as well as mandatory patent linkage.20 According to the proposal, this mechanism would expedite market access to generic medicines, presumably at a lower cost than the original ones. But the United States proposal has met strong resistance from other countries involved in the negotiations. The disagreements on patents extend into other sectors as well.21

A third controversial issue is copyright protection in the digital environment. According to the information available, the United States is seeking to include in the TPP agreement provisions making Internet service providers responsible for removing content such as music, films or literary works that might be in copyright infringement, upon being notified by the copyright holder. On the other hand, the United States has submitted proposals at the Trans-Pacific Partnership talks aimed at expanding the scope of allowable copyright exceptions and limitations for purposes such as criticism, scholarship and research (Fergusson and others, 2013, p. 33). The way in which this area of the negotiations is resolved is of great importance; it calls for proper balance between the protection of intellectual property rights and the pursuit of other goals, such as freedom of expression, innovation and access to culture (Rosales, 2013).

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19 Armstrong (2013) maintains that strengthening intellectual property protection through the Trans-Pacific Partnership would entail the transfer of wealth from the less developed participating countries to the more developed ones.

20 Patent linkage is the practice of linking market approval for generic medicines (a process under the purview of the health authorities) to the patent status of the originator reference product (under the purview of the patent authority).

21 The United States is also facing domestic difficulties regarding patents. President Obama’s recent veto of the import ban on older Apple devices that infringed Samsung patents calls into question the stringent disciplines that the United States is attempting to impose on the TPP negotiations (Financial Times, “Apple import veto risks undermining patent protection push”, 4 August 2013).
(d) State-owned enterprises

The United States has strongly pushed for inclusion of this issue in the TPP agreement. The objective is to create an environment of competitive neutrality in which State enterprises do not receive benefits beyond those received by private companies competing with them. Such benefits may include subsidies and loans on preferential terms, the right to provide certain services on an exclusive or preferential basis, or privileged access to government procurement processes.

To date, there is no clarity on the scope of the rules that are being negotiated in the chapter on State-owned enterprises. However, it has emerged that this is a particularly complex issue for Asia's participants in the TPP agreement (Brunei Darussalam, Japan, Malaysia, Singapore and Viet Nam) because State enterprises play an important role in the economy of all these countries. Some examples are Japan Post in Japan, the oil company Petronas in Malaysia and the sovereign wealth fund Temasek in Singapore. In Viet Nam, State enterprises account for nearly 40% of GDP (Fergusson and others, 2013, p. 44).

Depending on the specific disciplines that are negotiated, this chapter could affect the operations of major State-owned enterprises in the participating Latin American countries, such as the National Copper Corporation (CODELCO) and the National Mining Corporation (ENAMI) in Chile, Petróleos Mexicanos (PEMEX) in Mexico and Petróleos del Perú (PETROPERU) in Peru. And public enterprises from a number of countries could be put at a de facto competitive disadvantage with regard to agricultural enterprises in the United States (which benefit from substantial subsidies) as well as banks and financial institutions there that received massive funding under bailout programmes after the outbreak of the global financial crisis in 2008. Lastly, the content of this chapter is especially relevant in view of the potential for China joining TPP, because State enterprises play a large role in the Chinese economy.

(e) Government procurement

The purpose of this chapter is to provide businesses in all Trans-Pacific Partnership member countries access to goods, services and public works procurement processes in each member country, on equal terms with national vendors. This issue is particularly sensitive for Malaysia, which to date has not made any trade agreement commitments in the area of public procurement and which maintains preferential access policies for small and medium-sized enterprises and businesses owned by ethnic Malays (bumiputra). As for the United States, while it has signed a number of trade agreements with chapters on government procurement, it maintains “Buy American” provisions that give preference to domestic enterprises. The scope of the government procurement commitments undertaken by the United States in some trade agreements is very modest at the sub-federal level: only 8 out of its 50 states took on commitments under the most recent free trade agreements, concluded with Colombia, Panama and the Republic of Korea (Fergusson and others, 2013, p. 23). Similar concerns arise in the case of other federal-system Trans-Pacific Partnership countries, such as Australia, Canada and Mexico.

(f) Environment

The United States proposal in this area is significantly broader in scope than the environment chapters of its previous free trade agreements, which generally reflect only the commitment of the parties to ensure effective enforcement of their own environmental legislation. For TPP, the United States adds binding commitments in the area of conservation, including provisions to combat illegal trade in plant and animal species, illegal logging and overexploitation of fisheries (USTR, 2011b). The United States has proposed that the obligations set forth in the environment chapter of the TPP agreement be subject to the agreement’s general mechanism for the settlement of disputes, opening up the possibility of trade sanctions in cases of non-compliance. The latter approach has been resisted by several of the other participants, in particular the developing countries.

This chapter is particularly complex for Malaysia and Viet Nam, both of which face problems of illegal logging. For Malaysia, other sensitive issues are the elimination of subsidies for fisheries and fossil fuels, and the adoption

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22 For example, the participation of Japan Post in the provision of express mail (courier) services and insurance policies in Japan was the subject of negotiations with the United States prior to the formal entry of Japan into the Trans-Pacific Partnership (Fergusson and others, 2013, p. 51).
by the central government of binding commitments in areas such as forest management and biodiversity, which are regulated at the state level (Ministry of International Trade and Industry of Malaysia, 2013). The entry of Japan into TPP could add new complexities because it provides significant subsidies to its fishing industry.

(g) Labour

The issue of labour is of great sensitivity in TPP because the current participants are countries with widely dissimilar levels of development and labour practices. There is strong pressure in the United States for the agreement to establish stringent and legally binding labour disciplines, especially in view of competition from Viet Nam in sectors such as clothing and footwear. Viet Nam’s competitiveness in these sectors is based largely on low wages and labour practices that fall short of the standards in the other participants in the agreement.

The United States proposal requires that TPP member countries ensure the effective enforcement of their respective national laws and comply with the fundamental rights covered by the International Labour Organization Declaration on Fundamental Principles and Rights at Work, adopted in 1998. These are: freedom of association and recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labour; the abolition of child labour; and the elimination of discrimination in respect of employment and occupation. As with the environment chapter, the United States has proposed that the labour chapter of the TPP agreement be subject to the general mechanism for dispute settlement, including the possibility of trade sanctions. This has come up against resistance from several of the other participants in the negotiations, especially the developing countries. In May 2013, Canada proposed an alternative mechanism whereby breaches of obligations under the labour chapter would result in fines instead of trade sanctions (World Trade Online, 2013a).

(h) Data flows and e-commerce

The United States wants to include provisions in the e-commerce chapter to ensure the free cross-border flow of data. To this end it has proposed prohibiting the blocking of cross-border data flows over the Internet and barring countries from requiring that servers be located within their territory as a condition for companies to do business there. Australia and New Zealand have indicated that the United States proposal could contradict their own personal data privacy laws. Malaysia and Viet Nam allegedly apply restrictions to the free cross-border transfer of data over the Internet and so might be reluctant to accept the United States proposal (Fergusson and others, 2013, pp. 45 and 46). As in other areas, the content of this chapter is especially relevant in view of the possibility of China joining TPP at some point in the future.

3. Negotiation challenges and outlook

At the time of writing this chapter, the prospects for concluding Trans-Pacific Partnership negotiations at the end of October 2013 seem bleak. There are still significant differences between the participants, and they are likely to become more pronounced following the recent entry of Japan. Despite the quest to establish a twenty-first-century agreement, some of the main disagreements have to do with such nineteenth-century issues as tariff barriers to trade in agricultural products, footwear and clothing. And the goal of building a “value-chain-friendly” agreement is not in line with, for example, the position of the United States on textile industry rules of origin. If that position were to prevail, Viet Nam’s garment manufacturers would be unable to source fabric or fibres from their traditional suppliers in China if they want to benefit from tariff relief under the TPP agreement.

Trans-Pacific Partnership negotiators face a major challenge stemming from the diversity of the countries involved. It is a very heterogeneous group in terms of location, economy size, level of development, political system, institutional framework and culture, among many other dimensions. This, added to the complexity of the agenda under discussion, raises questions as to the feasibility of replicating, in this context, the NAFTA model on which United States has, with some adjustments, based all of its free trade agreement negotiations over the past two decades. In this setting, differentiated commitments under the TPP agreement in areas such as intellectual property could be a way to reflect the varying capacities and levels of development of the member countries. So far, though, the negotiations have been conducted under the premise that the final outcome should apply to all countries regardless of level of development.
As a result, the only form of special and differentiated treatment that might be under consideration would be to give the less developed participants more time to comply with certain obligations. This position, held by the United States, could not only make it hard to conclude the TPP agreement but also discourage some developing Asian countries from joining it, especially if other ongoing trade initiatives such as the Regional Comprehensive Economic Partnership offer more flexible alternatives (see section E).

The participants in TPP negotiations have agreed that the many existing agreements between them will remain in force and shall not be subsumed under this plurilateral agreement. This coexistence, in addition to posing substantial legal complexities, raises the question of whether TPP will make a real contribution to solving what has been referred to as the Asian “noodle bowl”. This term describes the proliferation of trade agreements and the resulting increase in transaction costs faced by firms in value chains as they deal with different tariff phaseout schedules, rules of origin and other disciplines in each market in which they operate (Kawai and Wignaraja, 2013, p. 87). A similar concern arises with respect to the future relationship between TPP and the Regional Comprehensive Economic Partnership initiative, especially since a number of countries (Australia, Brunei Darussalam, Japan, Malaysia, New Zealand, Singapore and Viet Nam) are simultaneously involved in both processes.

Lastly, a major institutional challenge for TPP is the establishment of rules and procedures for the eventual accession of new members. To date, a number of countries have entered the negotiations along the way. But the situation will be different once the current participants have reached an agreement, as countries interested in entering TPP would in principle have little influence over the terms of accession. This poses a major challenge if it is hoped that TPP will gradually expand and become the basis for a trans-Pacific free trade area. Such an outcome is not likely if large Asian economies such as China, Indonesia and the Republic of Korea entering an agreement of this magnitude do not have the opportunity to influence its content. A related topic has to do with determining what countries can access TPP. So far, participation in the negotiations has been restricted to Asia-Pacific Economic Cooperation member countries. But this approach excludes countries bordering the Pacific Ocean such as Colombia and Costa Rica, which have expressed interest in joining TPP.

E. Regional Comprehensive Economic Partnership

Of the three major global “factories” Factory Asia is the one that, historically, had a lesser degree of de jure economic integration. But this situation has been changing quickly since the early 2000s. In just under 15 years, East and South-East Asia has gone from being a region where economic and trade integration took place almost exclusively through markets to one in which trade agreements have proliferated. As of September 2012, there were 103 free trade agreements in force with at least one party from Asia; most these agreements are bilateral. In addition there were 26 agreements signed but not yet in force, 64 in negotiation and 60 proposed (Menon, 2013). The result has been a complex web of relationships encompassing a range of products, tariff phaseout schedules, rules of origin and trade disciplines (Lim and Kimura, p. 16).

Recognition of the increasing complexity of the web of trade agreements in East and South-East Asia, and the associated costs, led the major economies of the region to consider the possibility of establishing an agreement spanning the entire region (Urata, 2013, p. 101). ASEAN has played a central role in this process. The agreement establishing the Association of Southeast Asian Nations Free Trade Area was signed in 1992; the six original members
of that grouping\textsuperscript{23} have eliminated their tariffs for 99.1\% of the tariff lines (Kleinmann, 2013, p. 4). After the ASEAN Free Trade Area came other economic and trade integration initiatives under the umbrella of ASEAN, such as the Framework Agreement on Services, signed in 1995, and the Comprehensive Investment Agreement, signed in 2009. The goal of establishing the ASEAN Economic Community (with a single market and production base) by 2015 was set in 2003 on the basis of these and other instruments.

As its own subregional integration process deepened, ASEAN has, since the 2000s, become the hub for formal integration efforts throughout East Asia as free trade agreements of varying scope were concluded with China, Japan, the Republic of Korea and India, and with Australia and New Zealand. On top of these agreements, generically referred to as ASEAN+1, came others signed among these six countries and between them and individual members of ASEAN.

Against this backdrop, ASEAN began assessing options for moving towards the establishment of larger integrated economic spaces. Two such projects were under consideration in parallel for a number of years. One was ASEAN+3, which included the 10 members of ASEAN plus China, Japan and the Republic of Korea (that is, the core of Factory Asia). The other was ASEAN+6, encompassing Australia, India and New Zealand as well. In the end it was the second option that prevailed, with the November 2012 announcement of the launch of negotiations for establishing a vast free trade area between ASEAN and those six countries. This is the project known as the Regional Comprehensive Economic Partnership; the first round of talks took place in May 2013.\textsuperscript{24} The 16 participating governments have explicitly recognized the centrality of ASEAN in this process.

Within the framework of the Regional Comprehensive Economic Partnership, the goal is to progressively eliminate tariff and non-tariff barriers on “substantially all trade” in goods among the participating countries. It also aims to “substantially eliminate” restrictions and discriminatory measures with respect to trade in services among them. In the area of investment, the agreement will cover the four pillars of promotion, protection, facilitation and liberalization. It will also address the areas of intellectual property, competition policy, and dispute settlement, among other matters. Negotiations are expected to conclude by late 2015, which is the same year that has been set for the ASEAN Economic Community to become fully operational.\textsuperscript{25}

The ASEAN+1 agreements are expected to be the foundation for building the Regional Comprehensive Economic Partnership, and it has been agreed to keep them in place once the latter enters into force. But the Regional Comprehensive Economic Partnership participating countries have said that it should represent significant improvements over the ASEAN+1 agreements. One way of doing this would be to standardize tariff phaseout schedules, rules of origin and other disciplines contained in these agreements, which (despite sharing a generic name) have significant differences between them. For example, tariff elimination product coverage under the ASEAN agreements with Australia and New Zealand, China, Japan and the Republic of Korea is more than 90\%; under the agreement with India it is only 80\% (Urata, 2013, p. 101).

Regarding market access for goods, each ASEAN+1 agreement is in fact a network of 10 bilateral agreements between each member of ASEAN and the respective “plus one” partner, giving rise to a complex web of relationships with different product coverage and tariff phaseout schedules (Lim and Kimura 2010, p. 16). And the various ASEAN+1 agreements use different rules of origin, which hampers Asia’s production networks (Urata, 2013, p. 105). The differences between the ASEAN+1 agreements are also significant in terms of the scope and depth of their trade disciplines. The ASEAN agreements with developed countries (Australia and New Zealand, Japan and the Republic of Korea) are much deeper than those signed with developing countries (China and India). And agreements between individual ASEAN countries and developed “plus one” countries such as Japan are broader in scope and deeper than the respective plurilateral agreements (Kleinmann, 2013, pages 27-29).

Rules of origin will be a subject of particular relevance in the Regional Comprehensive Economic Partnership negotiations. Reaching a consensus on harmonization of these rules and on the cumulation of origin within this framework could be good for Factory Asia because of the high fragmentation of production processes in the region.

\textsuperscript{23} The six original members are Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand.

\textsuperscript{24} In parallel with the Regional Comprehensive Economic Partnership process, China, Japan and the Republic of Korea have been negotiating a trilateral free trade agreement since early 2013.

However, there is a risk that any consensus might mean a race to the bottom, which would considerably detract from the relevance of the agreement (Menon, 2013).

The foregoing highlights the technical and political complexity of the proposed Regional Comprehensive Economic Partnership. But in comparison with TPP, there is a far greater overlap between the members of the Regional Comprehensive Economic Partnership and the group of economies commonly known as Factory Asia (see diagram II.2). The Regional Comprehensive Economic Partnership therefore seems to be potentially more relevant to the functioning of current production networks in Asia, where China (which is not part of TPP) plays a central role. That said, it remains to be seen what real contribution the Regional Comprehensive Economic Partnership will make to easing the problem of trade agreement proliferation in Asia. This is because, like the TPP agreement, the Regional Comprehensive Economic Partnership would not replace the existing web of bilateral and plurilateral agreements among its members. Even so, the Regional Comprehensive Economic Partnership could contribute a good deal to greater production integration in East and South-East Asia through cumulation of origin and negotiation of deeper trade disciplines than in the current ASEAN+1 agreements.

Diagram II.2
Membership of selected Asia-Pacific trade integration initiatives

Stockholm, 2006
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information.

Like TPP, the Regional Comprehensive Economic Partnership has been conceived as an agreement that is open to new members. It has been agreed that it will contain an open accession clause for countries or groupings that have signed or might in the future sign free trade agreements with ASEAN, even if they are not Asian. Clauses of this nature are a positive element, for several reasons. First, they would help to reduce discrimination and the resulting diversion of trade and investment away from countries that are not originally part of the Regional Comprehensive Economic Partnership. Second, the incorporation of new members is in line with one of the basic premises of mega-regionalism, that is, the expansion of integrated economic spaces. Third, having a small number of broad mega-regional agreements facilitates, in principle, subsequent multilateralization of the commitments acquired under them in the context of WTO.

Lastly, an important difference between the Regional Comprehensive Economic Partnership and TPP has to do with the way they deal with a diverse membership. The Regional Comprehensive Economic Partnership has been explicitly designed as a flexible initiative that takes account of the different levels of development of its participants. Accordingly, the final agreement will include provisions for special and differentiated treatment for less developed countries, particularly ASEAN countries (Cambodia, Lao People’s Democratic Republic, Myanmar and Viet Nam). And it makes explicit reference to the provision of technical assistance and capacity building in favour of the less
developed participants so as to enable them to fully participate in the negotiations, take on the resulting commitments and benefit from the outcomes. This stands in contrast to one of the basic premises of the TPP negotiations: that all obligations should apply to all member countries regardless of their level of development. Underlying these differences are the different approaches taken by ASEAN and the United States with regard to economic and trade integration (Findlay, 2013).

The bottom line is that TPP and the Regional Comprehensive Economic Partnership are two different paths towards greater economic integration in Asia and the Pacific. They could eventually converge into a Free Trade Area of the Asia-Pacific, such as that being promoted by APEC. If on the contrary convergence does not occur, the Free Trade Area of the Asia-Pacific project will be incomplete because the two major world economies, the United States and China, would not be linked by any agreement.

F. Conclusions

The mega-regional negotiations now under way will likely have a marked impact on the geographical distribution and governance of global trade and investment flows in the coming years. In practice, the magnitude of these initiatives, both in terms of the economic weight of the participants and in terms of their ambitious thematic agenda, could mean that by 2020 the rules of international trade will have been rewritten. But unlike the most recent major negotiations of this kind at the global level (the GATT Uruguay Round, completed in 1994), this time the new rules will all have been negotiated outside the multilateral framework and among a limited number of countries, primarily those more closely linked to the dynamics of production networks.

The prolonged Doha Round impasse is one of the factors driving the emergence of mega-regional negotiations. These in turn may erode the efficacy and centrality of the multilateral trading system, especially as a negotiating forum. For the moment, WTO maintains its undisputed central role as a forum for trade dispute settlement worldwide. However, the emergence of mega-regional agreements could eventually affect its primacy in that area too, as the new international trade rules are increasingly negotiated in other forums and would therefore not be codified in multilateral agreements. This situation is of concern for developing countries, especially those most dependent on foreign trade. However, multilateral negotiations in the past received a boost from relevant regional initiatives. For example, in the 1960s the process of building what was then the European Economic Community contributed to the completion of the Kennedy Round. And in the 1990s the signing of NAFTA pushed along the conclusion of the Uruguay Round.

The emergence of mega-regional agreements could reduce the viability of the Doha Round. The Doha agenda (which was set more than a decade ago) does not include several important governance issues relating to value chains.26 The existence of mega-regional agreements could also lead WTO to focus more on negotiating plurilateral agreements in areas where there is a critical mass of interested countries (ECLAC, 2012b, p. 47; Draper, 2013, p. 6). In fact, in 2013 plurilateral negotiations are to kick off on trade in services, in addition to existing negotiations for extending the Information Technology Agreement, and the recent United States proposal to negotiate a plurilateral agreement to liberalize trade in environmental goods. Over the medium term, the eventual conclusion of mega-regional

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26 An important exception is the negotiations on trade facilitation, which is key to the proper functioning of production networks. It is for this reason that in recent months there has been talk of the possibility of reaching an agreement in this area at the next WTO Ministerial Conference (to be held in Bali in December 2013) and of applying it independently from the other contents of the Round. However, this approach has not yet garnered the requisite consensus.
negotiations would open space for WTO to regain its centrality in defining the rules of global trade. The next step after the conclusion of such agreements would be to attempt to make their outcomes compatible and eventually multilateralize them, a task for which WTO is the obvious forum. Moreover, there are issues of great interest to developing countries (such as agricultural subsidies and abuse of antidumping measures in industrialized ones) that are not on the agenda of current mega-regional agreements. WTO is, then, still the only forum available for reaching agreements on these issues.

The implications of mega-regionalism for Latin America and the Caribbean are varied and complex, and depend, among other factors, on the production and export structure of each country and subregion, as well their respective strategies for international economic integration. For example, Mexico, the countries of Central America and the Dominican Republic are closely linked to production networks centred in the United States: these ties have been strengthened by NAFTA and CAFTA-DR. And all of these countries have signed free trade agreements with the European Union. The example given above for the textile and clothing sector illustrates the risks that a process such as TPP can pose for the countries of Mesoamerica. At the same time, the parallel involvement of the United States in negotiations aimed at creating transatlantic and trans-Pacific free trade areas also holds opportunities for these countries.

In the case of Mexico, the planned negotiations for expanding its free trade agreement with the European Union open a space for its eventual incorporation into the trade treaty between the United States and the European Union itself. And since the European Union is also in advanced negotiations for a similar agreement with Canada, in the medium term there could be movement towards an integrated transatlantic space encompassing the three NAFTA members that could take in the Central American countries as well. The cumulation of origin and the harmonization of rules that this process would bring about would open significant opportunities for the countries of Mesoamerica and the Caribbean to join transatlantic value chains. This possibility would also, in principle, be open to those countries of South America that have trade agreements with both the European Union and the United States. But it should not be forgotten that rules negotiated between two highly developed partners are not necessarily the best for or easily complied with by the countries of the region.

The various mega-regional negotiations under way, especially those between the United States and the European Union, could hasten the conclusion of negotiations for a trade agreement between the European Union and the Southern Common Market (MERCOSUR), which resumed in 2010 but have made little progress. The conclusion of the Transatlantic Trade and Investment Partnership (TTIP) could, in fact, make MERCOSUR agricultural exporters less competitive than their United States competitors in the European market. For Argentina, the Bolivarian Republic of Venezuela, Brazil and Uruguay, this would be compounded by the loss of Generalized System of Preferences (GSP) benefits in the European Union, as a result of their being classified as upper-middle-income countries for three consecutive years by the World Bank.

The potential implications of TPP and the Regional Comprehensive Economic Partnership for the region are not as clear. On the one hand, the production linkages between Latin America and the Caribbean and Asia are less developed than those with the United States and Europe, reflecting a trade pattern that is markedly inter-industry. On the other hand, few countries of the region have trade agreements with both the United States and the main Asian economies. Those that do could, in principle, benefit from deeper integration with Asian and trans-Pacific value chains, although this would hinge on their production and export patterns.

The three countries of Latin America participating in TPP are an example. Mexico has built a modality of international integration strongly grounded in participation in value chains. This has put it in competition against a number of Asian economies, as is reflected in its large trade deficit with Asia. But this situation also opens alternatives for complementarity and cooperation, taking advantage of Mexico’s proximity and privileged access to the United States market. Chile and Peru have positioned themselves as exporters of raw materials to Asia, with little sign of intra-industry trade (Roldán and others, 2013). It is not clear how participating in TPP could contribute to any substantial change in this pattern, because the active trade negotiation policy undertaken by the two countries has not been accompanied by a similar focus on industrial policy or on policies for production or export diversification. As a result, there has been no major change in their export profile to Asia after the entry into force of their agreements with Asian countries.
Finally, mega-regional agreements are aimed at establishing governance mechanisms that meet the needs of value chains based in North America, East and South-East Asia and Europe. But production is much less integrated among the Latin American and Caribbean economies, and their economic integration agreements are less far-reaching. Megaregionalism thus challenges Latin America and the Caribbean to deepen its own regional integration and to upgrade its participation in the international economy, regardless of whether it is based on natural resources, manufacturing or services. This has a number of policy implications that are taken up in chapter III.

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Latin America and the Caribbean in value chains

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Bibliography
A. Introduction

Global trade is increasingly being organized around what have been termed “global value chains”. The available evidence on global value chains indicates that they work chiefly on a regional basis, since they are concentrated in North America, the European Union and East Asia, with focal points in the United States, Germany and Japan and China, respectively. This trend towards regionalization is due in a large part to the proximity between countries in a given region—which translates into lower freight costs—and the progressive elimination of barriers to cross-border trade under regional integration agreements. This trend towards geographical fragmentation of production creates challenges for the countries of Latin America and the Caribbean, which have thus far found it difficult to carve a niche for themselves in global value chains.

With a view to assessing to what extent, and how well, the region’s countries engage in global value chains, this chapter will examine trade links both within the region, by analysing intraregional value chains, and between Latin American countries and the three main global value chains, the countries party to the North American Free-Trade Agreement (NAFTA) (Factory North America), the European Union (Factory Europe) and ASEAN+3 (Factory Asia). This analysis will then form the basis of policy recommendations to foster production integration between the countries of the region as a platform for their more effective integration into global value chains.

B. Latin America and the Caribbean in value chains

The available information dictates the manner in which the region’s engagement in global value chains can be analysed. The most apposite way would be by means of interconnected input-output tables (IOTs), which connect data on output and trade in a group of countries. IOTs enable estimates to be made for each economy of the amount of imported inputs used in national exports and of total value added exported. They show the interlinked nature of trade relationships and are free of the resultant double counting that plagues raw trade data. Although some international IOT databases exist, they include data from only a handful of Latin American countries and so are not suitable for the analysis of the region’s participation in value chains carried out in this chapter.2

Concentrating on trade data alone, one way of ascertaining the degree of engagement of the Latin American and Caribbean countries in value chains, both within and outside the region, is by analysing trade in intermediate goods. This chapter takes a broad definition of intermediate goods that combines the Classification by Broad Economic Categories (BEC) with a categorization of goods by technology content based on Lall (2000).3 Specifically, the definition

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1 The ASEAN+3 group comprises the member countries of the Association of Southeast Asian Nations (ASEAN) plus China, Japan, the Republic of Korea, the Chinese special administrative regions of Hong Kong and Macao, and Taiwan Province of China.

2 The sole “global” IOT are the Asian International Input-Output Table produced by the Japan External Trade Organization (JETRO), the World Input-Output Database (WIOD) and the Trade in Value Added (TiVA) database of the Organisation for Economic Cooperation and Development (OECD) and the World Trade Organization (WTO). The JETRO database does not include any Latin American or Caribbean country, the WIOD database carries data only on Brazil and Mexico, and the TiVA database includes data on Argentina, Brazil, Chile and Mexico only.

3 Here, Lall’s classification by technology content is modified by ECLAC (see Durán and Álvarez, 2011).
considered excludes commodities from those products classified as intermediates according to the BEC criteria,⁴ and class all remaining intermediate goods as semi-finished intermediate goods or industrial intermediate goods.⁵ By this definition, in 2010-2011 intermediate goods accounted for an average of just under 30% of the value of the region’s worldwide exports and 47% of its imports (see table III.1). Intermediate goods make up a greater proportion of exports within the region than to the rest of the world, a situation that is reversed in the case of the region’s imports.

Intermediate goods account for a significantly larger share of exports in the North American, European and Asian value chains than they do in Latin America and the Caribbean, making up over 40% of overall export value in all three cases (see table III.1). Just as in Latin America and the Caribbean, in Asian and European value chains intermediate goods account for a larger share of intraregional than global exports, particularly in Asia. In the case of NAFTA, however, intermediate goods make up a rather higher proportion of extraregional exports. Unlike Latin America and the Caribbean, however, the North American, European and Asian value chains all import rather more intermediate goods from within their own regions than from outside.

<p>| Table III.1 |
| Latin America and the Caribbean and selected groupings: proportion of intermediate goods in intraregional and extraregional trade, 2010-2011 (Percentages) |</p>
<table>
<thead>
<tr>
<th>Intraregional</th>
<th>Extraregional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America and the Caribbean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports</td>
<td>34.7</td>
<td>27.1</td>
</tr>
<tr>
<td>Imports</td>
<td>36.2</td>
<td>49.5</td>
</tr>
<tr>
<td>Latin America and the Caribbean excluding Mexico</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports</td>
<td>34.5</td>
<td>24.1</td>
</tr>
<tr>
<td>Imports</td>
<td>34.4</td>
<td>44.4</td>
</tr>
<tr>
<td>North American Free Trade Agreement (NAFTA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports</td>
<td>41.3</td>
<td>44.1</td>
</tr>
<tr>
<td>Imports</td>
<td>40.6</td>
<td>33.9</td>
</tr>
<tr>
<td>NAFTA excluding Mexico</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports</td>
<td>40.1</td>
<td>47.0</td>
</tr>
<tr>
<td>Imports</td>
<td>40.4</td>
<td>31.7</td>
</tr>
<tr>
<td>European Union</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports</td>
<td>46.4</td>
<td>44.2</td>
</tr>
<tr>
<td>Imports</td>
<td>47.8</td>
<td>33.2</td>
</tr>
<tr>
<td>ASEAN+3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports</td>
<td>54.8</td>
<td>40.2</td>
</tr>
<tr>
<td>Imports</td>
<td>55.8</td>
<td>37.1</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

With a view to assessing the degree to which the countries of Latin America and the Caribbean are integrated in global value chains and identifying intraregional value chains, the above analysis, based on the level of trade in intermediate goods, must be supplemented with some measure of the “quality” of such goods. While the proportion of intermediate goods in trade can be deemed to be a sign of production integration between countries, intensive trade in natural-resource-based manufactured goods tends to denote a low degree of such integration, as production processes in these industries are less likely to be geographically fragmented (Castilho, 2012). Moreover, even when countries are engaged in international value chains by virtue of natural-resource-based trade, the benefits they gain depend on their position within the chain—which is determined by the type of goods they produce—which, in turn, shapes their ability to embed value added, acquire new technologies and improve efficiency and productivity.

⁴ Goods classed as intermediate under BEC fall into the following categories: 111 (food and beverages, primary, mainly for industry), 121 (food and beverages, processed, mainly for industry), 21 (industrial supplies not elsewhere specified, primary), 22 industrial supplies not elsewhere specified, processed), 31 (fuels and lubricants, primary), 322 (fuels and lubricants, processed other than motor spirit), 42 (parts and accessories of capital goods except transport equipment) and 53 (parts and accessories of transport equipment).

⁵ Goods originally defined as intermediate under BEC were then classified by technology content as primary products—which are excluded from this analysis—, natural-resource-based goods or low-, medium- or high-technology-manufactured goods. Natural-resource-based goods are classed as semi-finished intermediate goods, while low- medium- or high-technology manufactured goods fall into the category of industrial intermediate goods. This definition of intermediate goods is much broader than that generally used in the literature, which includes only parts and components and, on occasion, goods from the textile industry.
A breakdown of intermediate goods exports from Latin America and the Caribbean into semi-finished or industrial goods, according to technology content as explained above, shows, in principle, the predominance of industrial goods in both intraregional and extraregional exports (see figure III.1A). However, if Mexico is taken out of the picture, the proportion of industrial goods in extraregional exports is considerably reduced, and the share of semi-finished goods (66% on average in 2010-2011) is clearly larger. In North American, European and Asian value chains, meanwhile, industrial goods make up the lion’s share of exports —both intraregional and extraregional— of intermediate goods (with respective shares of around 70% in the first two cases and around 80% for ASEAN+3).

In all groupings, industrial goods account for a high share of imports of intermediate goods, in proportions ranging from 63% to 83% in 2010-2011 (see figure III.1B). What stands out in the case of Latin America and the Caribbean is that semi-finished goods make up a slightly larger share of imports from within the region than from outside it, whereas the opposite is true in the ASEAN+3 grouping.

Figure III.1
Latin America and the Caribbean and selected groupings: breakdown of intraregional and extraregional trade by type of goods, average 2010-2011
(Percentages)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on COMTRADE.
C. Regional integration and regional value chains

In this section, indices measuring intra-industry trade in intermediate goods will be used as an approximate yardstick to assess the degree of integration of each Latin American and Caribbean country in international value chains. These indices will also be used to identify the countries with the highest degree of bilateral intra-industry trade with their partners within the region and with the United States, the countries of the European Union and the ASEAN+3 grouping. A more in-depth analysis will then be made of these trade relations using data broken down by industry.6

As a rule, if bilateral trade between a given pair of countries is predominantly intra-industrial in nature, this will be deemed evidence of stronger production linkages between those countries.7 However, in order to capture trade relations involving vertical production integration, trade in final (not intermediate) consumption and capital goods will also be included, regardless of whether the partners have strong intra-industry bilateral relations (as in the textile-spinning and clothing and automotive parts and motor vehicles industries). Bilateral trade between Mexico and Central America and the United States provides a good example of such vertically integrated value chains.

Analysis of the data presented in table III.2 reveals that the highest rates of intra-industry trade are to be found in Mexico’s, Brazil's and Costa Rica's bilateral relations with the United States. There is also a small group of countries (the Dominican Republic, Saint Kitts and Nevis, Argentina, Colombia, Chile, Suriname and Panama) which have the potential for intra-industry trade with the United States. In contrast, the region’s bilateral trade in intermediate goods with the European Union and ASEAN+3 is overwhelmingly inter-industrial; the only exceptions being Mexico, Brazil, Costa Rica and Barbados, which have the potential for intra-industry trade with these blocs. These exceptions appear to show that there are certain industries with a major presence in global —i.e. European or Asian— value chains.

With regard to intraregional trade, the most intensive intra-industry trade is to be found in El Salvador, while most of the other countries of Central America and much of South America, as well as Mexico, show the potential for intra-industry trade, thus demonstrating that there are indeed a few regional value chains.

Trade in intermediate goods between the Bolivarian Republic of Venezuela, Cuba, Nicaragua, Paraguay, the Plurinational State of Bolivia and most Caribbean countries and all of the blocs shown in table III.2 is dominated by inter-industry trade, reflecting these countries’ export specialization in primary goods.

With a view to identifying the countries with the closest intra-industry links in intraregional trade in intermediate goods, bilateral trade between all of the economies in the region was analysed. The results for 2010-2011 show that the most intensive intra-industrial trade took place between countries belonging to the same subregional bloc, particularly in the Southern Common Market (MERCOSUR) and the Central American Common Market (CACM), where there was also potential for intra-industrial trade (see table III.3). Significant intra-industry trade also exists between, respectively, Argentina and Chile, Chile and Uruguay, Mexico and Argentina, Mexico and Brazil, and Costa Rica and the Bolivarian Republic of Venezuela. The potential for such trade is also evident among the Andean Community countries (between Colombia, Ecuador and Peru) and between Chile and Mexico and some South American countries.

Among the Caribbean countries, the Dominican Republic stands out as having potential for intra-industrial trade with the CACM countries, which are all parties to the Dominican Republic-Central America Free Trade Agreement (as is the United States). On the contrary, trade relations between Cuba and the CARICOM countries and the rest of the region are mostly inter-industrial —with a few exceptions where there is potential for intra-industry trade— which would suggest weak links to regional value chains.

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6 In this study, the term “industry” shall be taken to mean one of the three-digit product codes in the Standard International Trade Classification (SITC).
7 A pair of countries will be understood to be engaging in intra-industry trade if they export products to one another within the same sector. Intra-industry trade is measured by the Grubel-Lloyd Index (GLI), in which an index value of more than 0.33 shows a high incidence of such trade, a value of between 0.10 and 0.33 indicates the potential for such trade, and values of below 0.10 indicate inter-industry trade (i.e. mutual exports of products from different sectors). GLI calculations for the three-digit SITC (revision 2) product categories were made for bilateral trade flows between each country and its intraregional and extraregional partners. These values were then used to obtain a weighted average of each country’s exports per product and trading partner.
Table III.2
Latin America and the Caribbean: indices of intra-industrial trade in intermediate goods, by trading partner, 2010-2011<sup>a</sup>
(Grubel-Lloyd indices)

<table>
<thead>
<tr>
<th>Country</th>
<th>Latin America and the Caribbean</th>
<th>United States</th>
<th>European Union</th>
<th>ASEAN+3</th>
</tr>
</thead>
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<td></td>
<td></td>
<td></td>
</tr>
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<td>0.20</td>
<td>0.07</td>
<td>0.04</td>
</tr>
<tr>
<td>Bolivia (Plurinational State of)</td>
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<td>0.07</td>
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<tr>
<td>Colombia</td>
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<td>0.19</td>
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<td>0.01</td>
</tr>
<tr>
<td>Ecuador</td>
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<td>0.09</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>Paraguay</td>
<td>0.06</td>
<td>0.02</td>
<td>0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>Peru</td>
<td>0.16</td>
<td>0.08</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>Uruguay</td>
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<td>0.08</td>
<td>0.04</td>
<td>0.02</td>
</tr>
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<td>0.04</td>
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<td>Honduras</td>
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<td>0.01</td>
<td>0.01</td>
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<tr>
<td>Panama</td>
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<td>0.11</td>
<td>0.04</td>
<td>0.04</td>
</tr>
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<td></td>
<td></td>
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<td>0.00</td>
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</tr>
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<td>0.05</td>
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</tr>
<tr>
<td>Dominica</td>
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<td>0.02</td>
<td>0.06</td>
<td>0.00</td>
</tr>
<tr>
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<td>Guyana</td>
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<tr>
<td>Jamaica</td>
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<td>0.00</td>
</tr>
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</tr>
<tr>
<td>Saint Lucia</td>
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</tr>
<tr>
<td>Saint Vincent and the Grenadines</td>
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</tr>
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<td>Suriname</td>
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<td>0.01</td>
</tr>
<tr>
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<td>0.03</td>
<td>0.01</td>
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<td><strong>0.48</strong></td>
<td><strong>0.11</strong></td>
<td><strong>0.05</strong></td>
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</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

<sup>a</sup> These indices are weighted averages of each country’s bilateral trade with the countries of each of the groupings examined. For the Bahamas, Haiti, Honduras and Saint Lucia, trade data were based on mirror statistics of the respective bilateral trading partners, as no official statistics were available in COMTRADE for 2011.
### Table III.3
Latin America and the Caribbean: matrix of intraregional trade in intermediate goods, 2010-2011
(Grubel-Lloyd indices for total trade in intermediate goods)

<table>
<thead>
<tr>
<th>Source</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Paraguay</th>
<th>Uruguay</th>
<th>Venezuela (Bolivarian Republic of)</th>
<th>Bolivia (Plurinational State of)</th>
<th>Colombia</th>
<th>Ecuador</th>
<th>Peru</th>
<th>Chile</th>
<th>Dominican Republic</th>
<th>Mexico</th>
<th>Costa Rica</th>
<th>El Salvador</th>
<th>Guatemala</th>
<th>Honduras</th>
<th>Nicaragua</th>
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<th>Cuba</th>
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<tr>
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<td>0.00</td>
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<td>0.02</td>
<td>0.01</td>
<td>0.06</td>
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</tr>
</tbody>
</table>
| CARICOM                 | 0.00      | 0.01   | 0.00     | 0.01    | 0.00                              | 0.00                           | 0.02     | 0.02    | 0.01 | 0.01 | 0.03                              | 0.06 | 0.00     | 0.00     | 0.00    | 0.00    | 0.00     | 0.00    | 0.00    

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

The map of intra-industry trade in intermediate goods for the various subregional blocs shows that closest links are to be found, firstly, between members of the same integration scheme (as is the case within MERCOSUR and CACM) and, secondly, between countries in geographical proximity to one another (see table III.4). Mexico is notable for displaying potential for intra-industry trade with all of the various subregional integration schemes, with the exception of CARICOM, as well as with Chile.

### Table III.4
Latin America and the Caribbean (integration schemes and non-member countries): matrix of intraregional trade in intermediate goods, 2010-2011
(Grubel-Lloyd indices for total trade in intermediate goods)

<table>
<thead>
<tr>
<th>Country/grouping</th>
<th>MERCOSUR</th>
<th>Andean Community</th>
<th>CACM</th>
<th>CARICOM</th>
<th>Chile</th>
<th>Latin America and the Caribbean</th>
</tr>
</thead>
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</tr>
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<td>(MERCOSUR)</td>
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</tr>
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</tr>
<tr>
<td>Central American Common Market (CACM)</td>
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<td>0.36</td>
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</tr>
<tr>
<td>Caribbean Community (CARICOM)</td>
<td>0.00</td>
<td>0.01</td>
<td>0.00</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>0.26</td>
<td>0.14</td>
<td>0.04</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>0.32</td>
<td>0.10</td>
<td>0.12</td>
<td>0.01</td>
<td>0.26</td>
<td>0.17</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>0.28</td>
<td>0.14</td>
<td>0.25</td>
<td>0.02</td>
<td>0.25</td>
<td>0.21</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).
Having identified the bilateral trade relations which are most intensive in intra-industry trade, a more detailed analysis will be made of value chains, focusing on industries linked to chains in: Mexico and the United States; Costa Rica and the United States and the rest of Central America and the United States, as well as subregional chains in CACM; MERCOSUR and the Andean Community.

1. Mexico and the United States

Of all the countries in the region, Mexico has the closest intra-industry trade links with the United States. In 2000-2001 intra-industry trade accounted for 77% of exports from Mexico to the United States, a figure that had fallen to 53% by 2011-2012 as a result of competition in the United States market from similar imports from China, which is, like Mexico, deeply embedded in export chains orientated towards the United States.

In 2011-2012, about a third of Mexico’s exports to the United States were intermediate goods, with industrial goods making up the lion’s share (about 30% of total exports, or almost 90% of exports of intermediate goods, see figure III.2A). An analysis of these exports by category —intra-or inter-industry— reveals that the bulk of trade in industrial intermediate goods is intra-industrial (94%, compared with 59% for semi-finished goods, see figure III.2B).

Figure III.2  
**Mexico: exports to the United States, by category of goods, and breakdown of intermediate goods exports, 2011-2012**

*Percentages*

<table>
<thead>
<tr>
<th>Category</th>
<th>2011-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodities</td>
<td>14%</td>
</tr>
<tr>
<td>Industrial intermediate</td>
<td>30%</td>
</tr>
<tr>
<td>Capital</td>
<td>25%</td>
</tr>
<tr>
<td>Consumption</td>
<td>17%</td>
</tr>
<tr>
<td>Semi-finished intermediate</td>
<td>4%</td>
</tr>
<tr>
<td>Unclassified</td>
<td>10%</td>
</tr>
</tbody>
</table>

*Intra-industrial* corresponds to the proportion of exports from industries with a Grubel-Lloyd index of over 0.33; *inter-industrial* corresponds to the proportion of exports from industries with Grubel-Lloyd indices of below 0.10.

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).
Between 2000 and 2012, Mexico’s exports of intermediate goods to the United States grew, on average, at just under half the rate of its exports to the rest of the world (4.9% as opposed to 11.1%), and intermediate goods exports to the United States fell from 86% to 77% of total intermediate goods exports, with exports to other destinations taking up the slack (see table III.5). Although the share of semi-finished intermediate goods in the country’s exports fell most sharply, the slackening in the industrial intermediate goods category was of greater consequence since these accounted for a larger share of total exports. Growth markets for Mexican exports of intermediate goods included the European Union and, particularly, the Central American countries, especially the members of CACM, with which Mexico has signed a free trade agreement.

### Table III.5
**Mexico: exports to the United States and the rest of the world by type of goods, 2000-2012**

(Percentages)

<table>
<thead>
<tr>
<th>Type of goods</th>
<th>Share of total</th>
<th>Annual rate of change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>United States</td>
<td>Rest of the world</td>
</tr>
<tr>
<td>Commodities</td>
<td>75.2</td>
<td>68.9</td>
</tr>
<tr>
<td>Intermediate goods</td>
<td>88.9</td>
<td>80.1</td>
</tr>
<tr>
<td>Semi-finished</td>
<td>77.5</td>
<td>66.9</td>
</tr>
<tr>
<td>Industrial</td>
<td>90.1</td>
<td>82.3</td>
</tr>
<tr>
<td>Consumption</td>
<td>89.6</td>
<td>78.8</td>
</tr>
<tr>
<td>Capital</td>
<td>93.9</td>
<td>85.5</td>
</tr>
<tr>
<td>Not classified</td>
<td>84.5</td>
<td>80.8</td>
</tr>
<tr>
<td>Total exports</td>
<td>88.3</td>
<td>79.5</td>
</tr>
<tr>
<td>Total value</td>
<td>146 543</td>
<td>284 749</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

Of the 20 groups of intermediate goods exported from Mexico to the United States with the highest rate of intra-industry linkages, 19 are manufactures of various sorts, especially medium- and low-technology products (see table III.6). An analysis by type of goods shows that a significant proportion of intra-industry trade is in industrial intermediate goods.

Applying this analysis by sector shows that Mexico’s principal export chains to the United States are connected to the automotive industry, especially the automotive parts and accessories sector, which makes up 19% of the total. The next most important sectors are electricity distribution equipment, electrical switching devices and internal combustion engines. These four leading industries account for 43% of Mexico’s total exports of intermediate goods to the United States (see table III.6). Capital goods industries, including non-electrical machinery, medical equipment, heating and cooling equipment, pumps and compressors and civil engineering machinery and equipment, also figure prominently in the group of intermediate goods exporters to the United States. Mexican suppliers in these industries ship mainly parts and accessories to companies in Factory North America, especially those in the United States.

It is worth remarking that some of Mexico’s high-tech, capital-intensive industries, such as telecommunications equipment, electrical machinery and appliances, measurement instruments and devices and other electrical goods, also produce significant exports of intermediate products to Factory North America.

There are 20 vehicle assembly firms in Mexico housed within 18 production complexes in 11 federal states. In total, this adds up to more than 2,000 plants producing automotive parts and accessories, which accounts for about 13% of industrial employment spread throughout the various links in the chain, from design all the way to vehicle body pressing and final assembly (Prochnik and others 2010; Garrido 2010). Between 2000 and 2010 the Mexican automobile and automotive parts value chain attracted more than US$ 10 billion in foreign direct investment (FDI).
### Table III.6

**Mexico and the United States: intra-industry trade in intermediate goods, 2011-2012**

(Grubel-Lloyd Index and percentages)

<table>
<thead>
<tr>
<th>Rank</th>
<th>SITC</th>
<th>Description</th>
<th>Percentage of total</th>
<th>Grubel-Lloyd Index</th>
<th>Type of intermediate good</th>
<th>Percentage of intermediate goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>784</td>
<td>Motor vehicle parts, accessories</td>
<td>18.9</td>
<td>0.84</td>
<td>Industrial (MTM)</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>773</td>
<td>Electricity distributing equipment</td>
<td>8.8</td>
<td>0.59</td>
<td>Industrial (MTM)</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>772</td>
<td>Electrical apparatus for switching</td>
<td>7.9</td>
<td>0.87</td>
<td>Industrial (MTM)</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>713</td>
<td>Internal combustion engines</td>
<td>6.9</td>
<td>0.97</td>
<td>Industrial (MTM)</td>
<td>79</td>
</tr>
<tr>
<td>5</td>
<td>764</td>
<td>Telecommunications equipment</td>
<td>6.0</td>
<td>0.45</td>
<td>Industrial (HTM)</td>
<td>27</td>
</tr>
<tr>
<td>6</td>
<td>778</td>
<td>Electrical machinery and apparatus</td>
<td>4.5</td>
<td>0.58</td>
<td>Industrial (HTM)</td>
<td>54</td>
</tr>
<tr>
<td>7</td>
<td>821</td>
<td>Furniture and parts thereof</td>
<td>4.4</td>
<td>0.35</td>
<td>Industrial (LTM)</td>
<td>14</td>
</tr>
<tr>
<td>8</td>
<td>699</td>
<td>Manufactures of base metal</td>
<td>3.4</td>
<td>0.90</td>
<td>Industrial (LTM)</td>
<td>96</td>
</tr>
<tr>
<td>9</td>
<td>749</td>
<td>Non-electric machine parts, accessories</td>
<td>3.3</td>
<td>0.90</td>
<td>Industrial (MTM)</td>
<td>76</td>
</tr>
<tr>
<td>10</td>
<td>776</td>
<td>Electronic valves and tubes; diodes</td>
<td>2.7</td>
<td>0.79</td>
<td>Industrial (HTM)</td>
<td>100</td>
</tr>
<tr>
<td>11</td>
<td>872</td>
<td>Medical instruments and appliances</td>
<td>2.2</td>
<td>0.47</td>
<td>Industrial (MTM)</td>
<td>33</td>
</tr>
<tr>
<td>12</td>
<td>893</td>
<td>Articles of plastics</td>
<td>2.2</td>
<td>0.67</td>
<td>Industrial (LTM)</td>
<td>81</td>
</tr>
<tr>
<td>13</td>
<td>714</td>
<td>Engines and motors, non-electric</td>
<td>1.9</td>
<td>0.77</td>
<td>Industrial (MTM)</td>
<td>100</td>
</tr>
<tr>
<td>14</td>
<td>741</td>
<td>Heating and cooling equipment</td>
<td>1.7</td>
<td>0.59</td>
<td>Industrial (MTM)</td>
<td>24</td>
</tr>
<tr>
<td>15</td>
<td>874</td>
<td>Measuring instruments and apparatus</td>
<td>0.8</td>
<td>0.82</td>
<td>Industrial (HTM)</td>
<td>21</td>
</tr>
<tr>
<td>16</td>
<td>723</td>
<td>Civil engineering plant and equipment</td>
<td>0.6</td>
<td>0.43</td>
<td>Industrial (MTM)</td>
<td>14</td>
</tr>
<tr>
<td>17</td>
<td>743</td>
<td>Pumps and compressors</td>
<td>0.6</td>
<td>0.92</td>
<td>Industrial (MTM)</td>
<td>15</td>
</tr>
<tr>
<td>18</td>
<td>716</td>
<td>Rotating electric plant, and parts thereof</td>
<td>0.4</td>
<td>0.60</td>
<td>Industrial (HTM)</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>771</td>
<td>Electric power machinery</td>
<td>0.2</td>
<td>0.43</td>
<td>Industrial (HTM)</td>
<td>9</td>
</tr>
<tr>
<td>20</td>
<td>334</td>
<td>Petroleum products</td>
<td>0.0</td>
<td>0.42</td>
<td>Semi-finished</td>
<td>80</td>
</tr>
</tbody>
</table>

**Total for the 20 main products**: 77.67%

**Source**: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

- Refers to the proportion of the SITC product group in total exports of intermediate goods to the country in question.
- Refers to the type of intermediate good (semi-finished or industrial) within the SITC group. For industrial goods, the level of technology intensity is also given in brackets (LTM = low-technology manufactures, MTM = medium-technology manufactures, HTM = high-technology manufactures).
- Calculated on the basis of the ratio between the number of intermediate goods exported in the respective SITC group and the total number of goods exported in that group; the number of goods is measured using the 6-digit Harmonized Commodity Description and Coding System.

The main products from the automotive industry that are exported to value chains in North America, particularly the United States, are: bodies for tractors, buses and trucks, bumpers and parts thereof, transmission parts, electrical components, seat belts, brake linings, parts for braking systems, drive shafts, wheels and parts thereof and engines and parts thereof. Mexico is the leading supplier of automotive parts and accessories to the United States and is the third largest player in the automotive value chain as a whole (Dussel and Gallagher, 2013). Mexico has seized the significant advantages open to it as a member of NAFTA, since lower tariffs are applied to its goods than to similar Chinese products.

In the electricity distributing equipment and electrical appliances industry, major export items include spools of copper wire, coaxial and other cables, spark plugs, electrical conductors and ceramic and plastic insulators.

It is widely acknowledged that the automotive industry in Mexico has provided technological spillovers into other sectors, such as electronics and aerospace thus, in turn, enriching the Mexican workforce with specialist technical experts (DGIPAT, 2012).

The Mexican Directorate-General of Heavy Industry and High Technology (DGIPAT) has recently identified the following as some of the country’s main export manufactures for the aviation industry: turbine parts (such as rings, blades, vanes, metal rods, couplings, precision seals, radiators, compressors and heat insulators), electronic, machined and metal components and harnesses and products for use inside aircraft. Of all these manufactured goods, the production of parts generates the largest share of industrial inputs (about 24% of the total).

Mexico’s aviation industry has seen strong growth in recent years. The country is the world’s foremost destination for aviation manufacturing investment, with nearly US$ 36 billion invested between 1990 and 2012 (DGIPAT, 2012), and exports in the sector grew on average by 14% per year in the past decade. The industry is made up of...
248 companies and dedicated ancillary service providers in the subsectors of manufacturing (70.6%), repairs and maintenance (12.5%) and engineering and design (16.9%).

Although the United States is the main market for Mexico’s aviation exports, accounting for 74% of the total, a significant proportion (8%) also goes to Canada, also a part of Factory North America. Other notable markets are France, the United Kingdom and Japan (DGIPAT, 2012).

Fujii and Cervantes have calculated, using an input-output table (IOT) for Mexico in 2003, that the country’s three most important export sectors (the manufacture of electrical and electronic goods and transportation equipment) make up 54% of value added in exports. By breaking down these figures into direct (the income generated in transforming inputs into finished products) and indirect value added (the income generated in producing domestically sourced inputs for subsequent incorporation into exports), they then ascertained that the proportion of direct value added is larger, which means that export sectors are relatively isolated from the rest of the economy. These weak links between the export sector and the broader economy explain the small proportion of domestic inputs in exports, especially in the maquila industry (Fujii and Cervantes, 2013).

One industry that does not appear in the top 20 is textiles and clothing, a sector that has been emblematic of global integration in Mexico. This industry is made up of consumption goods (clothing) and intermediate goods (textiles), export sectors in which Mexico has traditionally played an important role in the United States market. However, stiff competition from similar products from China and Viet Nam has undermined Mexico’s competitiveness at all links in the value chain (yarn, textiles and clothing). Textiles and clothing exports have nearly halved from US$ 8.3 billion in 2000 to US$ 4.2 billion in 2012. As a result, some Mexican businesses are openly requesting State aid, while others have packed up and left for Asia, especially for China, the world’s largest producer of textiles and related goods (Dussel and Gallagher, 2013). This chapter will further discuss the clothing value chain when links between the Central American countries and the United States are examined.

2. Costa Rica and the United States

After Mexico, Costa Rica is the Latin American country whose trade is most integrated with the United States market: in 2012, 38% of total Costa Rican exports went to the United States. This trade relationship has gained strength over the past decade, especially as a result of Costa Rica’s strategy on attracting FDI and its trade policy aimed at tapping new markets. The country is also a party to the Information Technology Agreement, which a number of member countries of the World Trade Organization (WTO) signed in 1997. This, coupled with certain tax incentives and Costa Rica’s privileged location with both proximity to the United States and access to the Atlantic and Pacific, secured the Intel corporation investment in the country. From this basis Costa Rica has consolidated its strategy of building up export sectors with strong links to global markets.

The pattern of Costa Rica’s exports to the United States, consisting of 46% intermediate goods, and featuring a high rate of intra-industry trade in industrial intermediate goods (see figure III.3) has also been shaped by the free-trade agreement that it signed with the United States, together with the other CACM countries and the Dominican Republic in 2004. Further evidence of Costa Rica’s close links with the United States market is that the country provides the majority of flows of FDI into Costa Rica (60% of total inward FDI from 2000 to 2012).

Proportionally, between 2000 and 2011, Costa Rica’s intermediate goods exports to the rest of the world grew faster than its total exports, although its exports of capital goods grew faster still. In respect of the United States, exports of capital and semi-finished intermediate goods have risen strongly, as have exports of commodities, whereas exports of industrial intermediates have grown more slowly (see table III.7).

The slower growth of exports to the United States has been offset by more buoyant trade with the rest of the world, especially in industrial intermediate goods. This is a clear sign that Costa Rica’s intermediate goods industry is diversifying into other markets, especially in Asia.
Costa Rica: exports to the United States by category of goods and structure of intermediate goods exports, 2011-2012

A. Breakdown by category of goods

B. Structure of exports of intermediate goods

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

Table III.7

Costa Rica: exports to the United States and the rest of the world by category of goods, 2000-2011

<table>
<thead>
<tr>
<th>Type of goods</th>
<th>Proportion of the total</th>
<th>Annual rate of change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>United States</td>
<td>Rest of the world</td>
</tr>
<tr>
<td>Commodities</td>
<td>2000  2011</td>
<td>2000  2011</td>
</tr>
<tr>
<td>Industrial</td>
<td>36.6  36.6</td>
<td>36.6  63.4</td>
</tr>
<tr>
<td>Semi-finished</td>
<td>36.2  31.2</td>
<td>63.8  68.8</td>
</tr>
<tr>
<td>Capital</td>
<td>43.3  70.4</td>
<td>56.7  29.6</td>
</tr>
<tr>
<td>Total exports</td>
<td>52.2  38.6</td>
<td>47.8  61.4</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).
The top 20 groups of intermediate goods in Costa Rican intra-industry exports to the United States include a significant number of products from industries linked to Factory North America value chains, notably those supplying medical equipment and devices, electrical and electronic goods, automotive parts and accessories, chemicals and pharmaceuticals, agribusiness goods, and other cross-cutting industries such as plastic goods. Products in these industries are of medium or high technology intensity in 65% of cases (see table III.8).

Table III.8
(Grubel-Lloyd indices and percentages)

<table>
<thead>
<tr>
<th>Rank</th>
<th>SITC</th>
<th>Description</th>
<th>Percentage of total</th>
<th>Grubel-Lloyd index</th>
<th>Type of intermediate good</th>
<th>Percentage of intermediate goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>872</td>
<td>Medical instrument and appliances</td>
<td>17.8</td>
<td>0.33</td>
<td>Industrial (MTM)</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>776</td>
<td>Thermionic, cold cathode and photo-cathode valves and tubes</td>
<td>15.1</td>
<td>0.54</td>
<td>Industrial (HTM)</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>772</td>
<td>Electrical apparatus for switching</td>
<td>2.9</td>
<td>0.34</td>
<td>Industrial (MTM)</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>58</td>
<td>Fruit, preserved, and fruit preparations</td>
<td>2.1</td>
<td>0.45</td>
<td>Semi-finished</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>893</td>
<td>Articles of plastics</td>
<td>1.8</td>
<td>0.46</td>
<td>Industrial (LTM)</td>
<td>77</td>
</tr>
<tr>
<td>6</td>
<td>773</td>
<td>Equipment for distributing electricity</td>
<td>1.2</td>
<td>0.89</td>
<td>Industrial (MTM)</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>664</td>
<td>Glass</td>
<td>1.1</td>
<td>0.60</td>
<td>Semi-finished</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
<td>784</td>
<td>Parts and accessories of motor vehicles</td>
<td>1.0</td>
<td>0.64</td>
<td>Industrial (MTM)</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>778</td>
<td>Electrical machinery and apparatus</td>
<td>0.9</td>
<td>0.72</td>
<td>Industrial (HTM)</td>
<td>58</td>
</tr>
<tr>
<td>10</td>
<td>774</td>
<td>Electrical appliances for household use</td>
<td>0.8</td>
<td>0.50</td>
<td>Industrial (HTM)</td>
<td>33</td>
</tr>
<tr>
<td>11</td>
<td>874</td>
<td>Measuring instruments and apparatus</td>
<td>0.6</td>
<td>0.40</td>
<td>Industrial (HTM)</td>
<td>23</td>
</tr>
<tr>
<td>12</td>
<td>628</td>
<td>Articles of rubber</td>
<td>0.5</td>
<td>0.92</td>
<td>Semi-finished</td>
<td>71</td>
</tr>
<tr>
<td>13</td>
<td>881</td>
<td>Photographic apparatus and equipment</td>
<td>0.5</td>
<td>0.48</td>
<td>Industrial (HTM)</td>
<td>45</td>
</tr>
<tr>
<td>14</td>
<td>541</td>
<td>Medicinal and pharmaceutical products</td>
<td>0.5</td>
<td>0.34</td>
<td>Industrial (HTM)</td>
<td>69</td>
</tr>
<tr>
<td>15</td>
<td>98</td>
<td>Edible products and preparations</td>
<td>0.4</td>
<td>0.58</td>
<td>Semi-finished</td>
<td>9</td>
</tr>
<tr>
<td>16</td>
<td>635</td>
<td>Wood manufactures</td>
<td>0.4</td>
<td>0.79</td>
<td>Semi-finished</td>
<td>67</td>
</tr>
<tr>
<td>17</td>
<td>821</td>
<td>Furniture and parts thereof</td>
<td>0.4</td>
<td>0.88</td>
<td>Industrial (LTM)</td>
<td>36</td>
</tr>
<tr>
<td>18</td>
<td>716</td>
<td>Rotating electric plant, and parts thereof</td>
<td>0.3</td>
<td>0.72</td>
<td>Industrial (HTM)</td>
<td>6</td>
</tr>
<tr>
<td>19</td>
<td>786</td>
<td>Trailers and other vehicles, not motorized</td>
<td>0.3</td>
<td>0.38</td>
<td>Industrial (MTM)</td>
<td>25</td>
</tr>
<tr>
<td>20</td>
<td>713</td>
<td>Internal combustion engines</td>
<td>0.3</td>
<td>0.92</td>
<td>Industrial (MTM)</td>
<td>70</td>
</tr>
</tbody>
</table>

Total for the 20 main products 48.9 68

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

a Refers to the proportion of the SITC product group in total exports of intermediate goods to the country in question.
b Refers to the type of intermediate good (semi-finished or industrial) within the SITC group. For industrial goods, the level of technology intensity is also given in brackets (LTM = low-technology manufactures, MTM = medium-technology manufactures, HTM = high-technology manufactures).
c Calculated on the basis of the ratio between the number of intermediate goods exported in the respective SITC group and the total number of goods exported in that group; the number of goods is measured using the 6-digit Harmonized Commodity Description and Coding System.

In the medical equipment and devices industry, Costa Rican exports to the United States include products such as syringes, tubular metal needles, suture needles, catheters and cannulae as well as electrodiagnostic devices, stethoscopes, breathing apparatus, gas masks, blood pressure monitors and thermometers. Exports in this industry are mainly high-tech finished capital goods, with a high share of domestic value added (60%). The value added in this industry is mainly imparted by labour (23%), local inputs (8%) and local service-provision (19%) (Monje- Ariño, 2011). In 2011-2012, the sector accounted for 18% of total exports to the United States. In 2009 Costa Rica’s Foreign Trade Promotion Board (PROCOMER) estimated that 25 companies were active in global value chains, with an average of 475 employees per company.
In the electronics industry, the country exports a wide range of intermediate goods to the United States, principally medium-technology products for the manufacture of items such as integrated circuits, switches, incandescent lamps and surge protectors. The industry involves some 10 companies that export to both the United States and China. Just as in the medical equipment sector, the value added in the electronics industry amounts to 20%, of which employment provides 24%, local inputs 9% and services 10%, with profits, taxes and capital making up the largest category (58%) (Monje-Ariño, 2011).

Like Mexico’s aviation and aerospace industry, Costa Rica’s aerospace industry developed on the basis of production of electronic parts and accessories. Although the first company in the sector opened a plant in Costa Rica as far back as 1985, the industry did not become fully internationalized and embedded in global value chains until the early 2000s.

According to the Costa Rican Coalition for Development Initiatives (CINDE), between 2000 and 2013, the number of companies in the sector increased by 83%. As of July 2013, Costa Rica had a high-tech manufacturing cluster of 55 companies (including multinationals), providing 16,000 jobs, this number having quadrupled over the same period (Prensa Libre, 2013). The proportion of domestic value added in the sector is 70%, the bulk of which is provided by employment (54%), followed by services (31%) and then capital, local inputs and profit and taxes, which, taken together, account for less than 15%.

Costa Rica has 16 companies that are well linked into value chains, particularly in North America, and which provide goods and services such as repairing aircraft turbines, designing and testing devices, parts and accessories, printed circuit boards, thermostats, repairing motherboards for aircraft, and designing and maintaining helicopters (Monge-Gonzalez and Zolezzi, 2012).

The automotive industry also plays a prominent role. The main products it exports include automotive parts and accessories, exhausts and silencers, transmissions, shock absorbers and braking system parts, as well as less high-tech products in other manufacturing sectors with links to the industry (such as seats, lubricants, plastics and polymers). Although the value of exports from this industry is very low (under US$ 200 million), 40% of this value is embedded locally, of which 32% by employment and 27 % by local service-provision (Monje-Ariño, 2011).

Another important industry is medical and pharmaceutical products, which supplies a wide range of goods to the United States (medical dressings, dental cements, first-aid kits, hormone- or spermicide-based contraceptive preparations, X-rays, vitamins B1, B12 and A, veterinary vaccines, and antibiotics).

In Costa Rica, the way in which local industries participate in global value chains is notable in that the value-creation process involves a large number of service providers in various fields, namely financial services, professional services, electricity, water and gas, freight, and other business services (such as accounting, auditing and legal services). All of these services, therefore, effectively act as indirect exports in such chains.

3. Other Central American Common Market countries and the United States

Links between the other Central American countries and the United States are strongest in sectors such as textile-spinning and clothing, in which El Salvador, Guatemala, Honduras and, to a lesser extent, Nicaragua are present. A breakdown of these countries’ exports to the United States shows that 60% are final consumption goods, followed by commodities (28%) and intermediate goods, which account for only 9%.

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8 The electronics industry provides over 20% of total exports of intermediate goods and employs some 5,700 people in Costa Rica.
Among intermediate goods exports, 57% of industrial exports from CACM countries (excluding Costa Rica) are intra-industrial in nature. This share is significantly smaller in the case of semi-finished intermediate goods (see figure III.4). However, the small proportion of intermediate goods in the total exports of this group of countries is evidence of the predominately inter-industrial nature of their trade relationship with the United States.

**Figure III.4**

*Central American Common Market (excluding Costa Rica): exports to the United States, by category of goods and structure of intermediate goods exports, 2011-2012 (Percentages)*

<table>
<thead>
<tr>
<th>Category of Goods</th>
<th>2011-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodity</td>
<td>28%</td>
</tr>
<tr>
<td>Industrial</td>
<td>3%</td>
</tr>
<tr>
<td>Semi-finished</td>
<td>6%</td>
</tr>
<tr>
<td>Consumption</td>
<td>60%</td>
</tr>
</tbody>
</table>

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

*Intra-industrial* corresponds to the proportion of exports from industries with a Grubel-Lloyd index of over 0.33; “inter-industrial” corresponds to the proportion of exports from industries with Grubel-Lloyd indices of below 0.10.

Although trade between the remaining Central American countries and the United States is on the whole less intra-industrial, there is a high degree of production integration between these countries and their North American partner in the manufacture of clothing of various kinds (such as shirts, trousers, and men’s and women’s underwear). The Central American clothing industry uses inputs and parts from the United States, particularly textile fibres. Since this value chain is so particular in nature and has such a high profile, the criteria described above are relaxed. In this case, the top groups of goods exported from the CACM (excluding Costa Rica) to the United States are analysed, including those in which there is little intra-industry trade and which comprise no intermediate goods —particularly consumption goods, which are embedded in the clothing export chain, among others.
A sector-by-sector analysis shows that six of the top 15 categories belong to the clothing industry (chiefly linked to the United States, firstly under the Caribbean Basin Initiative (CBI),\(^9\) later as part of maquila and free-trade zone arrangements and, most recently, under the free-trade agreement between the Dominican Republic and Central America and the United States) (see table III.9). Taken in its entirety, the clothing industry makes up by far the largest segment (48%) of total exports in the four countries in question. Honduras and El Salvador are the most deeply embedded in the United States textile-spinning and clothing sector, as their total exports include the highest proportions of inputs from that country (49% and 25% respectively). The region’s most important export products include cotton knit shirts, men’s and women’s underwear, bras, and trousers and socks made of synthetic fibres.

The category of electricity distributing equipment, which—as in Costa Rica and Mexico—is well embedded in the United States electrical equipment value chain, is chiefly made up of products exported by Honduras and Nicaragua, of which Honduras has the closest intra-industry links with the United States.

In recent years, non-textile maquila manufacturing, including electronics, has branched out into the production of non-traditional items such as electricity conductors, including copper cables and coaxial cables as well as ceramic insulators, and automotive parts and accessories (electrical parts and accessories manufactured for United States automobile companies), such as dashboards for export.

Other notable intermediate products are chemicals in SITC product group 512 (alcohols and phenols), as well as metals and metal waste. The most widely exported alcohols are ethyl alcohol and propyl alcohol, which are exported from El Salvador and Guatemala, showing potential for intra-industry trade. In the metals industry, there is clear inter-industry trade in semi-finished goods, with exports of silver powder, unwrought silver in various forms, scrap copper and waste copper and scrap aluminium, which, on average, do not exceed 1% of total exports (see table III.9).

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\(^9\) The arrangement (the 807/9802 provision) has benefited mainly producers in the Caribbean Basin that re-export products containing inputs from the United States back to this country.
4. Guatemala and the Central American Common Market

In Central America, there are close intra-industry links in bilateral intra-regional trade among three countries (Costa Rica, El Salvador and Guatemala), and to a lesser extent, between these countries and Honduras and Nicaragua. Guatemala’s trade with the rest of the subregion is a good barometer of the level of integration between the countries of the CACM. Forty-six percent of Guatemalan exports go to other Central American countries, and the export pattern is predominantly intra-industrial in the sector of industrial intermediate goods, 54% of which are similar or complementary products, which subsequently find their way into various subregional value chains (see figure III.5).

The most intensive and longest-established intra-industry trade links are to be found among Costa Rica, El Salvador and Guatemala, a relationship that dates back to the 1960s (Willmore, 1972; Balassa, 1979) and which escalated in the early 1990s (Duran and Lo Turco, 2010). Guatemala’s trade figures for 2011-2012 show that it has closest trade links with Costa Rica and El Salvador in terms of exports and imports of intermediate goods, which both show a ratio of intra-industry trade of more than 50%. Its next most important trading partners are Honduras and Nicaragua, with the latter of which its trade is chiefly inter-industrial, but the potential is there for intra-industry trade in a significant number of products (see figure III.6).

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

* “Intra-industrial” refers to the proportion of exports from industries with a Grubel-Lloyd index of over 0.33; “inter-industrial” refers to the proportion of exports from industries with Grubel-Lloyd indices of below 0.10.
The 20 groups of products with the highest intra-industry trade indices account for 54% of total exports of intermediate goods from Guatemala to CACM. Fourteen of these product categories are predominantly made up of intermediate goods, which account for 70% of these categories overall.

**Figure III.6**

Guatemala: structure of trade in intermediate goods with the other Central American Common Market countries, 2012

![Graph showing trade structure](image)

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

This high rate of intra-industrial trade is particularly pronounced in low- and medium-technology products and natural-resource-based manufactured goods. The industries the most embedded in subregional value chains in Central America are: petrochemicals, chemicals, pharmaceuticals, agribusiness, textile-spinning, paper and paperboard and telecommunications equipment.

The petrochemicals industry encompasses in particular the plastics value chain, which includes a plethora of intermediate processed products (such as tubing, hoses, plastic bags and bottles) as well as other intermediate products for use in the plastics industry itself in neighbouring countries. Important exports in this industry include products in the polymerization and copolymerization products group (ethylene, propylene and vinyl-acetate films, among others), which ranks sixth in the list (see table III.10). Although Guatemala is a net importer of plastic products and related manufactures, it runs a trade surplus in these items intraregionally.

The second-highest ranking industry is soap and cleaning products, in which the few intermediate inputs present, in turn, inputs for other industries (such as organic surfactants, washing and cleaning preparations, ionic and cationic organic surface active agents and other similar preparations), specifically for the manufacture of toiletries and perfumery products.

The paper and paperboard industry is in third place. Guatemala produces a large group of products for export to the subregion in this industry, in particular products for use in other industries (e.g. corrugated paper and paperboard cartons, boxes and cases, non-corrugated paperboard boxes, folded paper, paper sacks, bags and cones, pressed-paper articles and other paper products), such as the food-production, pharmaceuticals, textiles and printing industries.

The chemicals industry also manufactures a significant number of medium-tech products, including various chemical compounds such as paint-drying accelerators, composite diagnostic laboratory reagents, solvents, paints, varnishes, additives, removers and antioxidants, all of which are intermediate goods (see table III.10).

The pharmaceuticals industry also has a major presence, manufacturing a wide variety of products for use in the medical industry, such as vitamins (A, E, C, B2, B1 and B12), serums, dressings and related items, penicillin, streptomycin, vaccines, ephedrine, hormones and alkaloids.

At least six groups of food agribusiness-related products appear on the list: edible products and preparations, feeding stuff for animals, fruit, meat and edible offal, fats and oils and vegetable preparations. These groups are all embedded in regional agribusiness value chains which have a high rate of intra-industry trade. If taken together with trade in other consumption products such as flour and cereal preparations and meat preparations and preserves, the industry accounts for 21% of Guatemala’s total exports to the subregion.
Table III.10
Guatemala: main product groups exported to the Central American Common Market, 2010-2011
(Grubel-Lloyd indices and percentages)

<table>
<thead>
<tr>
<th>Rank</th>
<th>SITC</th>
<th>Description</th>
<th>Percentage of totala</th>
<th>Grubel-Lloyd index</th>
<th>Type of intermediate goodb</th>
<th>Percentage of intermediate goodsb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>893</td>
<td>Articles of plastics</td>
<td>6.9</td>
<td>0.70</td>
<td>Industrial (LTM)</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>554</td>
<td>Soap, cleansing and polishing preparations</td>
<td>5.7</td>
<td>0.60</td>
<td>Industrial (MTM)</td>
<td>36</td>
</tr>
<tr>
<td>3</td>
<td>642</td>
<td>Paper and paperboard, cut to size or shape</td>
<td>5.4</td>
<td>0.47</td>
<td>Industrial (LTM)</td>
<td>63</td>
</tr>
<tr>
<td>4</td>
<td>541</td>
<td>Medicinal and pharmaceutical products</td>
<td>5.2</td>
<td>0.84</td>
<td>Industrial (HTM)</td>
<td>82</td>
</tr>
<tr>
<td>5</td>
<td>674</td>
<td>Universals, plates and sheets of iron or steel</td>
<td>3.5</td>
<td>0.74</td>
<td>Industrial (LTM)</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>583</td>
<td>Polymerization and copolymerization products</td>
<td>3.1</td>
<td>0.91</td>
<td>Industrial (MTM)</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>98</td>
<td>Edible products and preparations</td>
<td>3.1</td>
<td>0.66</td>
<td>Semi-finished</td>
<td>19</td>
</tr>
<tr>
<td>8</td>
<td>598</td>
<td>Miscellaneous chemical products</td>
<td>2.2</td>
<td>0.55</td>
<td>Industrial (MTM)</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>673</td>
<td>Bars, rods, angles and sections</td>
<td>2.1</td>
<td>0.34</td>
<td>Industrial (MTM)</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>651</td>
<td>Textile yarn</td>
<td>2.1</td>
<td>0.71</td>
<td>Industrial (LTM)</td>
<td>78</td>
</tr>
<tr>
<td>11</td>
<td>58</td>
<td>Fruit, preserved, and fruit preparations</td>
<td>2.0</td>
<td>0.53</td>
<td>Semi-finished</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>431</td>
<td>Animal or vegetable fats and oils</td>
<td>1.7</td>
<td>0.60</td>
<td>Semi-finished</td>
<td>100</td>
</tr>
<tr>
<td>13</td>
<td>891</td>
<td>Iron structures and parts thereof</td>
<td>1.5</td>
<td>0.69</td>
<td>Industrial (LTM)</td>
<td>100</td>
</tr>
<tr>
<td>14</td>
<td>653</td>
<td>Fabrics, woven, of man-made fibres</td>
<td>1.5</td>
<td>0.90</td>
<td>Industrial (MTM)</td>
<td>100</td>
</tr>
<tr>
<td>15</td>
<td>641</td>
<td>Paper and paperboard</td>
<td>1.5</td>
<td>0.70</td>
<td>Semi-finished</td>
<td>100</td>
</tr>
<tr>
<td>16</td>
<td>56</td>
<td>Vegetables, roots and tubers, prepared or preserved</td>
<td>1.4</td>
<td>0.46</td>
<td>Semi-finished</td>
<td>28</td>
</tr>
<tr>
<td>17</td>
<td>821</td>
<td>Furniture and parts thereof</td>
<td>1.3</td>
<td>0.85</td>
<td>Industrial (LTM)</td>
<td>14</td>
</tr>
<tr>
<td>18</td>
<td>764</td>
<td>Telecommunications equipment</td>
<td>1.3</td>
<td>0.50</td>
<td>Industrial (HTM)</td>
<td>27</td>
</tr>
<tr>
<td>19</td>
<td>533</td>
<td>Pigments, paints, varnishes</td>
<td>1.3</td>
<td>0.82</td>
<td>Industrial (MTM)</td>
<td>92</td>
</tr>
<tr>
<td>20</td>
<td>678</td>
<td>Tubes, pipes and fittings of iron and steel</td>
<td>0.8</td>
<td>0.36</td>
<td>Industrial (MTM)</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total for the 20 main products</td>
<td>53.5</td>
<td></td>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).
a Refers to the proportion of the SITC product group in total exports of intermediate goods to the country in question.
b Refers to the type of intermediate good (semi-finished or industrial) within the SITC group. For industrial goods, the level of technology intensity is also given in brackets (LTM = low-technology manufactures, MTM = medium-technology manufactures, HTM = high-technology manufactures).
c Calculated on the basis of the ratio between the number of intermediate goods exported in the respective SITC group and the total number of goods exported in that group; the number of goods is measured using the 6-digit Harmonized Commodity Description and Coding System.

5. Argentina and Brazil

Trade between Argentina and Brazil, the two largest countries in MERCOSUR and those with the closest production links, accounts for 64% of total trade within this integration scheme.

Bilateral trade between Argentina and Brazil involves a high proportion of intermediate goods (around 30% of Argentina’s exports to Brazil, and about half of exports in the other direction) and is strongly intra-industrial. The significant size of the unclassified goods category reflects the high proportion of bilateral trade in motor vehicles, which, despite the use of intermediate inputs in the production process, can be classed interchangeably as either capital or consumption goods (see figures III.7 and III.8). The results of the analysis of intra-industry trade intensity point to a high degree of integration in the automotive sector.

Figure III.7
Argentina: exports to Brazil by category of goods and structure of intermediate goods exports, 2011-2012
(Percentages)

A. Breakdown by category of goods
Figure III.7 (concluded)

B. Structure of exports of intermediate goods *

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

* “Intra-industrial” refers to the proportion of exports from industries with a Grubel-Lloyd index of over 0.33; “inter-industrial” refers to the proportion of exports from industries with Grubel-Lloyd indices of below 0.10.

Figure III.8

Brazil: exports to Argentina by category of goods and structure of intermediate goods exports, 2011-2012

(Percentages)

A. Breakdown by category of goods

B. Structure of exports of intermediate goods *

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

* “Intra-industrial” refers to the proportion of exports from industries with a Grubel-Lloyd index of over 0.33; “inter-industrial” refers to the proportion of exports from industries with Grubel-Lloyd indices of below 0.10.
In 2010-2011, the 20 product groups with the most intensive intra-industry trade (including in unclassified goods) accounted for 57% of the total trade between these two countries; 63% of Argentina’s total exports and 52% of Brazil’s.

Sector-by-sector analysis shows that five of the top 20 categories — accounting for 40% of total bilateral trade in 2010-2011 — had links with the automotive chain. Bilateral trade accounts for an average of 60% of all automotive exports, with the highest proportion in the category of passenger motor cars. The most important product groups include, in addition to motor cars and freight vehicles, automotive parts, tyres and trades, as well as products related to the sector such as aluminium, plastics and electrical parts and accessories. Both countries’ position as full members of MERCOSUR offers considerable benefits in these industries and guarantees them access to the expanded market which, although a system of quotas applies, is a significant boon to subregional trade. Similar products imported into the two countries from elsewhere in the world are subject to a common external tariff of around 20%.

Argentina and, particularly, Brazil have developed automotive chains managed according to an administrated system in which investment and production decision-making of companies have sought to make the most of both the MERCOSUR expanded market and its incentive schemes. Given the weight of both Brazil’s greater population and the resultant higher number of cars, the bulk of investment has been made in Brazil, and the most of the MERCOSUR manufacturing base has therefore been concentrated in this country. Nonetheless, a large number of automotive parts companies have set up plants in Argentina (de Negri, 2010).

Another notable category on the list is formed by the chemicals and petrochemicals industries, which include petroleum products, perfumery products, cosmetics, disinfectants, insecticides and fungicides, various chemical products, and plastic articles. The trade relationship is significant in these industries also, which represent between 22% and 28% of total exports between the two countries (see table III.11). The petrochemicals industry is currently one of the largest in the world, and products in this regional value chain provide a great deal of the momentum behind other industries in MERCOSUR (agribusiness, textiles, automotive, plastics and parts and accessories) (Brenner, 2012). Beckerman and Rikap (2010) have also provided evidence that sales of a wide variety of products from Argentina’s chemicals and plastics industries are on the increase (both to Brazil and the rest of the world). Argentina’s exports to Brazil may have helped to leverage dynamic comparative advantages and find new buyers for Argentine products both in the rest of MERCOSUR and the wider world.

Another major value chain is steel and metalworking, which comprises subcategories such as aluminium products, bars, rods, angles, profiles and manufactures of base metals. Argentine products in the value chain are mainly semi-finished intermediate goods, while Brazil’s are dominated by industrial intermediates.

6. Colombia and the Andean Community

Reciprocal exports between Colombia, Ecuador and Peru make this group of countries a major hub of trade, with well-established links between industries. Industrial trade among these countries has risen in the past 15 years, leading to the intensification of intra-industry trade, especially that involving Colombia (i.e. Colombia-Ecuador, and Colombia-Peru) rather than between Ecuador and Peru.

Intermediate goods, especially industrial intermediates, account for 40% of Colombia’s exports to the Andean Community, the next largest groups being consumption goods and commodities. Fifty percent of Colombia’s exports of industrial intermediate goods take the form of intra-industry trade, while exports of semi-finished intermediate goods are chiefly inter-industrial in nature (see figure III.9).

Notable among the top 20 product groups exported by Colombia to the Andean Community are products from seven industries: petrochemicals, chemicals, paper and paperboard, agribusiness, textiles and clothing, motor vehicles, and metalworking (see table III.12). Taken together, they account for just over 70% of the Colombian economy’s total manufacturing value added and encompass low-, medium- and high-technology manufactures as well as some natural-resource-based manufactured goods.
### Table III.11
Argentina and Brazil: bilateral trade in goods with strong intra-industry linkages, 2010-2011
(Grubel-Lloyd indices and percentages)

<table>
<thead>
<tr>
<th>Rank</th>
<th>SITC</th>
<th>Description</th>
<th>Argentina $^a$</th>
<th>Brazil $^b$</th>
<th>Grubel-Lloyd index</th>
<th>Technology intensity $^c$</th>
<th>Predominant product type $^d$</th>
<th>Number of intermediate goods $^e$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>781</td>
<td>Passenger motor cars</td>
<td>25.8</td>
<td>15.8</td>
<td>0.89</td>
<td>MTM</td>
<td>Unclassified</td>
<td>0 of 8</td>
</tr>
<tr>
<td>2</td>
<td>782</td>
<td>Motor vehicles for transport of goods</td>
<td>10.6</td>
<td>5.0</td>
<td>0.77</td>
<td>MTM</td>
<td>Consumption</td>
<td>0 of 10</td>
</tr>
<tr>
<td>3</td>
<td>334</td>
<td>Petroleum products</td>
<td>6.7</td>
<td>2.9</td>
<td>0.73</td>
<td>NRBM</td>
<td>Intermediate</td>
<td>4 of 5</td>
</tr>
<tr>
<td>4</td>
<td>784</td>
<td>Motor vehicle parts</td>
<td>5.7</td>
<td>11.0</td>
<td>0.57</td>
<td>MTM</td>
<td>Intermediate</td>
<td>16 of 16</td>
</tr>
<tr>
<td>5</td>
<td>583</td>
<td>Polymerization and copolymerization products</td>
<td>3.3</td>
<td>3.0</td>
<td>0.91</td>
<td>MTM</td>
<td>Intermediate</td>
<td>48 of 58</td>
</tr>
<tr>
<td>6</td>
<td>684</td>
<td>Aluminium</td>
<td>1.3</td>
<td>0.4</td>
<td>0.59</td>
<td>NRBM</td>
<td>Intermediate</td>
<td>21 of 21</td>
</tr>
<tr>
<td>7</td>
<td>553</td>
<td>Perfumery, cosmetics</td>
<td>1.2</td>
<td>0.7</td>
<td>0.94</td>
<td>MTM</td>
<td>Consumption</td>
<td>21 of 21</td>
</tr>
<tr>
<td>8</td>
<td>625</td>
<td>Tyres and treads</td>
<td>1.1</td>
<td>1.7</td>
<td>0.67</td>
<td>MTM</td>
<td>Intermediate</td>
<td>10 of 13</td>
</tr>
<tr>
<td>9</td>
<td>591</td>
<td>Disinfectants, insecticides, fungicides, etc.</td>
<td>1.0</td>
<td>0.9</td>
<td>0.91</td>
<td>MTM</td>
<td>Consumption</td>
<td>0 of 5</td>
</tr>
<tr>
<td>10</td>
<td>541</td>
<td>Medicinal and pharmaceutical products</td>
<td>0.8</td>
<td>0.8</td>
<td>0.98</td>
<td>HTM</td>
<td>Intermediate</td>
<td>35 of 44</td>
</tr>
<tr>
<td>11</td>
<td>749</td>
<td>Non-electric parts and accessories of machinery</td>
<td>0.8</td>
<td>0.8</td>
<td>0.89</td>
<td>MTM</td>
<td>Capital</td>
<td>25 of 31</td>
</tr>
<tr>
<td>12</td>
<td>783</td>
<td>Road motor vehicles, n.e.s.</td>
<td>0.7</td>
<td>2.4</td>
<td>0.41</td>
<td>MTM</td>
<td>Capital</td>
<td>2 of 3</td>
</tr>
<tr>
<td>13</td>
<td>598</td>
<td>Miscellaneous chemical products</td>
<td>0.6</td>
<td>0.8</td>
<td>0.80</td>
<td>MTM</td>
<td>Intermediate</td>
<td>46 of 46</td>
</tr>
<tr>
<td>14</td>
<td>582</td>
<td>Condensation, etc. products</td>
<td>0.6</td>
<td>0.5</td>
<td>0.83</td>
<td>MTM</td>
<td>Intermediate</td>
<td>19 of 19</td>
</tr>
<tr>
<td>15</td>
<td>893</td>
<td>Articles of plastics</td>
<td>0.6</td>
<td>0.9</td>
<td>0.88</td>
<td>LTM</td>
<td>Intermediate</td>
<td>29 of 35</td>
</tr>
<tr>
<td>16</td>
<td>673</td>
<td>Bars, rods, angles and sections</td>
<td>0.5</td>
<td>0.9</td>
<td>0.56</td>
<td>MTM</td>
<td>Intermediate</td>
<td>29 of 29</td>
</tr>
<tr>
<td>17</td>
<td>641</td>
<td>Paper and paperboard</td>
<td>0.5</td>
<td>1.9</td>
<td>0.35</td>
<td>NRBM</td>
<td>Intermediate</td>
<td>45 of 45</td>
</tr>
<tr>
<td>18</td>
<td>651</td>
<td>Textile yarn</td>
<td>0.5</td>
<td>0.3</td>
<td>0.92</td>
<td>LTM</td>
<td>Intermediate</td>
<td>44 of 52</td>
</tr>
<tr>
<td>19</td>
<td>592</td>
<td>Manufactures of base metals</td>
<td>0.5</td>
<td>0.9</td>
<td>0.56</td>
<td>NRBM</td>
<td>Intermediate</td>
<td>42 of 45</td>
</tr>
<tr>
<td>20</td>
<td>98</td>
<td>Edible products and preparations</td>
<td>0.4</td>
<td>0.1</td>
<td>0.55</td>
<td>NRBM</td>
<td>Consumption</td>
<td>3 of 17</td>
</tr>
</tbody>
</table>

**Total for the 20 main products**: 63.4 52.0 409 of 544

**Source**: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

- $^a$ Refers to the proportion of the product group in total exports.
- $^b$ Refers to the technology intensity of the product group: LTM = low-technology manufactures; MTM = medium-technology manufactures; HTM = high-technology manufactures; NRBM = natural-resource-based manufactures.
- $^c$ Refers to the predominant product type according to the classification by Broad Economic Categories. Product group 553, for example, consists of more products in the category of consumption goods than of intermediate goods, and is classified accordingly.
- $^d$ Number of intermediate goods, according to the Harmonized Commodity Description and Coding System, in the SITC group.

### Figure III.9
Colombia: exports to the Andean Community by category of goods and structure of intermediate goods exports, 2010-2011
(Percentages)

**A. Breakdown by category of goods**

- Commodity (11)
- Industrial intermediate (29)
- Semi-finished intermediate (11)
- Capital (8)
- Consumption (34)
- Unclassified (7)
Table III.12
Colombia: main product groups exported to the Andean Community, 2010-2011
(Grubel-Lloyd indices and percentages)

<table>
<thead>
<tr>
<th>Rank</th>
<th>SITC</th>
<th>Description</th>
<th>Andean Community</th>
<th>Grubel-Lloyd index</th>
<th>Technology intensity</th>
<th>Predominant product type</th>
<th>Number of intermediate goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>583</td>
<td>Polimerization and copolimerization</td>
<td>6.91</td>
<td>0.45</td>
<td>MTM</td>
<td>Intermediate</td>
<td>65 of 65</td>
</tr>
<tr>
<td>2</td>
<td>553</td>
<td>Perfumery, cosmetic or toilet preparations</td>
<td>5.82</td>
<td>0.26</td>
<td>MTM</td>
<td>Consumption</td>
<td>0 of 28</td>
</tr>
<tr>
<td>3</td>
<td>334</td>
<td>Petroleum products, refined</td>
<td>5.12</td>
<td>0.19</td>
<td>NRBM</td>
<td>Intermediate</td>
<td>8 of 10</td>
</tr>
<tr>
<td>4</td>
<td>541</td>
<td>Medicinal and pharmaceutical products</td>
<td>4.85</td>
<td>0.12</td>
<td>HTM</td>
<td>Intermediate</td>
<td>30 of 38</td>
</tr>
<tr>
<td>5</td>
<td>641</td>
<td>Paper and paperboard</td>
<td>4.11</td>
<td>0.31</td>
<td>NRBM</td>
<td>Intermediate</td>
<td>36 of 36</td>
</tr>
<tr>
<td>6</td>
<td>642</td>
<td>Paper and paperboard, cut to size or shape</td>
<td>3.95</td>
<td>0.30</td>
<td>LTM</td>
<td>Intermediate</td>
<td>30 of 49</td>
</tr>
<tr>
<td>7</td>
<td>782</td>
<td>Motor vehicles for transport of goods</td>
<td>3.50</td>
<td>0.82</td>
<td>MTM</td>
<td>Consumption</td>
<td>0 of 8</td>
</tr>
<tr>
<td>8</td>
<td>61</td>
<td>Sugars and honey</td>
<td>3.03</td>
<td>0.24</td>
<td>NRBM</td>
<td>Intermediate</td>
<td>7 of 10</td>
</tr>
<tr>
<td>9</td>
<td>554</td>
<td>Soap, cleansing and polishing preparations</td>
<td>2.39</td>
<td>0.24</td>
<td>MTM</td>
<td>Intermediate</td>
<td>10 of 24</td>
</tr>
<tr>
<td>10</td>
<td>591</td>
<td>Disinfectants, insecticides, fungicides, etc.</td>
<td>1.98</td>
<td>0.14</td>
<td>MTM</td>
<td>Intermediate</td>
<td>0 of 10</td>
</tr>
<tr>
<td>11</td>
<td>883</td>
<td>Articles of plastics</td>
<td>1.95</td>
<td>0.54</td>
<td>LTM</td>
<td>Intermediate</td>
<td>52 of 65</td>
</tr>
<tr>
<td>12</td>
<td>62</td>
<td>Sugar confectionery, not containing cocoa</td>
<td>1.73</td>
<td>0.22</td>
<td>NRBM</td>
<td>Consumption</td>
<td>0 of 4</td>
</tr>
<tr>
<td>13</td>
<td>652</td>
<td>Cotton fabrics, woven</td>
<td>1.57</td>
<td>0.52</td>
<td>LTM</td>
<td>Intermediate</td>
<td>100 of 100</td>
</tr>
<tr>
<td>14</td>
<td>775</td>
<td>Household-type equipment,</td>
<td>1.55</td>
<td>0.11</td>
<td>MTM</td>
<td>Intermediate</td>
<td>7 of 30</td>
</tr>
<tr>
<td>15</td>
<td>665</td>
<td>Knitted or crocheted fabrics</td>
<td>1.53</td>
<td>0.12</td>
<td>LTM</td>
<td>Intermediate</td>
<td>19 of 19</td>
</tr>
<tr>
<td>16</td>
<td>846</td>
<td>Undergarments, knitted or crocheted</td>
<td>1.43</td>
<td>0.43</td>
<td>LTM</td>
<td>Consumption</td>
<td>0 of 35</td>
</tr>
<tr>
<td>17</td>
<td>598</td>
<td>Miscellaneous chemical products</td>
<td>1.17</td>
<td>0.10</td>
<td>MTM</td>
<td>Intermediate</td>
<td>55 of 55</td>
</tr>
<tr>
<td>18</td>
<td>48</td>
<td>Cereal preparations and fine flour</td>
<td>1.15</td>
<td>0.39</td>
<td>NRBM</td>
<td>Intermediate</td>
<td>3 of 12</td>
</tr>
<tr>
<td>19</td>
<td>582</td>
<td>Condensation, polycondensation and polyaddition products</td>
<td>0.99</td>
<td>0.46</td>
<td>MTM</td>
<td>Intermediate</td>
<td>18 of 181</td>
</tr>
<tr>
<td>20</td>
<td>533</td>
<td>Pigments, paints and varnishes</td>
<td>0.99</td>
<td>0.17</td>
<td>MTM</td>
<td>Intermediate</td>
<td>23 of 232</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

In addition to the refining of petroleum, the petrochemicals industry includes goods such as polymers and copolymers, polycondensation products and polyacids, pigments, paints and varnishes as well as various plastic products. These articles make up the various sections of the plastics, rubber, paints, inks and fibres value chain, a well-developed chain within the petrochemicals industry, which has, on average, between 27 and 37 links with other
sectors in Colombia’s IOT). The industry also has an above average number of linkages in the rubber and plastic manufactures sector (Duran, Castresana and Mulder, 2013). By around 2009, the sectors of refined oil products, rubber and plastics together accounted for 18% of Colombia’s manufacturing value added (Ramirez, Suarez and Lesmes, 2012).

The polymerization and copolymerization, polycondensation and polyacids and plastic products sectors fall into the medium-technology category and are strongly embedded in Andean Community subregional chains, especially in advanced sectors in Ecuador and Peru, whose imports chiefly consist of polypropylene, vinyl polychloride and polyvinyl chloride. Colombia also imports products from these two countries, so there is quite intense intra-industry trade in petrochemicals, involving a wide range of products (almost 150), over 90% of which are intermediate goods. The petrochemicals industry is a competitive environment, with numerous small and medium-sized enterprises (SMEs) specialized in the production of plastics for use in diverse industries and in the manufacture of finished consumption goods such as automotive parts, containers, packaging, toys and footwear (DNP, 2007).

In the chemicals industry, five categories of diverse products exhibit the potential for intra-industry trade between Colombia and the other Andean countries, especially Ecuador and Peru. They encompass cosmetics, perfumery and toiletries, cleaning products, disinfectants, insecticides and fungicides (all medium-technology products) as well as medicines and pharmaceuticals (high-technology products), including drugs dispensed in doses, antibiotics, vitamins, alkaloids and vaccines. The Andean Community countries account for 40% of Colombia’s exports of these product groups, and over 80% in the case of certain products, such as hormones, vitamin concentrates, vitamin B2 and tetracycline. Colombia’s chemical industry provides a total of 13.5% of its manufacturing value added (Ramirez, Suarez and Lesmes, 2012) and has links with an above-average number of sectors in the country’s IOT.

In the agribusiness industry, Colombia’s exports comprise semi-finished intermediate products and consumption goods in the categories of sugar and honey, cocoa-free confectionery products, cereal preparations and fine flour. Notable export products in this industry include refined sugar, glucose syrup, cane sugar, malt extract and oat products. Intermediate inputs make up 39% of this group and these products, although present in few groups, have close links with the food-production, beverages and tobacco sectors, which together account for just over 23% of Colombia’s manufacturing value added.

Paper and paperboard is another important industry, providing a high proportion of intermediate goods for the printing industry in both Colombia and the other countries of the region, particularly Ecuador, which is the destination for 53% of Colombia’s exports (especially thin low-grammage paper, kraft paper, cartons, boxes and cases, plastic bags, corrugated paperboard and cigarette papers). This industry’s exports feature a high proportion of intermediate goods, of which nearly 80% are semi-finished intermediates.

The automotive industry, although accounting for only one product group in Colombia’s main list of exports, has the advantage of being well integrated into the rest of the Andean Community. The main export products are 5-20-ton diesel-engined trucks and trucks of under 5 tons.

There is also a considerable degree of integration between the Andean Community countries in the textiles and clothing industry. Colombia provides a significant share of the subregion’s cotton and knitted fabrics, especially 85%-cotton denim, mixed-fibre fabric and other cotton fabrics of various kinds dyed once or more. In respect of clothing, the main export products include crocheted or knitted underwear, especially bras, women’s and girl’s underwear, vests, girdles, pyjamas and men’s underwear. The industry contributes 6.9% of Colombia’s total manufacturing value added.

Although table III.12 only includes one product group (household-type equipment) from the steel and metalworking industry, this group plays an important role, accounting for 10% of Colombia’s industrial output. Colombia’s main export items in this product group are currently two-door refrigerators, waste-disposal units, fans, upright freezers of less than 900 litres in capacity, stoves and dishwashers.

10 According to calculations by Ramirez and others (2012) using data from the National Administrative Department of Statistics (DANE) of Colombia, in dollars at constant 2005 prices, the sugar industry accounts for 1.54% of total added value, the milling industry 5.79%, beverages 6.86%, oil, fats and cocoa 4.55%, meat and fish 2.47%, dairy products 1.80%, coffee and threshing 0.77% and tobacco 0.8%.
D. Small and medium-sized exporting enterprises in value chains

This section supplements the foregoing analysis with an examination of the participation of small and medium-sized exporting enterprises (SMEXs) in exports in two sectors of great importance for the countries considered: motor vehicle parts and accessories (SITC 784) a major sector in Mexico, Costa Rica, Argentina, Brazil and Colombia— and polymerization and copolymerization products (SITC 583) —of importance in Argentina, Brazil, Guatemala and Colombia. This information will then be used to ascertain how embedded SMEXs are in the automotive and auto parts and the petrochemicals value chains by comparing their participation in the total exports of the six countries examined.

Table III.13 shows that, in all of the cases considered, SMEXs make up a large proportion of total exporters but provide a much smaller share of total export value. This is a general characteristic of exporting companies in the region, and is evident on analysis of both each country’s total exports and a breakdown of exports in the two industries considered (automotive parts and polymerization products).

<table>
<thead>
<tr>
<th></th>
<th>Vehicle parts and accessories</th>
<th>Polymerization products</th>
<th>Total exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage of all companies</td>
<td>Percentage of export value</td>
<td>Percentage of all companies</td>
</tr>
<tr>
<td>Argentina</td>
<td>66.2</td>
<td>1.6</td>
<td>52.9</td>
</tr>
<tr>
<td>Brazil</td>
<td>82.2</td>
<td>8.8</td>
<td>77.5</td>
</tr>
<tr>
<td>Colombia</td>
<td>74.5</td>
<td>12.8</td>
<td>64.2</td>
</tr>
<tr>
<td>Guatemala</td>
<td>84.8</td>
<td>6.2</td>
<td>68.6</td>
</tr>
<tr>
<td>Mexico</td>
<td>74.0</td>
<td>3.2</td>
<td>69.0</td>
</tr>
<tr>
<td>Uruguay</td>
<td>66.7</td>
<td>0.8</td>
<td>73.8</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information from the customs services of the respective countries.

Although the data include no specific references to SMEs, they can be said to take adequate account of the involvement of SMEs in exports in the automotive parts and petrochemicals value chains, since these chains are dominated by large companies that account for an average of over 70% of exports in both cases.

However, SMEXs have a greater presence in exports to markets within the region than to the wider world. In Brazil, for example, SMEXs account for 15% of total exports to MERCOSUR, but only 6% of exports to the rest of the world (see table III.14). This pattern is repeated in numerous industries, such as textile-spinning in Colombia and parts and accessories in Guatemala. Nonetheless, the dominance of large companies continues unabated, even in regional markets. This constitutes a major public policy challenge: how to help SMEs participate more, and better, in global production networks, such as those formed by subregional value chains.

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SMEXs are defined as companies whose annual exports fall under a given threshold that varies from country to country (Mexico: US$10 million, Brazil US$5 million, Argentina and Colombia: US$3 million, Uruguay: US$2.5 million, Guatemala: US$1.5 million). SMEXs cannot therefore be said to be exactly the same as SMEs, since a large company whose exports fall under the threshold may be considered to be a SMEX.
### Table III.14
Latin America (selected countries): participation of SMEXs in exports to selected markets, around 2010
(Percentages of total)

<table>
<thead>
<tr>
<th></th>
<th>Brazil</th>
<th></th>
<th>Colombia</th>
<th></th>
<th>Guatemala</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MERCOSUR</td>
<td>Rest of world</td>
<td>Andean Community</td>
<td>Rest of world</td>
<td>Central American Common Market</td>
<td>Rest of world</td>
</tr>
<tr>
<td>Part and accessories</td>
<td>7.2</td>
<td>8.8</td>
<td>0.4</td>
<td>12.8</td>
<td>56.5</td>
<td>6.2</td>
</tr>
<tr>
<td>Polymerization</td>
<td>12.3</td>
<td>7.0</td>
<td>11.0</td>
<td>1.9</td>
<td>10.0</td>
<td>14.2</td>
</tr>
<tr>
<td>Paper and paperboard</td>
<td>13.1</td>
<td>5.1</td>
<td>0.1</td>
<td>3.0</td>
<td>7.4</td>
<td>10.4</td>
</tr>
<tr>
<td>Textile-spinning</td>
<td>20.8</td>
<td>28.8</td>
<td>18.6</td>
<td>5.0</td>
<td>44.8</td>
<td>44.3</td>
</tr>
<tr>
<td>Preparations and other edible products</td>
<td>16.5</td>
<td>16.1</td>
<td>19.9</td>
<td>6.1</td>
<td>3.4</td>
<td>4.8</td>
</tr>
<tr>
<td>All products</td>
<td>15.2</td>
<td>8.2</td>
<td>7.5</td>
<td>4.0</td>
<td>9.4</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information.

A factor that hinders the formation of value chains involving SMEs in Latin America and the Caribbean is the low productivity of many of these companies. The weak performance of SMEs shows through in the poor quality of their products or services or their high overheads and prices. It is also a result of insufficient coordination between public policies designed to help them gain a foothold in large companies’ distribution networks. The level of productivity of SMEs in Latin America and the Caribbean is indeed lower than that of large companies, unlike in most advanced industrial countries in other regions, including Europe (ECLAC, 2013a). Mentoring by a market leader or a support programme could help forge closer production links with SMEs and thus close the productivity gap and boost their competitiveness. Support of this kind could come from export promotion agencies, although their ability to act is restricted by their limited budgetary resources (ECLAC, 2013b).

### E. Conclusions

This empirical analysis in the foregoing sections illustrates the strikingly different ways in which the countries of Latin America and the Caribbean participate in production networks and regional and global value chains. It is useful, for the purposes of analysis, to make a distinction between Mexico and Central America, on the one hand, and South America and the Caribbean, on the other. The former group of countries are full and active participants in various value chains focused on the United States, both in goods (in the automotive, electronics and garment sectors, among others) and in services (call centres, information and communications technologies and other remote services). In the latter group, production networks and value chains are, with some exceptions, at an embryonic stage.

With a view to gaining a better grasp of the causes of these differences, this section will examine certain factors that are likely to affect the integration of the region’s countries into value chains and networks. These factors may be divided into two broad groups: exogenous and endogenous. Exogenous factors include those related to structural elements such as a country’s geography, the size of its market and its natural resources. Endogenous factors include those which, unlike exogenous factors, can be influenced by the action of public or private bodies —industrial, trade or education policy, for instance. Given the differences among key factors in the creation and development of value chains, it is important to distinguish between industrial networks, service chains and natural-resource-based networks.
A key factor in the creation of industrial networks is geographical proximity to a major manufacturing power, usually the largest and most technologically advanced country in its region. Such manufacturing giants tend to outsource certain (usually labour-intensive) processes to neighbouring countries, generally with a view to benefiting from their lower labour and operating costs. Proximity also reduces uncertainty concerning delivery deadlines, a crucial aspect when the value chain encompasses trade in intermediate goods needed in the manufacture of finished goods (in electronics or automotive industries for example) or when a rapid reaction to demand shifts is necessary (as in the clothing industry). Being based nearby also makes it easier to coordinate diverse operations spread across several countries, either by sending managers or specialized staff to deal with issues directly or by means of remote interactions if there are no significant differences in time zones. For all these reasons, the main manufacturing networks are set up on a clearly regional basis and focus on a leading power, the role played by the United States in North America, Germany in Europe and Japan in Asia. In the past decade, however, China has taken the place of Japan as the hub of Factory Asia, given the key role it has acquired in the assembly and export of final products manufactured with intermediate goods imported from the rest of the Asian region.

A second important element is the attractiveness of the tax regime for multinationals. Attracting multinational subsidiaries is, for developing countries in particular, key to unlocking access to international value chains, and multinationals are therefore often granted tax exemptions of various types. The most widely used such instrument in the region are free-trade zones, which usually offer various tax breaks for production activities carried out there, such as tariff exemptions on imported inputs. Since WTO has banned tax exemptions on export activities as from 2016, several countries in the region are considering whether to grant other types of aid, such as training subsidies. It should be noted, in any case, that a country’s attractiveness for multinationals is not dependent solely on its tax regime, but also on other factors such as those set out below.

A third key factor for participation in industrial manufacturing networks is the quality of roads, ports, bridges and airport infrastructure and the availability of adequate logistics, transportation and telecommunications services. The degree of development of this infrastructure and regulation thereof have a direct effect on the cost of transport and communications and time they take. These are essential elements in shortening delivery times and making them more predictable, and in facilitating coordination between the various plants or companies that make up the value chain.

A fourth factor concerns aspects such as the skills, cost and productivity of each country’s labour force, which go a long way towards determining its place in a given value chain. The more limited those skills, the greater the likelihood that the country is consigned to lower value-added sectors, which typically consist of repetitive processes that are, therefore, easily transferable to other countries. However, enhancing the skills of their workforce may enable countries to reposition themselves in links in the chain with greater value added and higher wages. This process, known as upgrading, is therefore closely related to public policy on, and the quality of national institutions in education, training, science and technology. Similarly, if public policy is focused on developing a critical mass of skilled human resources, and builds on existing competitive advantages to forge linkages between sectors, then countries will attract FDI, join more sophisticated value chains and enter sectors higher up the chains.

A fifth factor is a country’s endowment of natural resources and the price cycle of the related commodities. If a country has abundant fertile land or metal, mineral or energy reserves then companies will tend to invest in the extractive industries and primary activities that include no processing. This trend is particularly marked in times of high global commodities prices, such as in the period between 2003 and the present day. High prices not only make the exploitation of natural resources the country’s most profitable business sector, but also drive up the value of its currency in foreign-exchange markets, thus significantly reducing the potential for the development of other export chains (a phenomenon known as Dutch disease).

A sixth factor concerns the policies implemented to improve the business climate and the performance of domestic companies. The business climate depends not only on the tax burden, but also on aspects such as the stability of the macroeconomic, political, legal and social landscape, access to credit and financial markets, levels of red tape and corruption, the quality of infrastructure and the prevailing form of industrial policy. Furthermore, in addition to attracting multinationals, improving the performance of local businesses is critical to the success of strategies for access to international value chains and networks. Medium- and long-term public-private initiatives of various kinds may help to achieve this objective by promoting business innovation, opening up access to credit and supporting the education and training of workers.
A final relevant factor is the type of formal (de jure) integration between the economies that make up a value chain. The advent of industrial manufacturing networks spread across North America, Europe and Asia has created a demand for governance mechanisms that ensure a regulatory framework to underpin the smooth functioning of these networks. This demand is increasingly being met by “deep” — principally North-South — trade and investment agreements. There is a two-way relationship between value chains and such deep agreements, as the former creates a demand for the latter, and the latter helps consolidate value chain development.

The key factors in the development of value chains in services are similar to those affecting the creation of chains in goods, except in the case of remote services (services provided by telephone or technological platforms of various kinds). Remote service chains are often global rather than regional, because proximity to a major power is less important. In fact, some information technology companies have branches in every continent so as to provide services 24 hours a day anywhere in the world. In 2011 the consulting firm AT Kearney developed an index of the attractiveness of countries for global services. It includes three categories: firstly, financial attractiveness, which is determined by wage levels and costs related to infrastructure, regulation and taxation; the second category concerns the availability of skilled workers and their proficiency in English and the third is the business environment, which encompasses factors such as such as security, the quality of telecommunications and electricity infrastructure, government support to the information and communications technology sector and the security of intellectual property.

Natural-resource-based value chains essentially depend on the same factors as industrial chains. One element that sets them apart, however, is geography, as the activities at the beginning of the chain must take place in the country in which the resources are exploited. The final links in the chain are, in contrast, often to be found close to major consumption markets. In agricultural and agribusiness chains an additional factor affecting competitiveness is the need to comply with sanitary and phytosanitary rules, such as those on product traceability. Countries wishing to access high-value-added links in the chain must make adequate provision for workforce training in relevant areas, such as biotechnology, as well as for adaptive research and development and a range of ancillary services (quality control, marketing and logistics, among others) (ECLAC, 2008).

The aforementioned factors go some way to explaining the relatively major role played by Mexico and Central America in value chains. Their proximity to the United States and lower labour costs have proved convincing arguments for multinationals from the United States to transfer or outsource labour-intensive manufacturing processes and activities to these locations. This pattern has been consolidated by various incentive schemes implemented by these countries, such as maquila and export-processing zones. The types of skills available have meant that on the whole, Mexico and, particularly, the Central American countries (with the exception of Costa Rica) are embedded in relatively unsophisticated links of the value chains in which they participate. The deep trade agreements signed between Mexico and Central America and the United States (respectively NAFTA and the Dominican Republic–Central America–United States Free Trade Agreement) have strengthened this form of production integration.

In South America, value chains and production networks remain less well developed for the same reasons. The subregion has an ample endowment of natural resources, as is reflected in the marked specialization in the export of primary goods evident in all South American economies. This specialization has grown over the past decade, largely as a result of China’s strong demand for primary goods and the high prices of raw materials such as iron ore, copper, oil and soybeans. It is also a vast region, riven by large geographical barriers such as Amazonia and the Andes which hinder travel and have led to an unbalanced distribution of the population and economic activity. These factors, coupled with major deficiencies in terms of infrastructure, limit South America’s ability to emulate the type of production integration seen in Asia, which is characterized by closely linked industrial production networks. The main exception is integration between Argentina and Brazil in the automotive sector, which is reflected in extensive trade in parts and accessories (see section C.5).

The formal type of economic integration prevalent in South America also differs from that of Mexico and Central America. On the whole, South American integration schemes have tended to focus more on eliminating tariffs and other barriers to the cross-border trade in goods than on regulatory development towards deep integration in respect of issues such as trade in services, investment, competition policy and public procurement. As in the case of Mexico and Central America, an exception to this trend are the trade agreements between countries which have entered into such agreements with the United States and the European Union, such as those between Chile and Peru and
between Chile and Colombia. These treaties usually stick closely to the NAFTA model. The same countries that have entered into deep trade agreements among themselves have also done so with more highly developed partners from outside the region, such as, in the case of Chile and Peru, the United States, the European Union, Japan, the Republic of Korea and China.

Given the size of its economy and domestic market as well as its impressive technological capacity, Brazil has the potential to play a crucial role in any efforts to develop South American value chains. This would, however, require policy measures aimed at forging closer production links between Brazil and the other South American economies, which —except in the case of Argentina— remain relatively weak. For example, in 2011, 30% of Brazil’s industrial intermediate goods exports went to South America, mainly to Argentina, but only 5% of its imports of such goods were from the subregion —or 1% if MERCOSUR is excluded (see figure III.10). This difference between the makeup of Brazil’s imports and exports of industrial intermediate goods reflects the low degree of regionalization of its imports. Efforts to forge closer links with the rest of South America would be more likely to succeed if made in coordination with Brazil’s “multi-Latin” companies, which already have a strong presence as investors throughout the subregion.

Figure III.10
Brazil: destination of exports and source of imports of industrial intermediate goods, 2011 (Percentages)

A. Exports
- NAFTA excluding Mexico (19.2)
- European Union (20.4)
- ASEAN+3 (12.9)
- MERCOSUR (23.0)
- CAN (6.3)
- Other Latin American and Caribbean countries (5.9)

B. Imports
- NAFTA excluding Mexico (18.5)
- European Union (24.2)
- ASEAN+3 (34.3)
- MERCOSUR (4.3)
- CAN (0.7)
- Mexico (4.4)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations Commodity Trade Statistics Database (COMTRADE).

The varying ways in which the region’s countries participate in the world economy give rise to different challenges. A key objective for Mexico and the Central American countries is to position themselves in more sophisticated links higher up value chains —whether in industrial goods or services— in which they are already present. For South America the main challenge would appear to lie in incorporating links with greater value added into natural-resource-based exports and in promoting networks and chains in the manufacturing and service sectors.

As noted earlier, the obstacles standing in the way of greater production integration in South America are very diverse, and are often attributable to failures in public policies at the subregional level (such as transport infrastructure) and the national level (in respect of education, training, science and technology and the productivity and internationalization of SMEs, for instance). In this context, whatever progress may be made towards deeper forms of economic integration is, in isolation, unlikely to be sufficient to solve problems that require action on multiple fronts. However, there can be no doubt that a more integrated and deeper South American market would provide a more conducive environment for the emergence and development of value chains. It is therefore necessary to weigh up the benefits of full cumulation of origin at South American level as well as coordinated progress towards trade facilitation and the gradual harmonization or mutual recognition of technical, sanitary and phytosanitary standards, among other initiatives. These advances would be of particular benefit to (both direct and indirect) exporting SMEs, which are less able than large companies to deal with administrative and regulatory barriers to trade.

12 The recently established Pacific Alliance, linking Chile, Colombia, Mexico and Peru, also aims to achieve deep integration between its members, as typified by the free movement of goods, services, people and capital. However, negotiations to that effect are still ongoing, so it remains to be seen how successful it will be in meeting its stated aim.
The development of closer trade and investment links between South America, Central America and Mexico should also be a central objective in the efforts to promote greater production integration in Latin America. Thus, making progress towards greater formal integration between Brazil and Mexico, the two largest and most sophisticated manufacturing economies in the region, remains an ongoing challenge. A trade agreement between them would bring fresh impetus to the process of regional integration and pave the way for an economically integrated Latin American bloc.

The Caribbean shows a low degree of integration into value chains and limited participation in regional production networks. Despite the region’s proximity to the United States, few islands—with the exception of the Dominican Republic—are embedded in this country’s industrial value chains. This weak integration is due mainly to relatively high wages and low productivity, coupled with small geographical size that makes for poor conditions for large-scale production. The most important sectors in the Caribbean are tourism and remote services, neither of which have particularly strong links with the economies of the rest of the subregion in terms of purchasing inputs, which are chiefly imported from further afield. Geographical factors also hinder the development of links between the subregion, since the island countries are small in size and have limited air and sea connections, which is not conducive to the emergence of production networks. A further impediment is the fact that CARICOM still has a number of hurdles to overcome before it can function as a common market. In response to those factors, a national and regional policy agenda is to be drawn up to promote production chains by taking advantage of the great assets the Caribbean has in terms of potential for tourism, cultural services, niche goods and as a destination for offshoring.

Overcoming the acknowledged shortcomings of the Latin American and Caribbean region’s transport and telecommunications infrastructure is also essential in creating an environment more conducive to the development of value chains. In this context, the coordinated projects carried out as part of the Initiative for the Integration of Regional Infrastructure in South America (IIRSA), the Mesoamerica Project and the Caribbean Regional Strategy on Freight Logistics and Trade Facilitation are valuable initiatives that deserve to be strengthened.

Lastly, industrial policy is worthy of particular consideration, especially in view of changes in production paradigms in the wake of the proliferation of production networks and value chains. Rather than developing self-contained, vertically integrated industries, countries increasingly seek to position themselves in specific niches in which they can be internationally competitive. This trend is particularly marked in sectors based on the assembly of final goods such as the automotive, electronics, aviation and clothing industries. It therefore follows that certain industrial (and trade) policy instruments that may have been of use in the past are gradually becoming less effective and, in some cases, are even having the opposite effect to that desired. One such example is the high tariffs or other barriers to the import of intermediate goods, which chip away at the international competitiveness of industries that depend on them. A similar situation occurs with local content requirements, which can reduce access to foreign suppliers which may have lower operating costs or offer better quality than can be found on the local market. In this context, industrial policy remains key to identifying and promoting sectors and activities in which a country can be internationally competitive. However, industrial policy instruments must evolve to place greater emphasis on matters such as incentives for research and development, partnerships, training and supplier development.

Building the presence of Latin American countries in value chains and helping them enter sectors with greater value added may improve access to advanced technologies and best production practices. Joining value chains also means access to world-class inputs and services. The goods and services offered by countries and companies in these chains are therefore likely to have a competitive advantage in the global marketplace. However, realizing these potential benefits depends on the countries implementing an integrated package of policies to increase productivity and reduce productivity gaps between sectors and companies of differing sizes. This means making strides towards structural change in the sense of modernizing the production base, gradually incorporating SMEs along the way and providing them with support in overcoming major challenges in terms of training, partnerships, access to credit and technology, quality certification, traceability and reducing their carbon footprint, to name but a few. Addressing this series of challenges provides an opportunity to modernize regional cooperation and integration structures by shifting their focus towards these areas and launching multinational initiatives for these purposes. Coordinated progress on these issues will do more to further regional integration and to develop subregional value chains than debates on trade policy or tariff liberalization.

13 Tavares de Araujo (2013) argues that measures such as high import barriers and local content requirements, coupled with insufficient logistics services, go some way to explaining the weak international competitiveness of certain Brazilian industrial sectors.
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