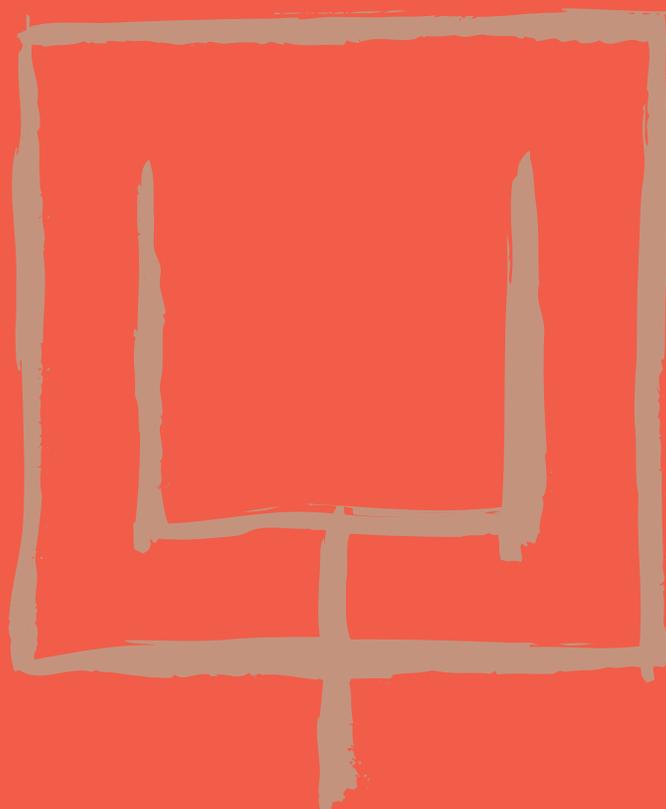


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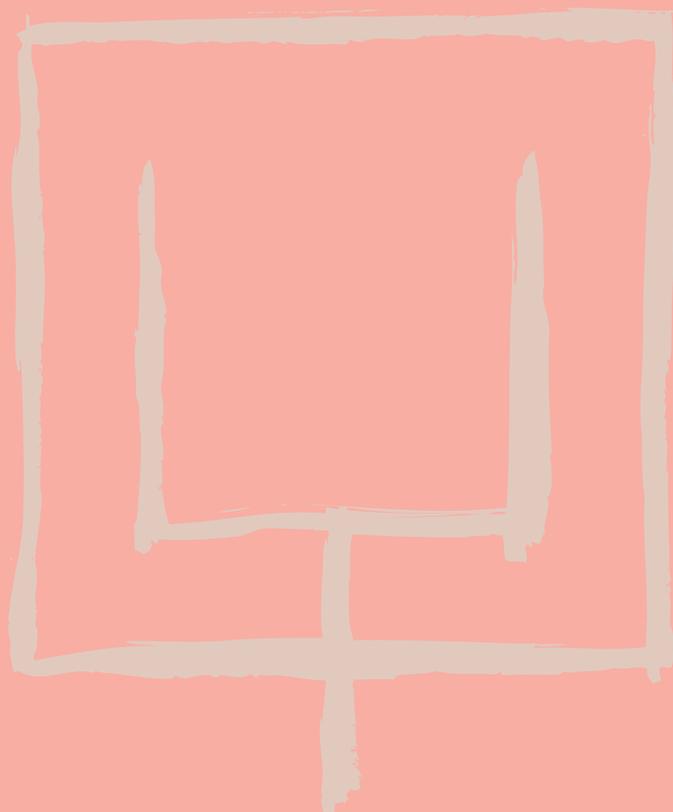
**Foreign Direct Investment**  
in Latin America and the Caribbean



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2012



**Foreign Direct Investment**  
in Latin America and the Caribbean



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Notes and explanations of symbols

The following symbols have been employed in this edition of *Foreign Direct Investment in Latin America and the Caribbean, 2012*:

Three dots (...) indicate that data are missing, are not available or are not separately reported.

Two dashes and a full stop (-.-) indicate that the sample size is too small to be used as a basis for estimating the corresponding values with acceptable reliability and precision.

A dash (-) indicates that the amount is nil or negligible.

A blank space in a table indicates that the concept under consideration is not applicable or not comparable.

A minus sign (-) indicates a deficit or decrease, except where otherwise specified.

The use of a hyphen (-) between years (e.g., 1990-1998) indicates reference to the complete number of calendar years involved, including the beginning and end years.

A slash (/) between years (e.g., 2003/2005) indicates that the information given corresponds to one of these two years.

The word "dollars" refers to United States dollars, unless otherwise specified.

Individual figures and percentages in tables may not always add up to the corresponding total because of rounding.

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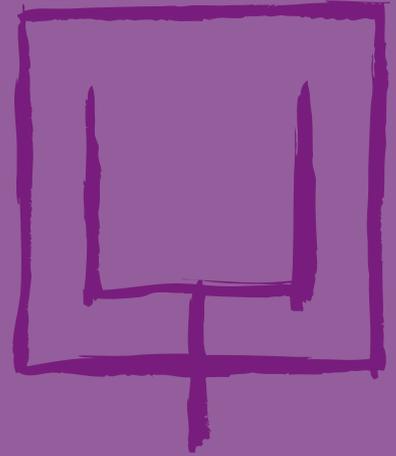
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# Summary and conclusions

## Summary and conclusions

- A. Overview of foreign direct investment in Latin America and the Caribbean
  - 1. FDI flows into the region
  - 2. Trans-Latins
- B. Transnational company profits: repatriation and reinvestment
- C. Foreign direct investment in the agricultural and agro-industry sector in Latin America and the Caribbean
- D. Concluding remarks



## Summary and conclusions

For the third year in a row, the countries of Latin America and the Caribbean continued to attract growing flows of foreign direct investment (FDI). The figures for 2012 were particularly significant because they were set in an international context of falling global FDI flows.

The new increase in FDI posted brought the region's share of global FDI flows up to 12% in 2012. Economic growth in the region (3%) and the high prices of natural resources have undoubtedly contributed to sustaining the level of foreign investment in the region over the past year.

This document offers a qualitative overview of FDI inflows and looks at the relative importance of the different destination sectors in the host economies, and the geographical origin of these capital flows.

The performance of FDI from Latin American and Caribbean countries is also examined, affording particular attention to the expansion of some of the region's largest firms, the trans-Latins.

The report also analyses the phenomenon of FDI income, which has become increasingly significant in the past 10 years, and takes a detailed look at FDI in the agricultural sector.

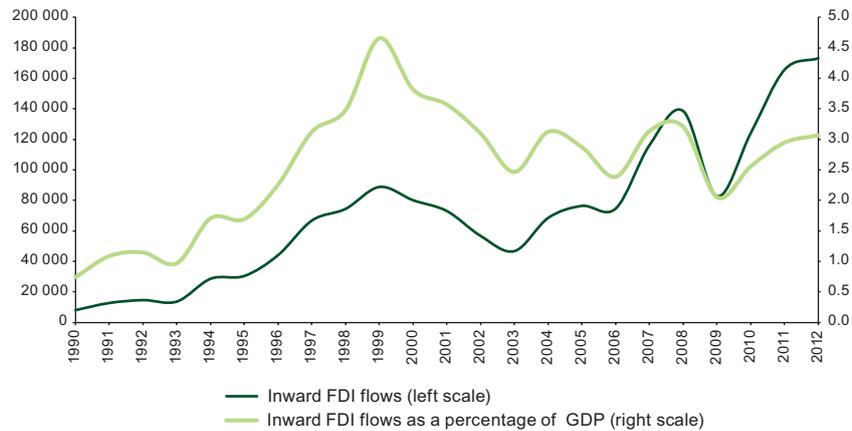
### A. Overview of foreign direct investment in Latin America and the Caribbean

#### 1. FDI flows into the region

In 2012 FDI flowing into Latin America and the Caribbean hit a new record high of US\$ 174.546 billion. This is 5.7% above the level posted in 2011 and confirms a consistent uptrend that began in 2010. These figures were set in a complex scenario of falling international FDI flows throughout the year (13%), to levels close to those seen in 2009. Macroeconomic uncertainty in the United States and the European Union lay behind this fresh drop in global investment, which was sharpest in flows to developed countries (22.5%). The developing countries as a whole also saw a decline in inward FDI, although the drop was much more modest (3%).

The differing performances of FDI going to the developed countries and to the Latin American and Caribbean region reflected several processes. First, the economic crisis and uncertainty in the developed economies has been displacing investment towards emerging markets. Second, local conditions in Latin America are favourable and particularly attractive to global investors at present. Natural resources, especially metals, are enjoying a long price boom, while the region's domestic markets have seen several years of steady growth and offer business opportunities for services development (telecoms, commerce and financial services).

**Figure 1**  
**Latin America and the Caribbean: foreign direct investment flows, 1990-2012<sup>a</sup>**  
 (Millions of current dollars and percentages of GDP)



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of estimates and official figures as of 29 April 2013.

<sup>a</sup> FDI figures indicate inflows of foreign direct investment, minus disinvestments (repatriation of capital) by foreign investors. The FDI figures do not include flows into the main financial centres of the Caribbean. These figures differ from those set out in the 2012 editions of the *Economic Survey of Latin America and the Caribbean* and the *Preliminary Overview of the Economies of Latin America and the Caribbean* because they show the net balance of foreign investment, that is, direct investment in the reporting economy (FDI) minus outward FDI.

Although the United States and the countries of the European Union continue to be the largest investors in Latin America, investments made by firms from Latin American countries increased substantially in 2012, to 14% of all FDI entering the region in the past year. Transnational corporations from the United States increased their share of FDI flowing into the region, while Spanish firms, which had ranked third in this respect in 2011, reduced their share heavily owing to divestments.

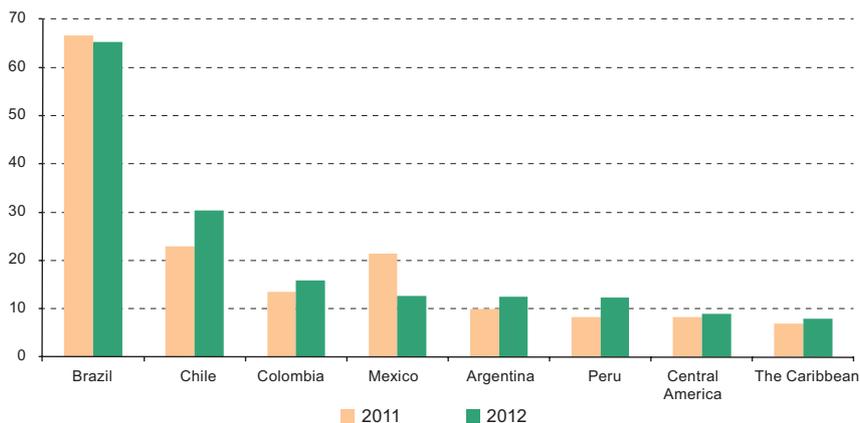
FDI flows to South America and the Caribbean both climbed (by 12% and 39%, respectively). Flow to Central America were up as well, by a more modest 7%. The largest increases were in Peru (49%) and Chile (32%). Inward FDI also rose significantly in Colombia (up 18%) and Argentina (a 27% increase). Mexico saw a marked 38% downturn in inward FDI, to the lowest figure since 1999. Brazil again received the largest share of FDI flowing into the region (38%), and Chile became the second largest recipient in 2012.

The sectoral composition of FDI entering Latin America and the Caribbean is particularly significant, because it indicates the extent to which investment is either driving change in the region's production structure or entrenching existing specialization patterns. In 2012, the sectoral distribution of FDI for the region as a whole was similar to the average for the past five years, although the share going to services (the largest destination sector) edged up to 44% of the total in 2012. Manufacturing slid slightly but continues to represent 30% of the total. The proportion going to sectors based on natural resources was the same in 2012 (26%) as during 2007-2011. Patterns vary widely among the subregions, however. In South America (excluding Brazil), the pattern has been one of increasing concentration of FDI in natural-resource-based sectors (in particular mining), which are the prime FDI destination (51% in 2012), while manufacturing and services accounted for 12% and 37%, respectively. In Brazil, the manufacturing sector represents a significant percentage of inward FDI, at 38% of the total in 2012. However, this is lower than the average for the past five years. By contrast, natural resources were still a relatively small draw for FDI in Brazil in 2012 (13% of the total).

Natural resources account for a smaller share of FDI in Mexico, Central America and the Caribbean, as well, and have tended to hold steady: 10% in 2012 and over the previous five years. Manufacturing, conversely, despite the decline in absolute values in Mexico, was again the largest recipient of FDI (48% of the total). As for services, their share dropped sharply from 55% in 2007-2011 to 42% in 2012. In this group of countries, the primary sector receives a substantial share in some economies of the Caribbean, such as Trinidad and Tobago and the Dominican Republic. In Mexico the proportion of FDI to this sector is very small because both mining and hydrocarbon extraction are in the hands of domestic groups.

These investments can have a significant effect on the entrenchment or diversification of production patterns, because of the substantial impact of FDI on host economies, measured approximately as the ratio of FDI to GDP. In 2012, the region captured flows equivalent to 3% of GDP (slightly more than in 2011). Chile stands out with an FDI-to-GDP ratio of 11.3% in 2012.

**Figure 2**  
**Latin America and the Caribbean (selected countries): inward foreign direct investment, 2011-2012**  
(Billions of dollars)



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of preliminary figures and official estimates at 25 April March 2013.

The growing share of reinvested earnings —averaging 42% of total FDI flows over the past five years— in total FDI could be strengthening the tendency towards entrenching sectoral profiles. In 2012, the reinvested earnings component rose again as a proportion of total FDI.

Transnational corporations have consolidated their presence in Latin America and the Caribbean over the years, especially in capital-intensive sectors, and have built up capital stocks that generate large income flows. In addition, the expansionary phase of the business cycle under way in the region, along with high prices for raw material exports, has boosted returns on those investments. Insofar as a proportion of those earnings are reinvested, they help to feed foreign investment growth.

Even if flows of FDI into the region continue to grow in the coming years, the flow of income on those investments will grow as well, reducing the net capital contribution to balances of payments. This calls for examining the contribution of FDI to different dimensions of performance in the host economies, including their capacity to create employment. In this connection, investments in expanding production capacity alone are estimated to have created three jobs directly for every US\$ 1 million invested in Latin America and the Caribbean in 2003-2012 (no estimates are available on indirect job creation).

Again, the profile of investments is important in this analysis, since the employment content of investment projects varies significantly between kinds of economic activity. Commerce and construction create the most jobs (seven per US\$ 1 million invested), followed by the manufacturing industry and services (three jobs per US\$ 1 million). Mining (including oil) creates one job for every US\$ 2 million. Labour-intensive manufacturing creates seven jobs per US\$ 1 million invested; and engineering-intensive manufacturing (including the automobile industry) creates four, similarly to the food industry. Other natural-resource-intensive activities (excluding food) are less employment-intensive, creating two jobs per US\$ 1 million invested.

The service sector is also quite heterogeneous. Call centres are strong job creators: 73 jobs per US\$ 1 million. Many studies draw attention to the notable job instability in this sector, however. These activities also have low entry barriers and tend to change locations in order to take advantage of tax or wage benefits, because the labour component figures heavily in their cost structure. Tourism-related activities (transport and personal services) have a

higher employment component than more modern ones such as financial services and information and communications technologies (ICTs).

The arguments and evidence set out can inform the discussion of how important it is to consider not only the amount of FDI but also the features of investment projects and their alignment with the requirements of each country's development agenda: more FDI does not guarantee greater job creation capacity.

## 2. Trans-Latins

Outward FDI by Latin American and Caribbean economies expanded in 2012 (18%) to an all-time high of US\$ 49.133 billion, following historically high figures for the past three years. These investments have come mainly from Brazil, Chile, Colombia and Mexico, but in 2012 came almost exclusively from Mexico and Chile. In these three years, trans-Latins have benefited from strong economic growth and investor confidence in the region, which has facilitated access to credit. In 2012, amid shrinking global FDI flows, trans-Latin firms expanded, some thanks to business opportunities that arose as a result of asset divestments by European firms. In fact, 7 of the 10 largest acquisitions by trans-Latins in 2012 consisted of assets bought from European companies.

Mexico was the region's largest outward investor in 2012, with US\$ 25.597 billion, more than double the figure for 2011 and far exceeding the previous high of two years earlier. América Móvil was the prime stakeholder in this process, as it expanded its activities into Europe. Chilean outward investment also reached a fresh record in 2012 at US\$ 21.09 billion, mainly in South America and principally in the retail industry, forestry and transport. Many Brazilian firms have continued to expand abroad, as well, and account for 7 of the 20 largest acquisitions by trans-Latins in 2012. Apart from the annual flows of FDI, Brazil has the highest level of FDI stock—over US\$ 200 billion—outside Latin America. Firms from the Bolivarian Republic of Venezuela and Argentina also invested abroad, although on a smaller scale. Data on outward FDI for the rest of the economies of the region are much more modest.

## B. Transnational company profits: repatriation and reinvestment

The profits made by transnational corporations operating in Latin America and the Caribbean have increased by a factor of 5.5 in nine years, swelling from US\$ 20.425 billion in 2002 to US\$ 113.067 billion in 2011. This surge in profits—also known as FDI income—tends to cancel out the positive impacts of FDI inflows on the balance of payments. The evidence for Latin America and the Caribbean shows, in fact, that in the past few years outflows registered as FDI income were almost as high (92%) as inflows in the form of FDI.

One of the hallmarks of the current stage of the globalization process is that FDI income is growing faster in developing economies. Between 2002 and 2011, FDI income quadrupled in developing regions and rose sevenfold in China, but only doubled in the United States, the European Union and Japan. Latin America and the Caribbean is one of the regions where FDI has risen the most.

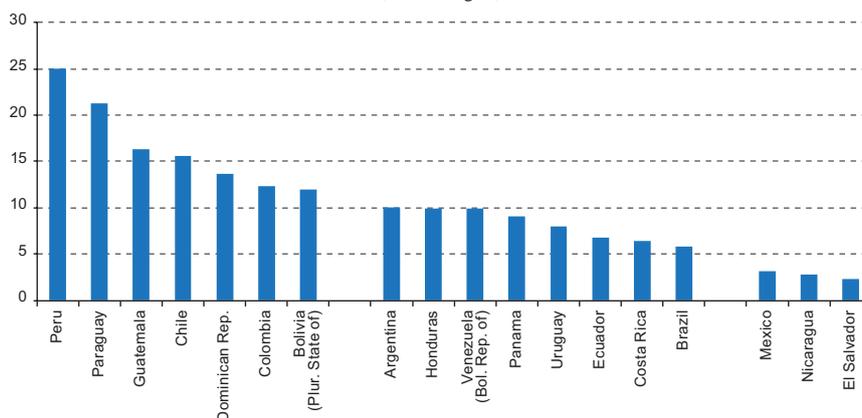
Two main factors underlie the surge in FDI income in Latin America and the Caribbean. First, the rapid build-up of FDI stock in the region. Although FDI flows into the region have increased steadily, the greatest impact relative to the size of the host economies occurred between 1996 and 2001. As State-owned assets were privatized and many sectors were opened up to foreign investment, inward FDI stock rose from 11% to 25% of GDP. During the decade that followed, this ratio continued to rise gradually to reach 30%. The second factor was a rise in investment profitability,

especially from 2003 on. Measured by the return on FDI stock in the region, profitability rose from a low of 4% during the 2001-2002 crisis to a high of 10% in 2008, as a result of two simultaneous processes: steady economic growth in the region's major economies—which drove up the profits of transnationals targeting the domestic market—and high prices for the region's export commodities, which benefited firms in the natural resource sector.

Patterns of FDI income by sector draw attention to the extremely high returns obtained by corporations in the extractive industries, especially metal mining, in the past few years. This is also reflected in the distribution of FDI income by country (see figure 3). Broadly, a first group of countries, in which a large part of FDI goes to mining, have seen returns on FDI well above the average. At the opposite end of the spectrum are Mexico and some other countries in which FDI has gone mainly to the production of manufactured goods for export; here, returns on FDI have been considerably lower.

Other sectors, which target expanding domestic markets, have also achieved very high returns. These include financial services in Chile and the automotive industry in Brazil. In 2012 FDI income in the region was down 7% on 2011, owing more to the impacts of the economic slowdown in Brazil than to the slight drop in prices for raw materials.

**Figure 3**  
**Latin America and the Caribbean (selected countries): FDI income as a proportion of FDI stock, 2007-2011**  
(Percentages)



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

Not all FDI income leads to a net outflow of foreign exchange from the economy, since about half is reinvested in the subsidiaries where it was generated. In the countries of the region for which data are available, it is estimated that between 2005 and 2011 54% of earnings were repatriated and 46% reinvested. This percentage varies from one country to another, but it held steady throughout that period, suggesting that the global financial crisis which broke out in 2008 had no effect on the proportion of profits that transnational corporations remit to their head offices, at least for the region overall.

FDI income has become one of the main determinants of equilibrium in the region's overall balance of payments, reflecting the shift that occurred in the late 1990s in the region's patterns of external financing. Whereas the primary source for foreign capital used to be loans and portfolio investment, since 2000 most foreign capital flowing into Latin America and the Caribbean has taken the form of FDI. As a result, FDI income is the main component of investment income and the main cause of the negative balance on the income account. Between 2008 and 2011, on average, US\$ 100 billion was generated in FDI income in the region each year, compared with a goods trade surplus of just over US\$ 50 billion.

The countries of the region must now consider the implications of FDI for balance-of-payments sustainability and the economies' external constraints. In this regard, FDI acts at several levels: FDI flows represent income, but FDI income is an outflow. At the same time, the operations of transnational companies in the economy also generate a surplus or a deficit on the trade balance, depending on whether they are export-oriented or not. And, whereas the balance-of-payments impact of FDI income generated by mining activities is offset by exports, income from services and manufactures targeting the domestic market, although smaller in amount, can generate larger external disequilibria.

Another consideration is the FDI income entering the region's economies from outward investments by trans-Latins. For now, these firms are remitting just 11% of the income they generate abroad, but the gap has narrowed in the past few years and will likely continue to do so as outward FDI gathers momentum. Nevertheless, this gap will not close for the entire region in the foreseeable future, and while almost all the Latin American and Caribbean countries receive significant amounts of FDI (and therefore generate FDI income), very few of them send outward FDI (or receive FDI income) to a comparable degree.

A further implication of the surge in FDI income is that transnational corporations should become much more significant in relation to host countries' tax takes. However, transnationals have a range of instruments at their disposal that enable them to transfer their profits to jurisdictions with more favourable tax treatment, perfectly legally. This increasingly common practice erodes the tax base and has led to incentives to limit these instruments. Thus far, only developed countries, mainly in Europe, have taken this sort of step, but the Latin American and Caribbean countries should join efforts to adapt domestic tax regulations and coordinate internationally to achieve a global pact to limit the more aggressive practices of transnational corporations. Furthermore, the growth of outward investments by Latin American countries will, unavoidably, be another source of tax base erosion, insofar as local firms can resort to the same instruments to reduce their tax obligations.

The effects that high FDI income could have on the Latin American and Caribbean economies will not be temporary. Although income may be expected to fluctuate with the domestic growth cycle and export prices, in the medium term it will remain much higher than it was a decade ago, because of the FDI stock built up in the region. This calls for an examination of the role of FDI as a source of capital for these economies and its contribution to growth and structural change in the region.

## C. Foreign direct investment in the agricultural and agro-industry sector in Latin America and the Caribbean

Agriculture and agro-industry are currently the focus of a global debate on food security, energy security and climate change. The world population is expected to reach 9 billion by 2050; to meet the demand for food, agricultural production will need to increase by 70% over 2006 levels. All of these changes are creating challenges and opportunities in the agricultural and agro-industry sector, particularly in the case of grains, oilseeds, sugar cane and other flex-crops that can be used for human consumption, animal feed or making biofuels but compete for the same basic inputs: land and water.

Although national statistics on FDI in the agricultural and agro-industrial sectors of the region vary widely in terms of availability, the information which it has been possible to obtain for 10 countries of the region indicates that US\$ 9.255 billion in FDI entered the primary agricultural sector between 2005 and 2010, which is 2% of this group's combined total inward FDI. The importance of agricultural FDI varies greatly from one economy to another. In Uruguay it accounts for nearly 22% of total inward FDI between 2005 and 2010. It also makes up a substantial proportion in Guatemala (12.5%), Costa Rica (6.7%) and Ecuador (7.3%). The data for FDI in agro-industry, referring to just six countries, total US\$ 48.4 billion for 2005-2011. Most of these flows went to Brazil (37.9%), Mexico (35.9%) and Argentina (15.5%). FDI targeting the agro-industry sector in these six countries averaged 8.3% of total inward FDI between 2005 and 2010.

Studies and databases on agricultural land purchase and lease operations in the region disagree as to their scale and extent. However, the sources examined do agree that the land market is growing quickly and that trans-Latin companies are playing a leading role. The governments of the countries of the region have responded to this phenomenon by passing legislation seeking to limit the land ownership rights of foreigners.

Companies specializing in the production of agricultural commodities are mapping their strategies in order to integrate their operations along the value chain and optimize global raw materials exports. This requires meshing agricultural production, logistics, the maritime freight business and industrial processing in order to reduce costs and produce competitively. This approach is being followed by the world's four major grain processing corporations (ADM, Bunge, Cargill and Louis Dreyfus), together with a wide range of other key but smaller transnationals (Glencore, Tereos, Mitsui Mitsubishi and Goldman Sachs) and emerging transnational corporations like the China-based Noble Group Limited. The pattern across countries and agro-industry chains is to acquire domestic operations (via mergers and acquisitions) and, to a lesser extent, enter into joint ventures with local companies and set up subsidiaries.

Trans-Latin firms have tended to develop a certain specialization based on existing comparative and competitive advantages; this is the case of the Brazilian meat sector companies (JBS-Friboi, BRF Foods, Marfrig and Minerva), which have been able to position themselves globally through acquisitions in the Southern Cone of South America, the United States and Australia. Apart from their competitive advantages, these firms' internationalization process has been aided by a national development policy spearheaded by Brazil's National Bank for Economic and Social Development (BNDES), which has provided funding through a variety of instruments for purchases of firms abroad, acquisitions of local firms with subsidiaries abroad or the establishment of joint ventures with competitors.

The vertically integrated, internationalized business model to which many firms aspire is not within the reach of all of them, because not all are at the same level or have the same implementation capacity. The specific characteristics of the different subsectors also have an impact on the degree of vertical integration at each point. The major actors in the sectors analysed therefore fall into four general groups: (i) transnational corporations with market positioning advantages; (ii) foreign companies with limited market presence; (iii) trans-Latins; and (iv) domestic enterprises.

The public policy regime and the institutional framework in general play a decisive role in promoting FDI and absorbing its positive domestic economic impact. The information set out in this study indicates that biofuel and meat industry FDI are driven not only by new market trends but also by the government incentives and regulations that have shaped foreign investor and trans-Latin company decision-making.

The impact of FDI in the agricultural and agro-industry sector in terms of innovation is another area for consideration. The study confirms that FDI has had an impact on the biodiesel industry in Argentina and the meat industry in all the Southern Cone countries, whose export-oriented facilities are technologically superior to slaughter facilities oriented towards the domestic market. The development of trans-Latin meat companies has also had a demonstration effect, inasmuch as operating in more developed markets (United States and others) has introduced these firms to new technology which is then introduced at home, and has even led to alteration of local standards and regulations.

This study clearly shows how extensively involved transnational corporations are in agriculture in Latin America and the Caribbean. FDI accounts for 23% of ethanol output in Brazil; the figures are similar for soybeans in Argentina and the seed and fertilizer industry. This level of penetration calls for a look at how accountable these companies are to their host countries. Agriculture depends on fragile environmental balances, and many supply chains generate negative externalities that must be controlled. The most obvious case is soybean mono-cropping in Argentina, but the sugar sector in Brazil and meat production throughout the Southern Cone also face formidable environmental challenges that require new responses by transnational corporations (and national ones as well). The same can be said of the social challenges. It is estimated that there are about 15 million family farms in the region. They control approximately 400 million hectares, of which 10 million hectares are defined as subsistence farms. All this calls for rethinking forms of production and for firms to work with new environmental sustainability standards while building successful relationships all around (a win-win situation) and forging new production chain linkages with small growers and surrounding communities.

Agricultural and agro-industry FDI can open substantial development opportunities, not only for the main traditional players, but also for small and medium-sized producers who normally have few linkages with foreign companies. It is therefore a challenge for governments to attract FDI that will also go to areas where there are small producers and

help build virtuous circles of economic growth that can contribute to the stability of the region's agricultural sector and further the well-being of the rural population. If this is to happen, firms, whether local or transnational, must be aware that they are working with humankind's common goods—air, water, soil, climate, genomes, local knowledge and cultures—which essentially belong to everyone and must be preserved for future generations. As evidenced by some of the cases analysed—for example the Round Table on Responsible Soy (RTRS) standard used in soybean growing in Argentina and Brazil and the agro-environmental protocol of the State of São Paulo applied in the sugar cane sector— this process is already under way. More needs to be done, however, and in a sustained manner. This means assuming new commitments vis-à-vis the major global challenges, forming networks and coalitions of multiple public and private stakeholders, capable of generating new synergies to successfully meet these challenges and to contribute to a creating a new global governance based on solidarity, responsibility and democracy.

## D. Concluding remarks

FDI flows into Latin America and the Caribbean expanded for the third year running to reach a new record of US\$ 174.546 billion. This took place against a backdrop of heavily shrinking global FDI flows, making the result achieved in the region all the more significant.

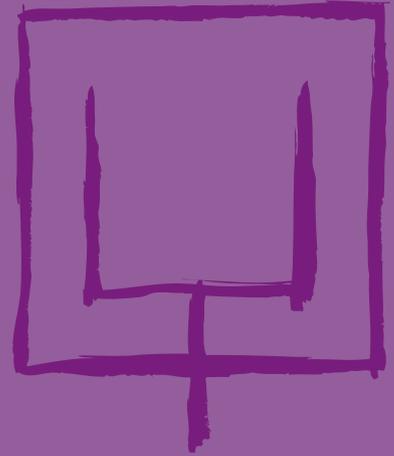
FDI flows into the Latin American and Caribbean region are not expected to depart from the pattern of the past few years in 2013, with reinvestment of earnings by transnational corporations, which now represents almost half of inward FDI, similar to 2012. Economic growth (an estimated 3.5%) slightly over the 2012 rate will sustain earnings reinvestments and new investments targeting the domestic market. The recent fall in some commodity prices may dampen the strong growth of FDI in natural resources seen over the past few years, but will not halt projects already under way. ECLAC estimates that FDI flows into Latin America and the Caribbean will be between 3% down and 7% up on 2012, this broad range being due to uncertainty over whether a recently announced large cross-border acquisition will materialize in 2013.

Setting aside the current conditions, sectoral patterns of FDI are leaning increasingly towards natural-resource exploitation, especially in South America, and are thus entrenching the region's existing production structure. Generally speaking, manufacturing accounts for quite a limited share of FDI flows, except in Brazil and Mexico.

There are no clear signs that FDI is making any significant contribution to generating new sectors or to creating high-tech activities in any of the countries. Yet, changing the production structure is precisely one of the most important needs the region is called upon to address.

The factors that have attracted FDI to the region will, in all likelihood, continue to be important in the coming years. Accordingly, attention should be afforded not only to the sums of FDI received, but, increasingly, to its characteristics and the nature of investment projects, on the one hand, and their adaptation to the needs of the countries' development agendas, on the other.

It is therefore increasingly necessary to tap the region's advantages as an FDI destination to improve the countries' production matrices. This could be achieved by making greater efforts to channel part of the profits from transnationals into funds for production development and by pursuing initiatives to direct FDI towards sectors which the countries view as priorities.



## Regional overview of foreign direct investment

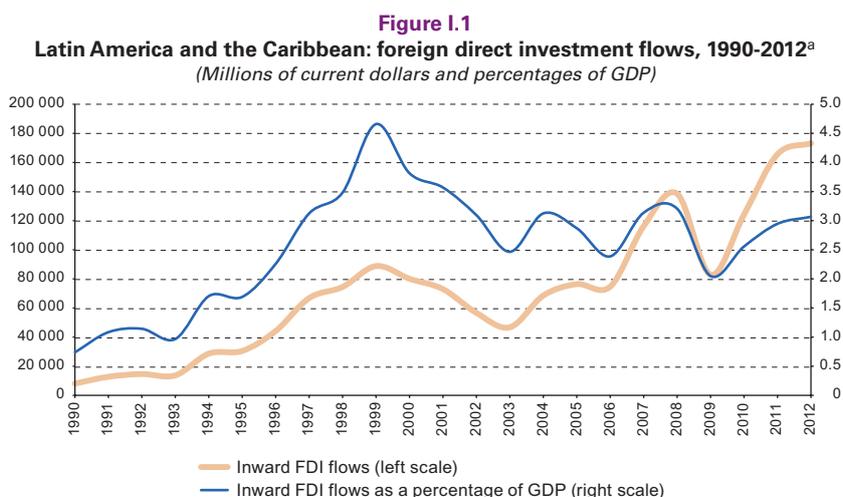
- A. Introduction
- B. Overview of foreign direct investment worldwide
- C. Inward foreign direct investment and transnational companies in Latin America and the Caribbean
- D. Patterns of origin and destination of foreign direct investment
- E. The trans-Latins and outward foreign direct investment from the region
- F. FDI and job creation in Latin America
- G. Conclusions
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## A. Introduction

For the third year in a row, the countries of Latin America and the Caribbean continued to attract growing flows of foreign direct investment (FDI). The figures for 2012 were particularly significant because they were set in an international context in which global FDI flows dropped off substantially. Economic growth in the region (3%) and high international prices for natural resources undoubtedly helped keep FDI in the region at levels comparable to last year's.

Recent growth in FDI inflows (measured in current dollars) has, for the third consecutive year, come with a higher FDI to GDP ratio. Although this ratio was not above 4% as it was between 1996 and 2001, FDI as a ratio of GDP for Latin America and the Caribbean as a whole neared 3%.



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of estimates and official figures as of 29 April 2013.

<sup>a</sup> FDI figures indicate inflows of foreign direct investment, minus disinvestments (repatriation of capital) by foreign investors. The FDI figures do not include flows into the main financial centres of the Caribbean. These figures differ from those set out in the 2012 editions of the *Economic Survey of Latin America and the Caribbean* and the *Preliminary Overview of the Economies of Latin America and the Caribbean* because they show the net balance of foreign investment, that is, direct investment in the reporting economy (FDI) minus outward FDI.

In keeping with a trend that has deepened over the past 12 years, reinvested earnings account for a growing portion of inward FDI in the region. This trend is associated with an increase in revenue generated by FDI over the years and whose features, causes and implications need to be thoroughly examined.

As revenue increases, so does the capital being reinvested in the region, but it also pushes up the profits transferred to parent companies by subsidiaries of multinational companies operating in Latin America.

So, even if FDI flows continue to grow in the coming years, it is likely that the net capital contribution from foreign investment will diminish. This calls for examining the contribution of FDI in more qualitative terms, looking at, for example, technology spillovers, generation of linkages, contribution to the creation of new sectors, local entrepreneurship enhancement and the quality and quantity of jobs created.

The present chapter is divided into six sections. Following this introduction, section B gives an overview of FDI worldwide. Section C describes FDI patterns in Latin America and the Caribbean on the basis of official balance-of-payments statistics. It also looks at investment flows in certain economies. Section D reviews the FDI-sending countries and receiving sectors. Section E provides a snapshot of the region's countries as foreign investors, as well as the expanding trans-Latins. Section F weighs some of the factors related to the employment impact of FDI. Lastly, section G sets forth the main conclusions.

## B. Overview of foreign direct investment worldwide

In 2012, global FDI flows fell 13% over the previous year, from US\$ 1.6 trillion to US \$ 1.39 trillion, just above the US\$1.37 trillion posted in 2011 when the global economy was still reeling from the financial crisis.

The main factor behind the drop in 2012 was the 22.5% decline in flows to the developed countries compared with 2011. Macroeconomic uncertainty in the United States and the European Union had a marked impact on their figures, with inward FDI to the United States down by 25.3% and flows towards the European Union economies off by 24.8%.

The developing countries as a whole also saw a decline in inward FDI, although the drop was much more modest (3.0%) than in the developed economies.

Foreign direct investment flows to the transition economies, Asia and the Pacific and the countries of the Middle East fell by 13.1%, 10.2% and 3.3%, respectively. The transition economies were the hardest hit, owing to their proximity and links to the European Union.

Only two regions (Africa, and Latin America and the Caribbean) saw inward FDI increase, by 5.5% and 7%, respectively. For Africa, however, the increase followed three consecutive years of decline, and Africa accounts for a far smaller share of global FDI flows (3.5% of the total) than does Latin America and the Caribbean.

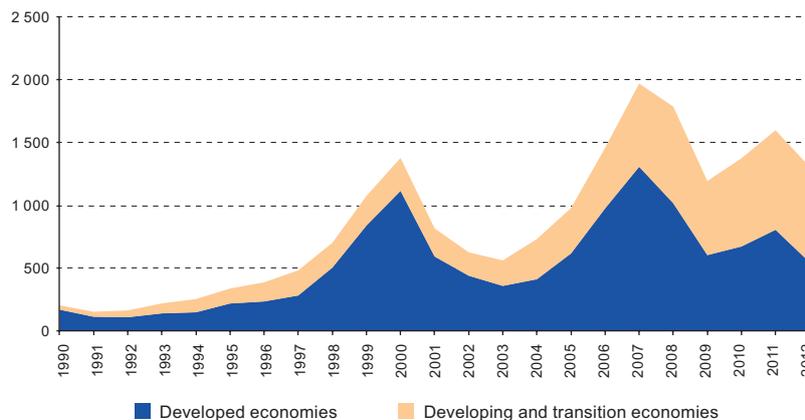
With inward FDI falling at different rates, the share going to different groups of countries changed significantly. The developed countries (which in 2011 accounted for 51% of global FDI) saw their share drop to 45%. The portion going to the developing economies rose from 43.8% in 2011 to 49% in 2012.

The United States, despite the fall in FDI inflows, is still the main destination for FDI: US\$ 175 billion, followed by China at US\$ 120 billion. Most of the countries of Europe saw significant declines; the European Union as a whole posted the lowest level of inward FDI since 2004.

Mergers and acquisitions accounted for much of the decrease in FDI flows. Such transactions dropped by 41%, from US\$ 525.881 billion in 2011 to US\$ 310.141 billion in 2012 —the lowest since 2009.

Transnational corporations based in developed countries cut back on these transactions across the board (56% decline); the value of mergers and acquisitions by multinationals in developing economies climbed 10.7%.

**Figure I.2**  
Global flows of foreign direct investment by group of economies, 1990-2012  
(Billions of dollars)



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures; United Nations Conference on Trade and Development (UNCTAD), *World Investment Report 2012. Towards a New Generation of Investment Policies* (UNCTAD/WIR/2012), Geneva, July 2012; and *Global Investment Trends Monitor*, No. 11, Geneva, 2013.

**Table I.1**  
**Worldwide net foreign direct investment inflows, variation and distribution, by region, 2007-2012**  
*(Billions of dollars and percentages)*

Region, grouping or country	Investment flows <i>(billions of dollars)</i>						Variation rate <i>(percentages)</i>					Distribution <i>(percentages)</i>				
	2007	2008	2009	2010	2011	2012 <sup>a</sup>	2008	2009	2010	2011	2012 <sup>a</sup>	2008	2009	2010	2011	2012 <sup>a</sup>
<b>World</b>	1 975	1 791	1 198	1 379	1 611	1 395	-9	-33	15	17	-13	100	100	100	100	100
<b>Developed economies</b>	1 310	1 020	606	675	816	633	-22	-41	11	21	-22	57	51	49	51	45
European Union	854	542	357	358	431	324	-37	-34		20	-25	30	30	26	27	23
United States	216	306	144	198	234	175	42	-53	38	18	-25	17	12	14	15	13
<b>South-East Europe and Commonwealth of Independent States<sup>b</sup></b>	91	121	72	75	94	81	33	-40	4	25	-13	7	6	5	6	6
<b>Developing economies</b>	574	651	519	629	701	680	13	-20	21	11	-3	36	43	46	44	49
Latin America and the Caribbean	116	139	83	124	166	175	19	-40	50	33	6 <sup>c</sup>	8	7	9	10	12
Financial centres in the Caribbean <sup>d</sup>	56	71	66	64	51	59	28	-7	-4	-19	16	4	6	5	3	4
Africa	52	58	53	43	43	46	12	-9	-18		6	3	4	3	3	3
Middle East	78	92	66	59	49	47	18	-28	-11	-18	-3	5	6	4	3	3
Asia-Pacific	272	291	251	339	392	352	7	-14	35	16	-10	16	21	25	24	25

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures; United Nations Conference on Trade and Development (UNCTAD), *World Investment Report 2012. Towards a New Generation of Investment Policies* (UNCTAD/WIR/2012), Geneva, July 2012; and *Global Investment Trends Monitor*, No. 11, Geneva, 2013; FDI in Figures, Organization for Economic Cooperation and Development (OECD), Paris, 2013.

<sup>a</sup> Estimates.

<sup>b</sup> Includes the Russian Federation.

<sup>c</sup> Some Latin American and Caribbean countries did not provide data for 2012; accordingly, the growth rate was based on the 12-month variation for the most recent period available.

<sup>d</sup> Includes the British Virgin Islands and the Cayman Islands.

The trend was particularly negative in the case of transnational corporations in the countries of the European Union: the value of mergers and acquisitions plummeted 99.7%, from US\$ 117.050 billion in 2011 to just US\$ 310 million in 2012. Companies in France, Italy, Luxembourg, Portugal, Spain and the United Kingdom carried out major disinvestments, selling part of their assets abroad. These patterns could signal extremely defensive restructuring strategies adopted by transnational corporations based in developed countries (particularly in Europe) as well as low levels of confidence in a very uncertain and complex macroeconomic and industrial context.

Among the developing economies, the value of mergers and acquisitions on the part of transnational corporations based in Latin America and the Caribbean (the trans-Latins) surged 50.9%. Trans-Latins headquartered in Argentina, Brazil and Chile accounted for the largest share of these transactions.

Global FDI flows could edge up in 2013 because global GDP, gross fixed capital formation and international trade are expected to recover, albeit slightly. Growth will be stronger in the developing economies, but if the economic crisis in the developed countries continues or even deepens, international FDI flows are not likely to rise until 2014 (UNCTAD, 2013).

**Table I.2**  
**Mergers and acquisitions by source, 2011 and 2012**  
*(Millions of dollars and percentages)*

Region	2011	2012	Change
World	525 881	310 141	-41.0
Developed economies	400 929	176 292	-56.0
European Union	117 050	310	-99.7
United States	130 210	78 721	-39.5
South-Eastern Europe and the Commonwealth of Independent States	13 510	8 615	-36.2
Developing economies	103 615	114 657	10.7
Latin America and the Caribbean	18 659	28 149	50.9
Africa	4 812	592	-87.7
Asia and the Pacific	80 179	85 873	7.1

**Source:** United Nations Conference on Trade and Development (UNCTAD), *Global Investment Trends Monitor*, No. 11, Geneva, 2013.

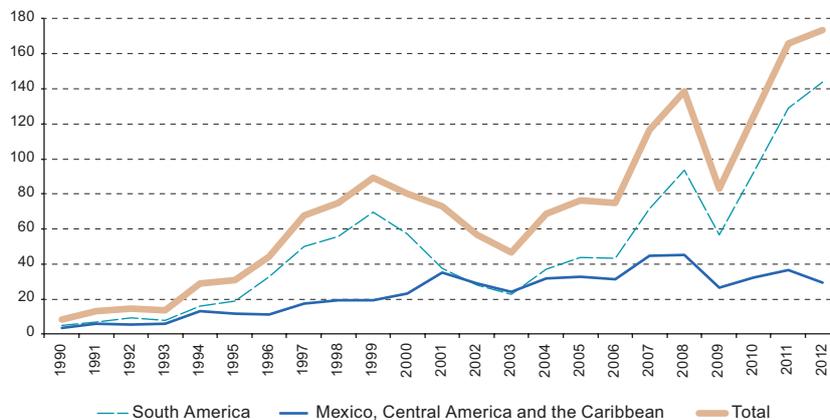
## C. Inward foreign direct investment and transnational companies in Latin America and the Caribbean

In 2012 foreign direct investment into Latin America and the Caribbean hit a new record high of US\$ 174.546 billion. This is 5.7% above the level posted in 2011 and confirms a consistent uptrend that began in 2010.

The figures for the region are particularly significant because they were set in a complex scenario of plummeting international FDI flows throughout the year. As a result, the region's share of global FDI flows climbed from 10% of the total in 2011 to 12% in 2012.

A look at the subregions shows that growth was concentrated in South America (12%), the Caribbean (39%) and, to a lesser extent, Central America (7%), while FDI flows to Mexico declined by 38%.

**Figure I.3**  
Latin America and the Caribbean: inflows of foreign direct investment by subregion, 1990-2012  
(Billions of dollars)



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and estimates at 29 April 2013.

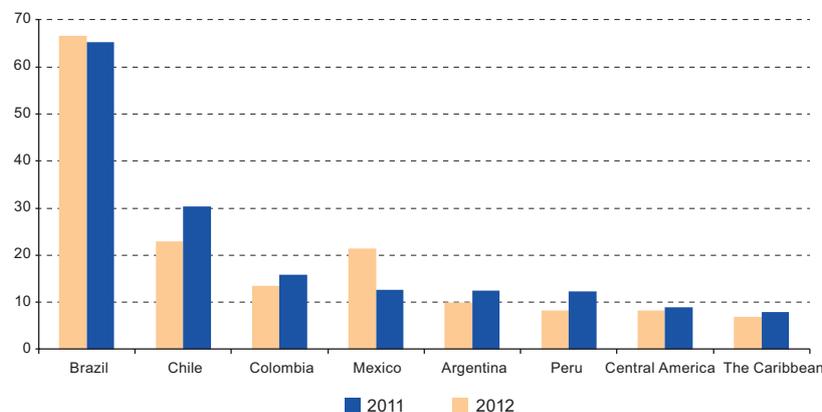
Brazil still receives the largest share of FDI flowing into the region: 41%, despite a slight downtick in 2012. The largest increases were in Peru (up 49%, to US\$ 12.240 billion) and Chile (whose 32% jump, to US\$ 30.323 billion, made it the second largest recipient of inward FDI in Latin America and the Caribbean). Inward FDI also rose significantly in Colombia (up 18%) and Argentina (a 27% increase).

Mexico saw a marked 38% downturn in inward FDI, which reached the lowest figure since 1999.

The figures for the region as a whole reflect a growing interest in natural resources and in the domestic markets of the countries of Latin America and the Caribbean. High international prices for many of the raw materials that are found in abundance in some countries of the region (especially those related to metal mining) favoured the growing flow of investments. The return on investment in mining has remained high and has, for a number of years, outstripped the figure for other sectors.

The region's continued economic growth over the past 10 years (with the exception of 2009) has led to an expansion of domestic markets that are increasingly attractive, particularly for the development of mass consumption services such as telecommunications, retail commerce and financial services. Furthermore, against an international backdrop of economic crises and uncertainty in many developed economies, many transnational corporations are reviewing their strategies and seeking new opportunities to enhance their footprint in emerging economies.

**Figure I.4**  
**Latin America and the Caribbean (selected countries): inward foreign direct investment, 2011-2012**  
*(Billions of dollars)*



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of preliminary figures and official estimates at 29 April 2013.

**Table I.3**  
**Latin America and the Caribbean: foreign direct investment inflows by receiving country or territory, 2000-2012**  
*(Millions of dollars and percentages)*

Country	2000-2006 <sup>a</sup>	2007	2008	2009	2010	2011	2012	Absolute change 2011-2012 <sup>b</sup>	Growth rate 2011-2012 <sup>b</sup>
<b>South America</b>	<b>38 582</b>	<b>71 766</b>	<b>93 447</b>	<b>56 604</b>	<b>92 112</b>	<b>129 140</b>	<b>144 054</b>	<b>14 914</b>	<b>12</b>
Argentina	4 473	6 473	9 726	4 017	7 848	9 882	12 551	2 670	27
Bolivia (Plurinational State of)	342	366	513	423	643	859	1 060	201	23
Brazil	19 144	34 585	45 058	25 949	48 506	66 660	65 272	-1 388	-2
Chile	5 387	12 572	15 518	12 887	15 373	22 931	30 323	7 392	32
Colombia	4 108	9 049	10 596	7 137	6 758	13 438	15 823	2 385	18
Ecuador	539	194	1 058	306	163	641	587	-54	-8
Paraguay	59	202	209	95	228	215	273	58	27
Peru	1 870	5 491	6 924	6 431	8 455	8 233	12 240	4 007	49
Uruguay	551	1 329	2 106	1 529	2 289	2 505	2 710	205	8
Venezuela (Bolivarian Republic of)	2 110	1 505	1 741	-2 169	1 849	3 778	3 216	-562	-15
<b>Mexico</b>	<b>22 916</b>	<b>31 380</b>	<b>27 853</b>	<b>16 561</b>	<b>21 372</b>	<b>21 504</b>	<b>13 431</b>	<b>-8 073</b>	<b>-38</b>
<b>Central America</b>	<b>3 046</b>	<b>7 278</b>	<b>7 769</b>	<b>4 515</b>	<b>6 228</b>	<b>8 305</b>	<b>8 876</b>	<b>571</b>	<b>7</b>
Costa Rica	747	1 896	2 078	1 347	1 466	2 157	2 265	109	5
El Salvador	311	1 551	903	366	117	385	516	130	34
Guatemala	370	745	754	600	806	1 026	1 207	181	18
Honduras	454	928	1 006	509	969	1 014	1 059	44	4
Nicaragua	229	382	626	434	508	968	810	-158	-16
Panama	935	1 777	2 402	1 259	2 363	2 755	3 020	265	10
<b>The Caribbean</b>	<b>3 639</b>	<b>5 958</b>	<b>9 628</b>	<b>5 268</b>	<b>4 656</b>	<b>6 865</b>	<b>8 186</b>	<b>1 983</b>	<b>32</b>
Antigua and Barbuda	162	341	161	85	101	68	74	6	8
Bahamas <sup>c</sup>	411	887	1 032	753	960	971	465	-375	-45
Barbados	157	476	464	247	290	532	...	...	...
Belize	78	150	180	113	100	99	195	96	96
Dominica	26	48	57	43	25	14	20	5	38
Dominican Republic	954	1 667	2 870	2 165	1 896	2 275	3 610	1 335	59
Grenada	69	172	141	104	64	45	33	-13	-28
Guyana	57	152	179	164	198	247	294	47	19
Haiti	33	75	30	38	150	181	179	-2	-1
Jamaica	636	866	1 437	541	228	218	381	163	75

Table I.3 (concluded)

Country	2000-2006 <sup>a</sup>	2007	2008	2009	2010	2011	2012	Absolute change 2011-2012 <sup>b</sup>	Growth rate 2011-2012 <sup>b</sup>
Saint Kitts and Nevis	90	141	184	136	119	112	101	-11	-10
Saint Lucia	99	277	166	152	127	116	113	-4	-3
Saint Vincent and the Grenadines	52	121	159	111	97	86	126	40	46
Suriname	-64	-247	-231	-93	-248	70	70	0	0
Trinidad and Tobago	879	830	2 801	709	549	1 831	2 527	963	70
<b>Total</b>	<b>68 183</b>	<b>116 382</b>	<b>138 698</b>	<b>82 948</b>	<b>124 368</b>	<b>165 815</b>	<b>174 546</b>	<b>9 394</b>	<b>5.7</b>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of preliminary figures and official estimates as of 29 April 2013.

<sup>a</sup> Simple average.

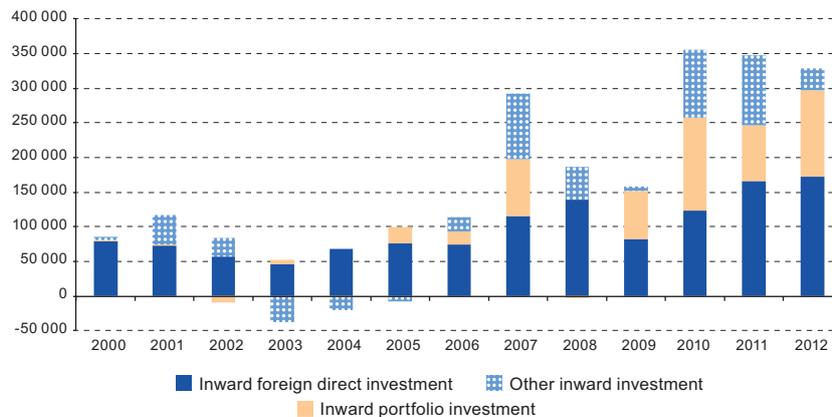
<sup>b</sup> The Bahamas, Barbado and Mexico have not reported data for 2012; accordingly, the absolute change and the growth rate for these economies were based on the 12-month variation for the most recent period available.

<sup>c</sup> Official data at the third quarter.

The confidence of investors worldwide in the economies of Latin America and the Caribbean is noticeable in other capital flows, not just in FDI. Macroeconomic stability and resilience in the face of the 2008-2009 global crisis have helped drive investment portfolio flows up.<sup>1</sup>

Over the past few years, portfolio investment and other investments<sup>2</sup> had, together, outstripped FDI (see figure I.5). However, the drop in other investments in 2012 pushed FDI, for the first time since 2007, back up to more than half of the cross-border capital flows into the region. In 2011, other investments totalled US\$ 103.412 billion while portfolio investment stood at US\$ 81.389 billion. By contrast, estimates for 2012 put other investment flows at US\$ 26.142 billion and portfolio investment flows at US\$ 127.860 billion. The rise in portfolio investment is attributable to the buoyancy and financial robustness of domestic markets and to low returns at the international level, which has spurred investment in emerging markets (ECLAC, 2011a). While FDI in the region has been an important source of capital over the past two decades and has never posted a negative balance, portfolio investments and other investments have both shown high volatility over the past 20 years and have sometimes been in negative territory.

**Figure I.5**  
Latin America and the Caribbean: inward cross-border capital flows, 2000-2012  
(Millions of dollars)



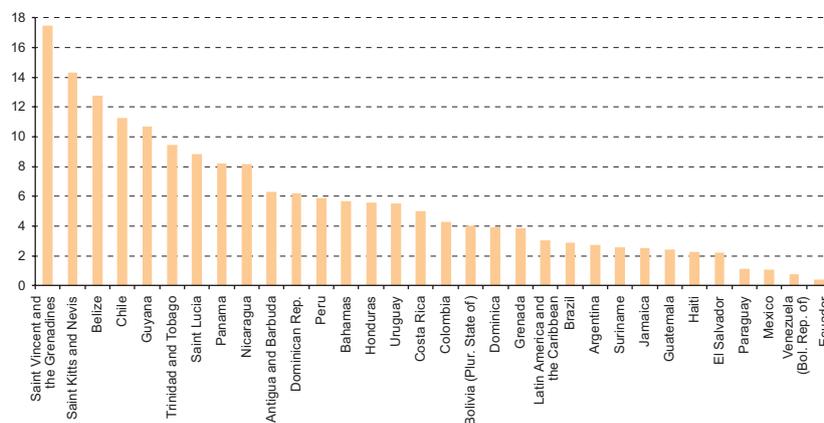
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and estimates as of 29 April 2013.

The FDI to GDP ratio increased only slightly, from 2.9% in 2011 to 3% in 2012. But it did change in those countries that posted the largest increases or declines in FDI. As a rule, inward FDI accounts for a larger share in the smaller economies—as high as 17.4% in Saint Vincent and the Grenadines and 14.3% in Saint Kitts and Nevis in 2012. Chile stands out among the medium-sized and large economies, with an FDI to GDP ratio of 11.3% on the strength of a nearly four-fold increase in inward FDI since 2006.

<sup>1</sup> Portfolio investments are transactions in marketable securities—public or private—such as stock and bonds, as well as money market instruments. Investments that carry a significant degree of influence over investee management (in practice, when the shareholding exceeds 10%) are not regarded as portfolio investments but rather FDI.

<sup>2</sup> “Other investments” are, mainly, non-securitized loans.

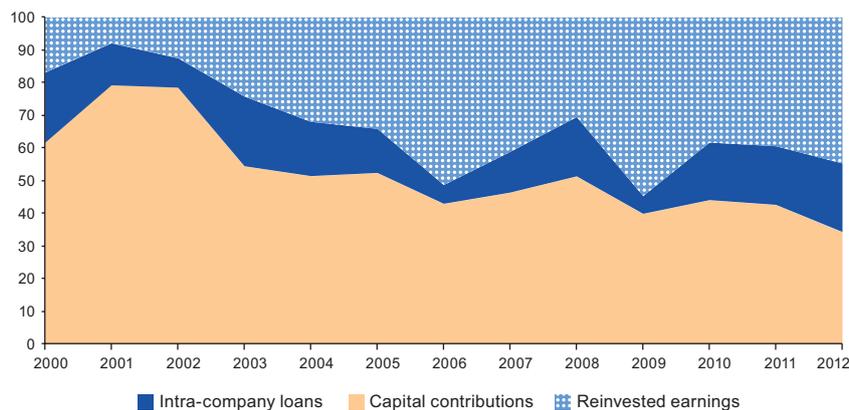
**Figure I.6**  
**Latin America and the Caribbean: foreign direct investment as a proportion of GDP, 2012**  
*(Percentages)*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and estimates as of 29 April 2013.

A look at the three components of FDI (reinvested earnings, intra-company loans and capital contributions) in 2012 confirms the trend that began 10 years ago, with reinvested earnings accounting for a growing proportion (see figure I.7).

**Figure I.7**  
**Latin America and the Caribbean: foreign direct investment by component, 2000-2012<sup>a</sup>**  
*(Percentages)*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and estimates as of 29 April 2013.

<sup>a</sup> The distribution of FDI by component is based on 57% of total FDI in Latin America and the Caribbean. Brazil is not included because it does not record data on reinvested earnings.

Capital contributions are the most variable of the three components, since most are from corporate mergers or acquisitions. Loans between group companies are a flexible way for allocating resources among subsidiaries and have made up 20% of total FDI flows over the past six years. The share of reinvested earnings has been growing since 2002, and they have been the largest of the three components (42% of total FDI flows) for the past five years. This is principally because of the consistent increase in the stock of foreign capital in the economies of the region relative to annual inflows. In addition, the expansionary phase of the business cycle under way in the region, along with high prices for raw material exports, has boosted returns on that capital. FDI income (which includes repatriated profits and reinvested earnings) has soared over the past 10 years and become a significant factor. Chapter II examines in detail the features and implications of this trend.

Details on FDI flows in selected economies are set out below.

## Brazil

The Brazilian economy is still the primary receiver of FDI in the region: US\$ 65.272 billion in 2012, slightly (2%) below the record high posted in 2011. This volume of investment, which is just about double the average for the past five years, is substantial even for an economy as large as Brazil's. It is equivalent to 2.9% of the country's GDP and 16% of its gross fixed capital formation (SOBEET 2013).

In 2012, 81% of FDI was in the form of capital contributions. The remaining 19% was from foreign loans to foreign-owned companies operating in Brazil;<sup>3</sup> these loans jumped 5% over the past year and partially offset the 4% decline in capital contributions. FDI flowing into Brazil is becoming somewhat atomized in that major transactions in excess of US\$ 1 billion accounted for just 16% of total investments, versus 27% in 2011 (SOBEET 2013).

In 2012, 21% of Brazil's inward FDI was in the form of capital contributions from the United States, primarily to the communications sector and for the acquisition of AMIL (Brazil's largest health plan operator) by United States-based United Health Group. The stream of capital from Europe and Asia was smaller than in 2011; flows from financial centres like Luxembourg and the Netherlands rose.<sup>4</sup>

The sectoral composition of inward FDI in 2012 differs from prior-year trends. Services and natural resource-based activities account for a growing share as the portion going to the manufacturing industry shrinks. Service-oriented FDI climbed 9% over the previous year and made up 48% of total investment. This sector's share grew significantly compared with prior years (36% on average between 2007 and 2011), owing to the acquisition of JPLSPE in the health sector (some US\$ 3 billion) and the surge in investment in other services (particularly insurance, commerce and real estate), which are increasingly attractive thanks to improving income distribution in Brazil.

The extractive industries took in 13% of total FDI in 2012. FDI to this sector contracted sharply in 2011 but rebounded in 2012, driven primarily by oil and gas extraction. Two major transactions stand out: British Gas greenfield investments in Sapinhoa (one of the largest fields in the Santos offshore basin) and acquisition of a 30% stake in Petrogal by China's state-owned SINOPEC (US\$ 4.8 billion).

Of the remaining total FDI, the manufacturing industry took in 38%, down from 47% the previous year and even below the 43% average for the preceding five years. The trend in industrial FDI (which dropped 19% over the past year) is the main reason for the slower pace of inward FDI to Brazil in 2012. But the contraction of industrial FDI in 2012 does not necessarily reflect a trend reversal; it could rather be due to fluctuations in large-scale industrial project execution cycles like the new ThyssenKrupp steel plant. The drop in investment flows to the food and beverage industry and metal and non-metal mineral products was not offset by rising investment in the chemical and pharmaceutical sectors, electronic goods manufacturing and paper pulp production.

These trends within manufacturing FDI are not enough to radically change the sectoral profile of industrial investment. The largest acquisitions were in activities that, in both years, accounted for more than 40% of manufacturing FDI: basic metal industries and food production. In the former, Argentina's Techint Group acquired 15% of steelmaker Usinas Siderúrgicas de Minas Gerais (Usiminas) for US\$ 2.8 billion. In the latter, the United States company General Mills Inc. acquired 100% of Yoki Alimentos SA.

## Other economies of South America

FDI income in Argentina climbed 27% to US\$ 12.551 billion, according to preliminary data.<sup>5</sup> While capital contributions decreased by 9%, to US\$ 3.708 billion, reinvested earnings reached US\$ 7.984 billion, more than double the figure for the previous year. A medium-term comparison shows that capital contributions were 7% higher than the average for 2007-2011 and reinvested earnings posted even sharper increases.

<sup>3</sup> Brazil's official statistics on FDI do not include reinvested earnings, so 100% of the country's inward FDI refers to capital contributions and intra-company loans. FDI in Brazil is therefore understated.

<sup>4</sup> A good many firms based in these financial centres are, in turn, subsidiaries whose parent companies are based in other countries. According to the specific literature, financial centres are called first country of origin, and where the parent company is based is called the ultimate country of origin.

<sup>5</sup> Figures for intra-company loans (one of the three components of FDI) were not reported.

The sectoral composition of cumulative FDI in Argentina at year-end 2011 shows that the sector with the largest share of transnational corporations was the oil sector (20%), followed by mining (6%), manufacturing and agriculture combined (44%) and the service sector (30%). Spain was the main country of origin of investments, followed by the United States, the Netherlands, Brazil and Chile (BCRA, 2013). This distribution changed in 2012 with the nationalization of the 51% stake in YPF (Argentina's largest oil company) held by Spain's Repsol.<sup>6</sup>

Acquisitions and investment projects announced for 2012 are in traditional FDI sectors. The largest acquisitions involved changes in ownership of subsidiaries of multinational companies in the financial sector. Industrial and Commercial Bank of China (ICBC) acquired 80% of Standard Bank Argentina (a subsidiary of a South African bank). Australia's QBE Insurance Group acquired the insurance company of Great Britain's HSBC Group. Brazilian ownership stakes in oil and food companies increased. The largest greenfield investments targeted agricultural production. For example, China's Chongqing Grain Group acquired land for soybean production and is seeking to partner with the local group Molinos Cañuelas. Both the agricultural machinery manufacturer John Deere and seed company Monsanto announced greenfield investments, as did companies that already have a local presence in the automobile industry (Daimler AG), food production (Unilever) and the mining sector (Barrick Gold).

In early 2013, the Brazilian mining company Vale announced its decision to shelve the Potasio Río Colorado potash project in Malargüe, in which it had planned to invest nearly US\$ 6 billion. The decision was likely driven by surging local costs and is also in line with the company's global strategy to sell off peripheral assets and focus on its core iron ore business in Brazil.

In the Plurinational State of Bolivia, FDI increased by 23% in 2012, to stand at US\$ 1.060 billion.

First semester data for 2012 show that FDI largely targeted the hydrocarbon sector (63%), trailed well behind by manufacturing (12%). FDI in other traditionally important activities contracted sharply. Such is the case with mining and power generation and distribution, which are areas of interest to foreign companies that have been nationalized.

In 2012, two foreign companies accounted for nearly two thirds of oil and gas production in the Plurinational State of Bolivia: Brazil's Petrobras and Spain's Repsol. In May 2012, YPFB authorized Repsol to begin exploration in new areas and cleared Petrobras to explore for oil and gas in three reserved areas (Astillero, Sunchal and San Telmo) in the department of Tarija. YPFB and the foreign companies therefore invested US\$ 1.593 billion in these operations in 2012; the figure could increase by 40% in 2013. YPFB will make 64% of these greenfield investments; the remaining 36% is to come from private companies: Repsol (US\$ 372 million for projects like a gas treatment plant in the Margarita field), followed by Petrobras (US\$ 179 million), France's Total (US\$ 118 million) and Argentina's Pluspetrol (US\$ 104 million).<sup>7</sup>

In 2012, foreign direct investment in Chile increased by 32.2%, to a new record high of US\$ 30.323 billion. FDI doubled between 2010 and 2012, making Chile the second largest recipient (after Brazil) of FDI in Latin America and the Caribbean for the second year running.

According to Central Bank statistics, the Chilean economy has become key for transnational corporations operating in Latin America. Nearly 26% of its inward FDI is subsequently invested outside the country by Chilean subsidiaries of foreign companies. With some regional operations being consolidated and coordinated from Chile, it is seen as becoming an investment platform or an entry point to other markets in Latin America.<sup>8</sup>

Chile is the world's largest producer of copper, so the mining sector was its top FDI destination, at US\$ 15.096 billion (49% of the total). In recent years, the high price of copper, together with declining ore grade and rising extraction costs have been strong incentives for stepping up investment in the mining sector. Chile's mining project portfolio for 2012-2016 exceeds US\$ 104.30 billion,<sup>9</sup> of which US\$ 58.231 billion is spearheaded by foreign companies.

The financial sector was the second largest recipient of FDI flows in 2012, with 18% of the total. In 2012, foreign banks accounted for 40% of the system's assets, led by Spain's Santander (18.6% of the market) and BBVA (7%),

<sup>6</sup> This transaction has not yet been included in FDI flows for 2012 (as a disinvestment) because no agreement has been reached on compensation.

<sup>7</sup> See *La Razón*, 30 January 2013.

<sup>8</sup> See Comité de Inversiones Extranjeras [online] [http://www.inversionextranjera.cl/images/stories/pdfs/Inversion\\_Extranjera\\_en\\_Chile\\_se\\_duplico\\_entre\\_2010\\_y\\_2012.pdf](http://www.inversionextranjera.cl/images/stories/pdfs/Inversion_Extranjera_en_Chile_se_duplico_entre_2010_y_2012.pdf).

<sup>9</sup> Of the US\$ 104.3 billion, 35% is in execution and 65% is in the feasibility or pre-feasibility study phase (COCHILCO, 2012).

Canada's Scotiabank (4.9%) and Brazil's Itaú (4.2%). In December 2011 Banco Santander sold 7.8% of its subsidiary in Chile for US\$ 980 million. Although some of the proceeds were used to capitalize its operations in Spain, Banco Santander announced a US\$ 380 million investment plan for Chile for 2011-2013. These funds have been allocated, among other things, for opening some 30 branches in major cities in Chile, enhancing customer service (especially for SMEs), and marketing. In January 2013 BBVA sold its 64.3% holding in Provida (the largest pension fund administrator in the Chilean market) for about US\$ 1.3 billion to the United States company MetLife. This transaction came shortly after Citigroup's exit from AFP Habitat in 2010 and the purchase of AFP Capital by Colombia's Grupo Sura in 2011.

In the manufacturing sector, the United States company Air Products and Chemicals, Inc. (the world's largest producer of hydrogen) acquired 67% of Indura for some US\$ 903 million. The transaction will enable Air Products and Chemicals to increase its market share in Latin America, mainly in industrial gases and welding equipment, and reduce its exposure in Europe.

By late 2012, construction had begun on power generation, transmission and distribution projects totalling approximately US\$ 3.40 billion. The most active foreign company has been AES from the United States; its projects include the Campiche and Guacolda V thermopower plants and the Alfalfal II and Las Lajas hydropower plants in the High Maipo. Several renewable and non-conventional energy projects are also under way. Among them are the wind parks Talinay, Valle de los Vientos and Tal Tal, as well as the geothermal power plant Cerro Pabellón, all led by Italy's Enel Green Power.

According to the Central Bank, the main countries of origin of investments in 2012 were the United States (19%), Spain (18%), Canada (12%) and Japan (8%). By regions, 16% came from Latin America itself; investments from the European Union dropped off sharply, mainly because of disinvestments by firms based in the United Kingdom and Ireland.

FDI in Colombia increased again in 2012, rising by 18% compared with 2011 to stand at US\$ 15.823 billion. As in previous years, about half of this figure went to the natural resources sector, particularly the oil industry (US\$ 5.377 billion) and the mining sector (US\$ 2.250 billion). FDI received by these sectors in 2012 was similar to the previous year; inflows to other activities (primarily manufacturing and power) rose. Much of this increase was due to the acquisition of the pharmaceutical company Laboratorio Franco Colombiano (Lafrancol) by Chile's Corporación Farmacéutica Recalcine (CFR) for US\$ 562 million and the purchase of Empresa de Energía de Boyacá (EBSA) by the Canadian investment fund Brookfield for US\$ 415 million. In 2012 Chile became the largest foreign investor in Colombia (excluding the oil sector and reinvested earnings) thanks to the two largest acquisitions made there as European companies sold off assets. France's Carrefour sold its supermarket subsidiary to Cencosud for US\$ 2.61 billion. Spain's Santander sold its Colombian banking unit to CorpBanca for US\$ 1.225 billion.

Investment inflows to Ecuador totalled US\$ 587 million; 39% was in capital contributions, 51% in reinvested earnings and 10% in intra-company loans. Data for 2012 show a drop over the previous year that is in line with year-to-year fluctuations in investment amounts, with no clear trend.

In March 2013, the Government of Ecuador announced the launch of the Ministry of Foreign Trade and Economic Integration investment promotion and attraction project. The goal is to significantly increase FDI inflows to the country in a set of priority sectors: tourism, metalworking, energy, and services, among other industries. This programme is part of a broader policy package aimed at changing Ecuador's production matrix. The four-year undertaking has allocated some US\$ 18.5 million for increasing direct investment by between 15% and 20% and enhancing the production chain at the province level by identifying opportunities for production investment (Ministry of Foreign Affairs, Trade and Integration, 2013).

In 2012, the main investment source countries were Mexico, China and Canada; the main receiving sector was natural resource exploitation. Noteworthy among the investment projects announced in 2012 were those related to renewable energy production (US\$ 322 million from Israel's S.D.E. Energy, Ltd. for producing power from sea waves), and US\$ 100 million from Spain's Isofoton, world leader in solar energy.

Paraguay received US\$ 273 million in FDI in 2012. Although this represented considerable (27%) growth over the previous year, the flow of FDI still represents only 1.3% of Paraguay's GDP. In recent years, services have taken in a large share of FDI, particularly mobile telephony, the financial sector and call centres. Among the investment announcements, Canada's Rio Tinto Alcan confirmed its interest in investing up to US\$4 billion in a power-intensive aluminum smelter in Paraguay that would be directly supplied by the binational Itaipu.

## Box I.1

## Sale of highways in Chile: strategy or urgency?

The Government of Chile has undertaken an ambitious public works and infrastructure concession programme, in which the private sector has been heavily involved through build-operate-transfer (BOT) agreements. Between 1993 and 2012, over 70 projects were tendered out and investments were made for over US\$ 14.175 billion (Lagos Charme, 2012). In terms of road infrastructure, over 2,500 kms of urban and intercity highways have been built or upgraded.

Foreign construction firms have been key actors in this process. Spanish companies, in particular, have provided almost 60% of foreign direct investment (FDI) in construction (CIE, 2010). As of 2008, some of these Spanish companies —Ferrovial, Acciona, ACS and OHL— began to rotate their assets, a very common strategy in this industry, selling off older assets in order to finance new projects, both in Chile and elsewhere. At the same time, the deepening economic crisis in Spain forced a number of these companies to sell assets to pay down debt. Together, these two factors have led to multiple changes of ownership and the entry of new actors into the sector (see table below).

One of the new entrants was Abertis, also of Spain. Since 2008 Abertis has acquired the stock of ACS, Sacyr Vallehermoso and OHL in six major Chilean highway concessions, with a combined investment of US\$ 1.3 billion.

The Colombian firm Interconexión Eléctrica SA ESP (ISA) had diversified geographically and by industry to enter the telecommunications and highway sectors in several Latin American

countries. Between 2010 and 2011, ISA paid some US\$ 510 million for the entire share stock of the Spanish firm Cintra, a subsidiary of Ferrovial, in eight segments under concession of Ruta 5, the main highway joining the north and south of Chile.

Between 2006 and 2012, Atlantia of Italy (which is linked to the Benetton family) acquired the Costanera Norte urban highway from Impregilo S.p.A., also of Italy, and another four from the Spanish firms Sacyr Vallehermoso and Acciona. In this process Atlantia paid over US\$ 1.9 billion and became the largest urban highway operator in Chile.

Being mature, low-risk schemes that generate a long-term, stable cash flow, Chile's tendered highways have attracted not only infrastructure management firms but also investment funds. Canadian investors, which already had a track record in the Chilean infrastructure market, became very active in this area and have focused on the new urban highways in the capital, Santiago. In 2010, the first such move was the purchase of 50% of Autopista Central by the pension fund Alberta Investment Management Corp. (AIMCo) from the Swedish construction firm Skanska, for US\$ 850 million. Thereafter, Brookfield Asset Management bought shares in the Vespucio Norte highway and the San Cristóbal Tunnel from ACS of Spain for about US\$ 580 million (Cinco Días, 27 September 2011; and 5 October 2012). Lastly, the Canada Pension Plan Investment Board (CPPIB) bought 49% of Grupo Costanera from Atlantia for US\$ 1.145 billion (Diario de Fusiones y Adquisiciones, 24 April 2012).

## Chile: new actors in road infrastructure, 2013

Current owner	Concession	Share (percentages)	Kms under concession	End of concession	Former owner
Abertis (Spain)	Autopista del Elqui	100.0	229	2022	Sacyr Vallehermoso
	Rutas del Pacífico <sup>a</sup>	78.9	141	2024	Sacyr Vallehermoso (50%)/ACS (28.9%)
	Autopista Central <sup>a</sup>	28.9	61	2031	ACS
	Autopista del Sol	41.4	133	2019	OHL
	Autopista Los Andes	100.0	92	2036	OHL
	Autopista Los Libertadores	41.4	116	2026	OHL
			770		
ISA (Colombia)	Talca-Chillán	67.6	193	2015	Cintra-Ferrovial
	Temuco-Río Bueno	75.0	171	2023	Cintra-Ferrovial
	Collipulli-Temuco	100.0	144	2024	Cintra-Ferrovial
	Santiago-Talca	100.0	265	2024	Cintra-Ferrovial
	Chillán- Collipulli	100.0	160	2021	Cintra-Ferrovial
			933		
Atlantia (Italy)	Río Bueno-Puerto Montt	100.0	135		Sacyr Vallehermoso
Atlantia (50,1%) (Italy) - Canada Pension Plan Investment Board (CPPIB) (49.9%) (Canada)	Costanera Norte	100.0	43	2033	Impregilo S.p.A
	Nororiente	100.0	22	2044	Atlantia - Sacyr Vallehermoso
	Vespucio Sur	100.0	24	2032	Atlantia - Acciona- Sacyr Vallehermoso
	Acceso vial Aeropuerto Arturo Merino Benítez	100.0	10	2021	Atlantia - Sacyr Vallehermoso
	Litoral Central	100.0	90	2031	Atlantia - Acciona- Sacyr Vallehermoso
	Autopista de Los Lagos	100.0	136	2023	Atlantia - Acciona- Sacyr Vallehermoso
			325		
Brookfield (Canada)	Autopista Vespucio Norte	100.0	29	2032	ACS- Hochtief
	Túnel San Cristóbal	50.0	4	2035	ACS
			33		
Alberta Investment Management Corp. (Canada)	Autopista Central	50.0	61	2031	Skanska AB

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC).

<sup>a</sup> These assets are operated in partnership with Banco Santander.

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Andrés Lagos Charme, "Cartera de inversiones 2012-2014 y proyecciones a futuro"; Ministry of Public Works, Public Works Concessions Department, Santiago, November 2012 [online] [http://www.concesiones.cl/publicacionesyestudios/seminariosytalleres/Documents/Seminario\\_Cartera\\_de\\_Proyectos\\_2012\\_2014/Prt\\_Cartera\\_de\\_Proyectos\\_2012\\_2014.pdf](http://www.concesiones.cl/publicacionesyestudios/seminariosytalleres/Documents/Seminario_Cartera_de_Proyectos_2012_2014/Prt_Cartera_de_Proyectos_2012_2014.pdf); Foreign Investment Committee (CIE), "Chile: Opportunities in Infrastructure", Santiago, October 2010 [online] <http://www.inversionextranjera.cl/images/stories/pdfs/publicaciones/CIEINFRA.pdf>; and Cinco Días [online] <http://cincodias.com/>.

FDI flows to Peru surged in 2012, growing by 49% over the previous year, confirming the sustained growth path seen over the past decade and setting a new record high. In 2012, inward FDI to Peru totalled US\$ 12.240 billion (equivalent to 5.9% of GDP); this made the country the fourth largest recipient in Latin America, after Brazil, Chile and Colombia. Replicating the pattern seen in recent years, reinvested earnings (US\$ 8.263 billion) was the predominant component of FDI in 2012, followed by capital contributions (US\$ 4.637 billion). The flow of parent-company loans was slightly negative. The high return on FDI in companies based in Peru (chiefly in mining) explains why a substantial part of production capacity expansion is funded with reinvested earnings.

There are no official data on the distribution of FDI by destination sector, but reports point to the mining sector as the largest recipient of FDI, followed by the expanding power and communications sector and the financial sector. According to the Ministry of Energy and Mines, investment in the sector (largely related to foreign companies) came to US\$ 8.55 billion in 2012. The four companies investing the most account for more than half of that amount. They are Minera Chinalco Perú S.A.,<sup>10</sup> Xstrata,<sup>11</sup> Minera Yanacocha S.R.L.,<sup>12</sup> and Compañía Minera Antamina.<sup>13</sup> According to the Government of Peru, the 47 projects in the mining investment portfolio total an estimated US\$ 54.680 billion, made up of mining unit expansion projects (US\$ 7.674 billion), projects with an environmental impact study approved by the Ministry of Energy and Mines (US\$ 19.588 billion), and projects in the exploration phase (US\$ 26.740 billion). The main source countries for these greenfield investments are China (22%), followed by the United States (18%) and Canada (16%). Copper and gold are the chief investment draws, at 64% and 13% of the total, respectively.

In 2012, Uruguay posted US\$ 2.710 billion in inward FDI to resident companies. This is a key factor of the country's economy, amounting to 4.1% of GDP. FDI flows in 2012 were 8% higher than those in 2011 and well above the average for 2007-2011. This uneven growth path can be attributed to the dynamics of large-scale investment projects. Sixty-one percent of investment in 2012 was in new capital contributions; 15% was from intra-company loans, and 23% was from reinvested earnings. Three major projects stand out among the investment announcements made in 2012. The IMPSA group launched the US\$ 120 million Libertador I wind power generation project in the departments of Lavalaja and Maldonado, with an installed capacity of 50 megawatts. This investment will help diversify Uruguay's energy matrix and reduce its dependence on hydroelectric power. The Spanish company Cementos Molins announced the 2014 start-up of a cement plant in Uruguay to supply southern Brazil; the US\$ 160 million investment is expected to generate 200 direct jobs and 500 indirect ones. And Donald Trump announced the launch of a US\$ 100 million real estate development project in Punta del Este.

Discussions continue between environmentalist organizations and Uruguayan government officials about implementation of the Aratirí project. At an estimated investment cost of US\$ 3 billion, the project consists of opening a large iron mine and carrying out infrastructure projects that include a deepwater port. The investment is to be made by the Zamin Ferrous mining group. Environmental impact studies for the project are under way; they are particularly important because of its proximity to tourist areas.

The Bolivarian Republic of Venezuela received US\$ 3.22 billion in FDI in 2012, 15% less than in 2011. The oil sector drew in 56%, with two diverging trends according to the nature of the business. While the public sector (state-owned enterprises) invested US\$ 2.25 billion, the private sector posted net divestments totalling US\$ 442 million. The rest of inward FDI targeted the financial sector.

### *Mexico and Central America*

Mexico saw a sharp drop in investment flows over the previous year: provisional data for 2012 shown FDI flows of US\$ 12.659 billion in 2012. Over the previous 10 years, Mexico's inward FDI had remained relatively stable (in nominal terms) at an average US\$ 23 billion per year. The contraction impacted most sectors, but almost half of the decline can be attributed to a specific operation: the US\$ 4.10 billion IPO of a 25% stake in the subsidiary of Spain's Banco Santander.

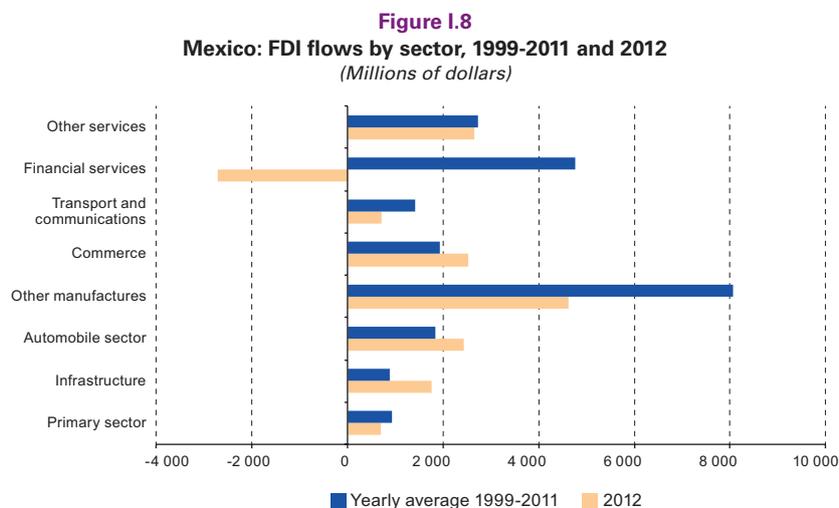
<sup>10</sup> Minera Chinalco Perú S.A. is a subsidiary of Aluminum Corporation of China (CHALCO).

<sup>11</sup> British company.

<sup>12</sup> Yanacocha was incorporated in 1992. Its shareholders are Newmont Mining Corporation (51.35%), based in Denver, United States; Cía. de Minas Buenaventura (43.65%), a Peruvian company; and International Finance Corporation (5%).

<sup>13</sup> Compañía Minera Antamina S.A. is a company incorporated under Peruvian law. It is the product of a joint venture between leading companies in the world mining industry. Antamina's shareholders are BHP Billiton (33.75%); Xstrata (33.75%); Teck (22.5%); and Mitsubishi Corporation (10%).

In 2012 most sectors saw lower FDI inflows, although there were some notable exceptions. Manufacturing as a whole received 28% less FDI than in 2011, but the automotive sector recorded a 75% jump, to US\$ 2.430 billion. In the service sector, inward FDI to civil engineering projects increased over the past two years and totalled US\$ 1.450 billion in 2012. FDI to the commerce sector was also higher than the previous year and outstripped the average for the past decade owing to investments in supermarkets (see figure I.8).



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

In 2012 the manufacturing sector continued to be the strongest investment draw (56% of the total), driven by major acquisitions such as the US\$ 2.34 billion purchase of paint company Comex by Sherwin-Williams of the United States. Noteworthy among the greenfield projects was Brazilian steelmaker Gerdau's US\$ 600 million investment to build a new structural steel plant. Caterpillar, a United States manufacturer of construction and mining equipment, also began construction of a new plant at an investment cost of US\$ 500 million. In the service sector, Swiss insurer ACE Group bought ABA Seguros, Mexico's fourth largest auto insurance company, for US\$ 865 million. In the power generation resources sector, Japan's Mitsubishi bought wind energy megaproject Energía Eólica Mareña (from FEMSA and Macquarie) for US\$ 1 billion.

The Belgian group AB InBev has been unable to complete its US\$ 20.1 billion acquisition of the remaining 50% of the shares of Grupo Modelo because the company has yet to address United States Department of Justice reservations as to the impact on competition in the United States beer market.

In 2012 most FDI flows continued to originate in the United States (58.5% of the total), followed by Japan (13%) and Canada (8%). Spain, the second largest investor in Mexico in 1999-2012, posted a US\$ 1.52 billion negative flow in 2012 owing to the Santander transaction mentioned above.

FDI flows in Central America have regained the momentum they had in the years before the 2008 crisis, with some countries in the subregion (Costa Rica, Guatemala, Honduras and Panama) reaching record levels of FDI in 2012. FDI to Central America as a whole grew by 7% over 2011.

The strongest growth was in El Salvador (34% increase), followed by Guatemala (18%), Panama (10%), Costa Rica (5%) and Honduras (4%). FDI income in Nicaragua fell by 16%.

The special ties that Mexico and the countries of Central American have with the United States mean that business strategies involving investments in these countries seek to establish export platforms to leverage labour cost and location advantages. However, investments are increasingly aimed at gaining access to specific assets. In recent years, the high price of metals and petroleum products has attracted the interest of foreign investors in mining and energy production in this subregion (ECLAC, 2012).

**Box 1.2****Mexico: economic reforms and prospects for foreign direct investment**

Mexico's hydrocarbon, mining, power and telecommunications sectors are largely dominated by domestic firms, while in most of the large countries of the region transnational companies have a strong presence. Since 1999 these four sectors have accounted for only 9% of the FDI flowing into Mexico, chiefly to mining and telecommunications. By contrast, they account for 26% of FDI stock in Brazil, 35% in Argentina and 45% in Chile.

By law, hydrocarbons and power transmission and distribution are reserved for the State-owned companies PEMEX and CFE, respectively. Telecommunications and mining are open to competition and foreign investment; however, in practice they are dominated by large Mexican companies. Reforms announced by the new administration and set forth in the Pact for Mexico could create opportunities for FDI in these sectors over the medium term. Although these reforms seek to spur economic competition in all sectors of the economy, particularly in strategic ones such as telecommunications, transport, financial services and energy, the pact does suggest some actions targeting the hydrocarbons and telecommunications sectors.

The pact asserts State ownership of hydrocarbon resources and rules out the privatization of PEMEX assets. However, the administration does commit to creating competition in the refining, petrochemical and hydrocarbon transport segments. And it stresses the need to increase PEMEX's production capacity,

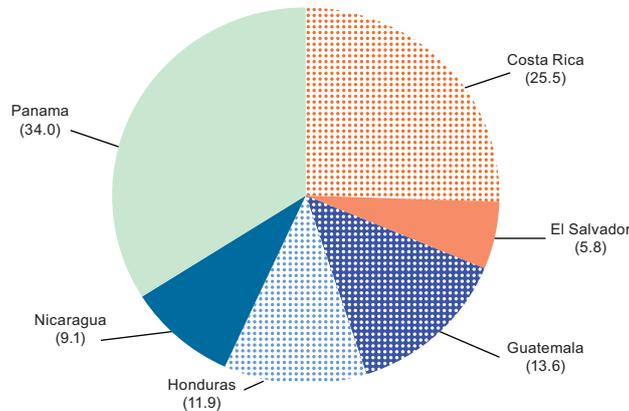
**Source:** Economic Commission for Latin America and the Caribbean (ECLAC).

which could spur the signing of service agreements with foreign oil companies, a practice that has been approved since 2008 but has been little used. Lastly, it aims to reform corporate governance at PEMEX to make it a "world-class" company that is able to compete. In the telecommunications sector, the pact will boost competitiveness, strengthening the regulatory body and preventing companies from skirting regulations by filing for writs of protection (*amparo*), among other measures. The aim is to enable the entry and development of other firms, changing the current supply structure. The reforms announced in the pact still have to pass the legislature, although this process is at an advanced stage in the case of telecommunications.

These reforms could create opportunities for domestic and foreign companies in some segments of the hydrocarbon and telecommunications sectors' value chains. They could also encourage the main telecommunications company, América Móvil, to invest abroad, if it were forced to slow its investing in Mexico. With regard to PEMEX, the Pact for Mexico expresses the wish that "the firm remain in State ownership, but that it should have the ability to compete in the industry and become a world-class company."

Although it is still unclear whether current restrictions on investing abroad will be eased, past experience shows that oil companies seeking to become more competitive have, sooner or later, diversified their operations outside their country of origin.

**Figure 1.9**  
**Central America: distribution of foreign direct investment flows by country, 2012**  
(Percentages)



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

Panama is still the principal receiver of FDI in this subregion: US\$ 3.020 billion (34% of the total) in 2012. Although there are no official data on FDI-receiving sectors, data on mergers, acquisitions and investment projects announced in 2012 indicate that a large share of FDI went to services, especially logistics, energy and the construction industry. Noteworthy among the announcements made in 2012 are the investment by Brazil's GMR Energia in the energy sector, and the investment by Denmark's AP Moller-Maersk in maritime transport logistics. The Swiss company Glencore International increased its equity interest in the mining company Samref Overseas; the US\$ 480 million investment was the largest that Panama received in 2012, underscoring the growing importance of

the primary sector in the subregion. The buoyant food industry (particularly the dairy sector) was on the receiving end of substantial investments: Colombia's Grupo Nutresa acquired the Central American ice cream company Panamanian American Franchising Corp (AFC) for US\$ 110 million.

Costa Rica maintained its position as the second leading destination for FDI in Central America (26% of the total). According to official estimates, FDI totalled US\$ 2.26 billion, a 5% increase over 2011. Costa Rica is consistently a strong draw for greenfield projects, primarily in the services sector, in keeping with the trend that began in 2011 with the liberalization of activities such as telecommunications. This drove the share of FDI flowing to the manufacturing sector down from an average 46% during the past decade to 25% in 2012. In the manufacturing sector, Colombia's Pintuco acquired the paint maker and distributor Grupo Kativo. Sealed Air Corporation, ArthroCare, ATEK Companies, Covidien and Nitinol Devices & Components (NDC) made investments related to the medical device industry.

Forty high-technology greenfield projects in advanced manufacturing, life sciences and certain services accounted for 27% of inward FDI in 2012. Infosys, based in India, will establish a service centre to serve the United States market and support its growing operations in Latin America. EPC Ingeniería, the first Korean-owned service company in Costa Rica, located its new engineering and design centre there. It plans to invest US\$ 3 million during 2012-2015. The German power project developer Juwi announced a US\$ 155 million investment. Other announcements included investments in information technology (software and technological services) and business services (Amazon, Honeywell, Thomson Reuters and Telefónica, among others).

According to preliminary figures, FDI flowing into El Salvador totalled US\$ 516 million in 2012. This is a 34% increase over 2011 and accounts for 6% of the investments made in Central America. The main receiving sectors were financial services (44%) and manufacturing (43%). AES, a power generation and distribution company based in the United States, invested US\$ 26.1 million in infrastructure in 2012. Ubiquity Global Services, a business process outsourcing company headquartered in the United States, invested US\$ 2 million in opening a call centre. Taiwan-based Speedtech Energy Co. (which designs and manufactures solar and LED lighting products) and the Government of El Salvador signed a letter of intent for a substantial investment to begin operations in the country. In 2012, Speedtech made an initial investment of US\$ 2 million. Competition policy issues kept some of the investments announced (like the purchase of Digicel by América Móvil) from moving ahead. The government has conducted investment roadshows in Brazil, Viet Nam and countries in Central America and elsewhere.

Guatemala received US\$ 1.207 billion in FDI —18% more than in 2011 and a record high. Despite being the largest economy in Central America, it ranked third among the receivers of FDI flows, at 14% of the total for the subregion. Data by sector show that the main recipient sectors were natural resources (26%), followed by banking and commerce (19% each). The largest project announced in 2012 was the nearly US\$ 500 million that the Canadian mining company Tahoe Resources plans to invest for working a silver deposit. South Korea's Sollensys, which makes touch screens and cellular phones, announced a US\$ 20 million investment to build a plant. Colombian-owned Empresa de Energía de Bogotá will invest more than US\$ 300 million in expanding the power transmission system. In December 2011, Telefónica Guatemala announced a US\$ 20 million investment in remodeling a number of its stores and opening two new locations as part of its domestic expansion strategy. In 2012, Mexico's Grupo Herdez and Grupo Financiero Ficohsa of Honduras began operations in Guatemala.

During 2012, Honduras received US\$ 1.06 billion in FDI—a 12-year high that was 4.3% more than in 2011. Telecommunications continued to be the strongest draw. It took in US\$ 295.4 million in 2012 (27.9% of total FDI for the year), and it is the economic activity that has received the most foreign capital over the past 10 years. However, FDI targeting telecommunications dropped 21.5% in 2012 compared with the previous year, as investment in this sector slowed. Most of the resources received were for expanding coverage by the main operators: Tigo and Claro-Digicel. The manufacturing industry (24.8%) and the offshoring outsourcing industry (15.5%) also received significant FDI flows.

The main source countries for these investments were the United States (19.6%), Mexico (18.1%) and Panama (13%). Investments from Europe contracted the most (by 4.6%). In 2012 Honduras did not receive any inward investments from its usual source countries, such as Guatemala and El Salvador. But the Bahamas-based Columbus Business Solutions acquired Telefónica Corporativa (TELECORP) and, in the manufacturing sector, AEC Narrow Fabrics acquired Telas Elásticas S.A.R.L.

Nicaragua received US\$ 810 million in FDI, 16% less than in 2011. The strongest draws are still the energy sector (investment announcements included Globeleq Generation Limited's purchase of 100% of the shares of the Eolo de Nicaragua S.A. project, and Puma Energy's US\$1.2 million purchase of Esso), the industrial sector (construction of the El Supremo Sueño de Bolívar refinery), communications (Telefónica's approximately US\$ 100 million investment in infrastructure) and mining (Canada's B2Gold Corp, with its investments in La Libertad and El Limón). The largest investments were from the United States (36.8%), targeting metal ore extraction and agriculture and livestock projects. Panama accounted for 26.5% of total FDI in commercial banking; Mexico accounted for 18.8% of FDI in telecommunications on the strength of América Móvil's investments in technology.

### *The Caribbean*

Flows of FDI into the Caribbean increased for the third year running, but remained below the high of 2008 for the subregion.

As in 2011, most of the rise in FDI took place in the countries with an abundance of natural resources. Mining is an increasingly important activity in the Dominican Republic, Guyana and Suriname. For now, oil and gas are being exploited to an important extent only in Trinidad and Tobago, but there are major exploration activities in other countries, particularly Guyana, suggesting that this sector could become more relevant for the Caribbean economies in the future. On a smaller scale, inflows into agriculture and forestry have risen in the countries that are land-abundant, Guyana and Belize.

The Dominican Republic is the largest FDI recipient in the Caribbean. FDI flows into the Dominican Republic grew 59% on the back of the acquisition by Anheuser-Busch InBev of Cervecería Nacional Dominicana, the country's largest brewer, for US\$ 1.237 billion. Even without this acquisition, however, FDI in the Dominican Republic would have been up on 2011, driven by increased investments in electricity, manufacturing and mining. This last activity continues to attract increasing amounts of FDI in the country (US\$ 1.168 billion in 2012), owing mainly to the activities of Barrick Gold Corp., which operates the Pueblo Viejo gold mine. The electricity sector received US\$ 305 million, mostly for wind and solar generation projects. Investment was also up in manufacturing in export processing zones, tourism and real estate.

Belize received US\$ 193 million in 2012, more than double the 2011 figure and 14% up on the previous high in 2008. All sectors gained from this surge, but natural resources received more than half of total inflows. Two separate investments in sugar cane (including a cogeneration power plant) were announced for a total of around US\$ 100 million.

FDI flows into Guyana amounted to US\$ 294 million in 2012, a 19% rise from 2011 and a new record. Inflows were concentrated in the mining industry (bauxite and gold), as well as in telecoms. Gold mining is currently conducted through small local operations, but companies from Canada are in the exploration phase, with a view to investing in large scale operations. There are also prospects for oil exploration which, if confirmed, could boost FDI levels in the coming years.

Suriname reports FDI data only for the bauxite mining sector, which received US\$ 70 million in 2012. In addition, however, apart from FDI in different services sectors (which could easily match that entering Guyana), significant investment has gone to gold mining, including the expansion of the Gross Rosebel gold mine (95% owned by IAMGOLD of Canada) and the development of the Merian gold mine, the latter in a joint venture between two mining companies based in the United States. Bank of Baroda of India announced a US\$ 33.5 million investment in Suriname in January 2012, as well.

FDI flows into Trinidad and Tobago stood at US\$ 1.831 billion in 2011 and reached US\$ 2.527 billion in 2012,<sup>14</sup> with the oil and gas sector accounting for 91%. The country has seen oil and gas exports decline in the past few years owing to lack of new investments, but contract awards for exploitation of oil fields, which are assigned by the government in a bidding process, have been picking up in 2012 and are expected to boost FDI levels in the coming years. In the services sector, New India Assurance made an investment of US\$ 44.4 million in 2012. Reinvested earnings represent 80% of FDI in Trinidad and Tobago.

<sup>14</sup> Because of a methodological change, inflows in 2011 and 2012 are not directly comparable with previous periods.

Those economies of the Caribbean which have limited natural resources received less FDI in 2012 than in the previous year, and less than half of the inflows received in 2006, 2007 and 2008. Although tourism arrivals picked up again in 2012 after several years of decline following the financial crisis of 2008 (ECLAC, 2012), this has not been enough to entice investors into new projects. Recent years have brought increasing investments in business processing outsourcing (BPO) activities, which the governments have been pursuing aggressively with generous tax concessions. Investors have been attracted by low wage levels, relatively skilled, English-speaking populations, location advantages relative to the United States and much improved broadband connectivity following investments by newly arrived telecoms operators in the past few years. The levels of investment in this industry are necessarily low, given its very low capital intensity, but the resultant employment creation is important for some of these economies, with Jamaica and Guyana having an estimated 3,000 jobs each in BPO centres.

In 2012, US\$ 381 million of FDI flowed into Jamaica, 75% more than the previous year but still far lower than the annual average for the previous decade. Both mining and tourism, which once accounted for much of FDI, have been receiving a fraction of the sums they used to. Mining has been affected by lower aluminum prices worldwide, which reduced demand for bauxite, while the tourist sector is still absorbing the new capacity created by some large investments in 2003-2009. In the past two years, telecommunications have been the largest recipient, as new entrants Digicel (from Ireland) and Columbus (from Canada) have captured the market from the incumbent Cable and Wireless (from the United Kingdom).

The Bahamas received US\$ 595 million in FDI in 2012, less than half the level of the previous year. A similar trend may be expected for Barbados, which has yet to report data for 2012. Both these economies are highly dependent on tourism, which has been badly affected by the economic crisis since 2009. Nevertheless, there are investment projects in both countries worth mentioning. While in the Bahamas the Baha Mar project has reached the implementation phase (see box I.2 in *Foreign Investment in Latin America and the Caribbean, 2011*), in Barbados a Four Seasons resort project that had to be abandoned after the financial crisis was reinitiated with assistance from the Government of Barbados and the Inter-American Development Bank (IDB).

FDI flows into the economies that form the Organization of Eastern Caribbean States (OECS) totalled US\$ 465 million in 2012, a 5% increase with respect to 2011 although again far below previous record years. Official estimates suggest that most FDI entering these economies goes to tourism and related activities, such as real estate and construction. Some individual projects have been identified in this sector, such as a Park Hyatt Hotel in Saint Kitts and Nevis, with an estimated investment of US\$ 64 million financed mostly through individual investments in exchange for Saint Kitts and Nevis citizenship. A similar level of investment is expected for the construction of United Kingdom-owned Hotel Chocolat in Saint Lucia. In the electricity sector, Light & Power Holdings (LPH) of Barbados has signed a letter of intent to purchase a controlling share of Dominica Electricity Services from United States-based WRB Enterprises, and this deal should be completed during 2013.<sup>15</sup>

By individual country, FDI flows declined in Saint Lucia (to US\$ 113 million), Saint Kitts and Nevis (US\$ 101 million) and Grenada (US\$ 33 million), but rose in Antigua and Barbuda (US\$ 74 million), Dominica (US\$ 20 million) and Saint Vincent and the Grenadines (US\$ 126 million). Anguilla and Montserrat, which are members of OECS and associate members of ECLAC, are discussed in box I.3.

Haiti received US\$ 179 million in FDI, practically the same amount as in 2011. FDI flows into Haiti remain relatively limited owing to the economy's small size, modest growth and poor competitiveness. Nevertheless, low wages and preferential access to the United States market have attracted some investments in export-processing manufacturing, most recently in the Caracol industrial park. In services, Best Western of the United States and Occidental of Spain are opening hotels in the country.

<sup>15</sup> See Caribbean News Now [online] [http://www.caribbeannewsnow.com/dominica.php?news\\_id=13584&start=0&category\\_id=31](http://www.caribbeannewsnow.com/dominica.php?news_id=13584&start=0&category_id=31).

## Box I.3

## FDI in ECLAC associate member States in the Caribbean

In addition to the member States which are regularly covered in this report, 12 other economies in the Caribbean, which are not fully independent States, are associate members of ECLAC: Anguilla, Aruba, Bermuda, the British Virgin Islands, Cayman Islands, Curaçao, Guadeloupe, Martinique, Montserrat, Puerto Rico, Turks and Caicos Islands and the United States Virgin Islands. Except for Guadeloupe and Martinique, which use the euro, all other economies either use the United States dollar or peg their currencies to it.

Besides their currency status, these economies vary widely in terms of size and economic activity. Most are service-based and small, even for the Caribbean, but some are relatively

large and therefore can be significant for corporate investment strategies in the region. Guadeloupe and Martinique have larger economies (with GDP of around US\$ 10 billion each) than any other English-speaking Caribbean country except Trinidad and Tobago and Jamaica but, as French overseas departments, they do not keep separate FDI records. FDI data for the British Virgin Islands and the Cayman Islands are distorted by their status as offshore financial centres, while the United States Virgin Islands and the Turks and Caicos Islands do not report these data. Table 1 represents the most up-to-date information available concerning flows of FDI into the other economies.

## Selected ECLAC associate member States in the Caribbean: population, GDP and FDI inflows, 2003-2012

Country	Population (thousands)	GDP in 2011 (millions of dollars)	FDI inflows (millions of dollars)									
			2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Anguilla	15	288	29	87	117	142	119	99	44	11	38	18
Aruba <sup>a</sup>	107	2 677	161	-106	-209	222	-477	16	-31	159	470	-228
Bermuda	65	5 973	...	...	...	368	1 016	267	208	705	-337	222
Curaçao <sup>a</sup>	142	3 017	20	39	75	-39	419	476	209	33	-49	20
Montserrat	6	62	2	2	5	4	7	13	3	4	3	3
Puerto Rico <sup>b</sup>	3 749	101 496	1 869	2 105	2 656	3 345	4 230	13 313	9 701	5 707	1 446	2 356

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of from UNStats, World Bank, UNCTAD and national sources.

<sup>a</sup> Prior to 2010, data for Curaçao refer to the Netherlands Antilles, of which Curaçao was the largest island.

<sup>b</sup> Data for Puerto Rico refer to "long-term investments" rather than FDI.

Puerto Rico is by far the largest economy and the foremost recipient of investments in the Caribbean. Puerto Rico is attractive to international investors, particularly since it can act as a bridge between the United States market and the markets of Latin America and the Caribbean. In 2012 the island received US\$ 2.356 billion in FDI, 63% up on the 2011 figure but far short of the average inflows for 2006-2010. LGI Broadband Operations of the United States purchased San Juan Cable LLC for US\$ 585 million and the Caribbean Property Group, also of the United States, invested US\$ 347 million in assets held by Banco Popular of Puerto Rico. In addition, América Móvil announced a significant investment (estimated at US\$ 240 million) through its Claro subsidiary and several companies announced expansions of their pharmaceutical facilities on the island (totalling an estimated US\$ 390 million).

Bermuda also benefits from its status as an offshore financial centre and received several large investments during 2012, including the acquisitions of an oil and gas exploration company for US\$ 196 million and of two different insurance companies, totalling US\$ 492 million. Two very large deals pending in the insurance and hospitality industries, respectively, may

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

significantly boost the 2013 FDI figures, with their combined value of US\$ 4.7 billion.

The economies of Dutch-speaking Aruba and Curaçao are both relatively dependent on tourism and thus rely on the international tides of tourism flows. Accordingly, Curaçao's FDI figures for the first three quarters in 2012 were similar (-3%) to the prior-year period. However, the sale of LMA International NV, which was completed in the fourth quarter, is expected to lift the figure for the year overall. In Aruba, the flow of investment was affected in particular by the closure of the Valero refinery. Although the former refinery may be refurbished for different uses, it nevertheless represents a significant divestment.

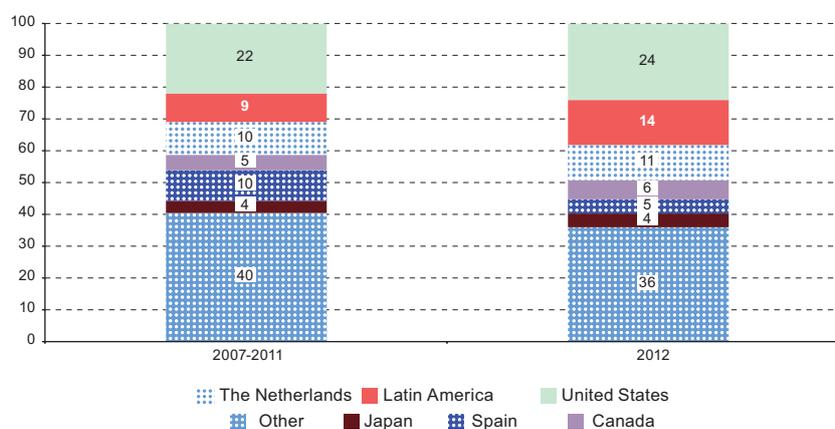
Lastly, the two OECS members represent only a very small share of FDI in the subregion. In Anguilla, FDI inflows fell to US\$ 18.3 million, less than for any year since 2003, bar 2010, despite an uptick in tourism-related FDI. While 2012 was thus not a good year, in 2013, the government signed a memorandum of understanding with AJ Capital of the United States for a US\$ 20 million hotel investment. Montserrat continues to receive little in terms of FDI, as volcanic activity persists on the island. Nevertheless, inflows rose 36% year-on-year, to US\$ 3.4 million.

## D. Patterns of origin and destination of foreign direct investment

The United States and the countries of the European Union are still the largest source of investment in Latin America and the Caribbean. However, 2012 saw a sharp rise in the share of FDI flows from the countries of the region, bringing them up to 14% of the total.

In 2012, transnational corporations based in the United States were the source of 24% of inward FDI in the region, a higher share than in the past five years. Transnational companies based in the Netherlands were the second largest source of FDI (11% of the total), although it is estimated that most of these flows were originally from companies headquartered in other countries.<sup>16</sup> Investments from Spain (the third-ranked source country in 2011) dropped sharply, to 5% of the total (see figure I.10). Several disinvestments contributed to this decline, particularly the public offering of 25% of Banco Santander's subsidiary in Mexico, for US\$ 4.1 billion.

**Figure I.10**  
Latin America and the Caribbean: origin of foreign direct investment, 2007-2011 and 2012<sup>a</sup>  
(Percentages)



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and estimates at 29 April 2013.

<sup>a</sup> FDI in this figure accounts for 66% of total FDI in Latin America and the Caribbean. "Others" refers to data on other countries and to flows without an identifiable source.

A high percentage of inward FDI in the region cannot be identified as coming from a specific source economy. This is because transnational corporations increasingly channel their investments abroad through subsidiaries in third countries. In addition to the Netherlands, much of the FDI flowing into many countries of the region is registered as coming from the British Virgin Islands, the Cayman Islands or Luxembourg. A number of countries of the region do not disclose this information, or the data they do provide is incomplete or late. For these two reasons it is especially difficult to estimate the share of the region's inward FDI that is sourced in China. Most of it is channelled through third countries and, in 2012, was concentrated in countries like the Bolivarian Republic of Venezuela and Peru that do not report data.

In 2012, the sectoral distribution of FDI for the region as a whole was similar to the average for the past five years, although the share going to services (the largest destination sector) edged up to 44% of the total in 2012. Manufacturing slid slightly but still accounts for 30% of the total. The proportion going to sectors based on natural

<sup>16</sup> For cumulative FDI to Brazil at year-end 2010, an estimated 91% of per cent of the investments identified in the first instance as coming from the Netherlands were actually from companies based in other countries that had used subsidiaries in the Netherlands to channel their investments.

resources was the same in 2012 (26%) as during 2007-2011. Patterns vary widely among the subregions, though, and have consolidated over time.

In South America (without Brazil), the pattern has been one of increasing concentration of FDI in natural resource-based sectors (in particular mining), which are by far the prime FDI destination. Their share of FDI reached 51% in 2012 after averaging 44% over the previous five years. This is reflected in the proportion of total inward investment targeting manufacturing and services (12% and 37%, respectively). These percentages are lower than the average for 2007-2011, although the trend towards a higher concentration of FDI towards natural resources in this group of countries was already well established in 2011.

**Figure I.11**  
**Latin America and the Caribbean: sectoral distribution of foreign direct investment by subregion, 2007-2011 and 2012**  
 (Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and estimates at 19 April 2013.

In Brazil, the manufacturing sector continues to account for a substantial percentage of inward FDI, at 38% of the total in 2012. However, this is lower than the average for the previous five years. By contrast, natural resources were still a relatively small draw for FDI in Brazil in 2012 (13% of the total), and services have surged to 48% of the total inflow of investment (compared with 44% in 2011 and an average of 34% in 2007-2011).

Natural resources account for a smaller share in Mexico, Central America and the Caribbean as well and have tended to hold steady: 10% in 2012 and over the previous five years. Manufacturing, despite the decline in absolute values in Mexico, continues to be the largest recipient of FDI (48% of the total). The portion targeting services has dropped sharply, from 55% in 2007-2011 to 42% in 2012.

In this group of countries, the primary sector receives a substantial share in some economies of the Caribbean, such as the Dominican Republic and Trinidad and Tobago. In Mexico the proportion of FDI flowing to this sector is not large, because both mining and hydrocarbon extraction are in the hands of domestic groups.

In all the countries of the region, agriculture (despite being an important sector) receives very little FDI. Nevertheless, there are some activities and subsectors in which transnational firms have a substantial presence, as will be seen in chapter III.

Beyond the official FDI figures, data on mergers and acquisitions yield a more comprehensive picture of which countries are investing in the region and in what sectors. Cross-border mergers and acquisitions targeting Latin America and the Caribbean totalled US\$ 57.70 billion in 2012, 34% lower than the previous year. This decline is due primarily to the 12% decrease in the number of deals and, especially, to the 65.7% drop in the value of acquisitions by multinationals from European Union countries. The value of mergers and acquisitions by United States companies also fell (by 18.4%), as did transactions by companies in other regions of the world (60.1% decrease). The value of mergers and acquisitions in the region carried out by trans-Latin companies jumped 139.3%, from US\$ 8.90 billion in 2011 to US\$ 21.30 billion in 2012. Such companies thus became the main source of mergers and acquisitions in Latin America and the Caribbean, although this increase did not offset the fall in the value of transactions originating in other countries of the world.

**Table I.4**  
**Latin America and the Caribbean: ten largest cross-border mergers or acquisitions, 2012**  
(Millions of dollars)

Company	Country of origin	Assets acquired	Seller located in	Assets located in	Sector	Amount
1 LATAM	Chile and Brazil	Merger of LAN and TAM	Chile and Brazil	Chile and Brazil	Transport	6 502
2 Sinopec	China	Petrogal (30%)	Portugal	Brazil	Oil	4 800
3 United Health Group	United States	JPLSPE Empreendimentos (85.5%)	Brazil	Brazil	Health services	3 199
4 Techint	Argentina	Usiminas (15%)	Brazil	Brazil	Steel	2 823
5 Cencosud	Chile	Carrefour Colombia	France	Colombia	Commerce	2 614
6 Abertis	Spain	Participes	Spain	Brazil	Construction	1 667
7 Experian	Ireland	Serasa (30%)	Brazil	Brazil	Financial	1 530
8 AmBev	Belgium	Cerveceria Nacional Dominicana (51%)	Dominican Republic	Dominican Republic	Food and beverages	1 237
9 Corpbanca	Chile	Banco Santander Colombia	Spain	Colombia	Financial	1 225
10 Canada Pension Plan	Canada	Grupo Costanera (50%)	Italy	Chile	Infrastructure	1 174

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

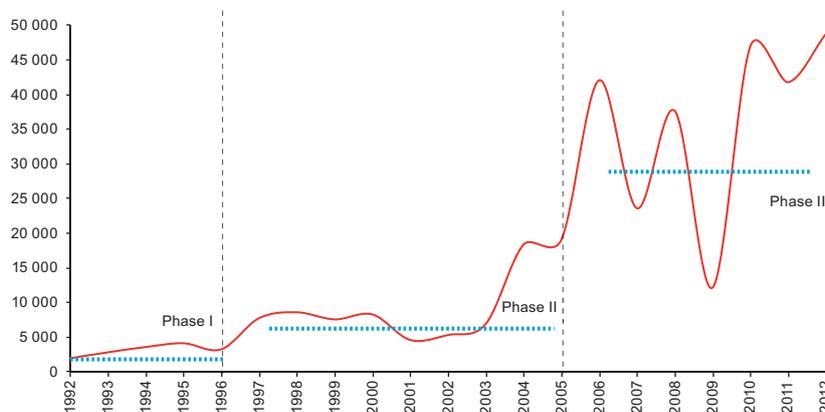
The drop in the total value of mergers and acquisitions was also reflected in the amounts of individual operations. They were, on average, substantially lower than in 2011: US\$ 78 million versus US\$ 104 million, respectively. Other than the merger of LAN and TAM (US\$ 6 billion), no single transaction exceeded US\$ 5 billion, unlike what happened, for example, in 2010.<sup>17</sup>

<sup>17</sup> Among the major mergers and acquisitions in 2010 were a US\$ 9.742 billion deal (the purchase of Brazil's telecommunications company Vivo by Telefónica S.A. of Spain), the US\$ 7.325 billion acquisition of Mexico's FEMSA Cerveza by Heineken of the Netherlands, and the purchase of Repsol YPF Brasil S.A. by China's Sinopec group, for US\$ 7.10 billion. The only deal in excess of US\$ 5 billion in 2011 was Mitsubishi's purchase of a 24.5% stake in Anglo American Sur, in Chile.

## E. The trans-Latins and outward foreign direct investment from the region

Outward FDI originating in the economies of Latin America and the Caribbean increased by 18% between 2011 and 2012, to stand at US\$ 49.133 billion (see figure I.12). This is 5% above the previous high, set in 2010. Direct investments abroad from individual countries vary widely from year to year because the number of major trans-Latins behind these flows is still small and the aggregate figures are very project-sensitive. Nevertheless, outward FDI flows from the region have held at historically high levels over the past three years. During the past decade, the great majority of investments abroad originated in Brazil, Chile, Colombia and Mexico. In 2012, however virtually all of them were sourced in Mexico and Chile.

**Figure I.12**  
Latin America and the Caribbean: general trends in outward foreign direct investment, 1992-2012  
(Millions of dollars)



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and estimates at 29 April 2013.

Trans-Latins have, over the past three years, benefited from the region's healthy economic growth (which kept them profitable) and from investor confidence in the economies of the region (which facilitated their access to credit). Although global FDI flows fell off in 2012, the trans-Latins have stepped up their pace of international expansion. In some cases this was because other companies, mainly European ones, opted to slow their own investments and to shed assets. Many trans-Latins took advantage of this scenario in 2012 to expand in Europe and in other markets.

This trend is clear in the list of major corporate mergers and acquisitions undertaken by trans-Latins in 2012. Seven of the ten largest acquisitions were of assets held by European companies. In some cases, the European company was taken over by a Latin American group or the latter purchased a controlling interest (as did Brazil's Camargo Correa with Cimpor in Portugal). But in most of these transactions, the selling company regarded the assets sold as peripheral or non-strategic ones that could therefore be sold to improve its balance sheet or undertake other investments. Such was the case with the Colombian operations of French retail group Carrefour and Spain's Banco Santander, or the Central American subsidiaries of the British bank HSBC.

Mexico was the country of the region that most invested abroad in 2012. Outward investments from Mexico totalled US\$ 25.6 billion, more than double the figure for the previous year and far more than the previous high

two years earlier. América Móvil, Mexico's largest trans-Latin, was the primary (but not the only) driver behind this increase. After focusing its international expansion efforts on Latin America, where, together with Spain's Telefónica, it leads the telecommunications market (ECLAC, 2011b), in 2012 América Móvil decided to diversify towards Europe and acquired substantial stakes in telephone operators in Austria and the Netherlands, for a total of US\$ 4.48 billion. Half of its profits still come from Mexico, but its ongoing expansion abroad, now extended to Europe, and possible regulatory changes in Mexico (see box 1.2) could bring down this percentage and contribute to the internationalization of profits.

Mexico does not publish disaggregated data on outward FDI that would allow a breakdown by destination sectors and countries. In any event, data on mergers and acquisitions show that Mexican investments, while still chiefly targeting the United States and other markets in Latin America, are also venturing into Europe and other regions. In addition to new acquisitions, Mexico's major trans-Latins continue to announce investments abroad. Among them, Grupo México invested US\$ 134 million in its mining operations in Peru; Bimbo opened a new plant in Brazil and one in Argentina; Gruma inaugurated a facility in the United States; and Cinépolis (the fourth largest movie theatre chain in the world) announced early this year the opening of 350 theatres in Brazil, Colombia, India and the United States.

**Table I.5**  
**Main cross-border acquisitions by trans-Latins, 2012**  
(Millions of dollars)

	Company	Country of origin	Assets acquired	Seller located in	Sector	Amount
1	LAN and TAM	Chile and Brazil	Merger	Chile and Brazil	Transport	6 502
2	Camargo Correa	Brazil	CIMPOR Cimentos (40%)	Portugal	Cement	4 097
3	América Móvil	Mexico	Koninklijke KPN (23%)	Netherlands	Telecom	3 380
4	Techint	Argentina	Usiminas (15%)	Brazil	Steel	2 823
5	Cencosud	Chile	Carrefour Colombia	France	Commerce	2 614
6	Grupo Safra	Brazil	Bank Sarasin & Cie	Netherlands	Financial	2 087
7	lochpe-Mexion	Brazil	Hayes Lemmerz International	United States	Automobile	1 317
8	Corpbanca	Chile	Banco Santander Colombia	Spain	Financial	1 225
9	América Móvil	Mexico	Telekom Austria (16%)	Austria	Telecommunications	1 103
10	Banco Davivienda	Colombia	HSBC assets in Central America	United Kingdom	Financial	801
11	Cielo SA	Brazil	Merchant e-Solutions	United States	Financial	670
12	Grupo Elektra	Mexico	Advance America	United States	Financial	656
13	CSN	Brazil	Stahlwerk Thuringen	Spain	Iron and steel	632
14	BTG Pactual	Brazil	Celfin Capital	Chile	Finance	600
15	Techint	Argentina	Confab Industrial (56%)	Brazil	Iron and steel	567
16	Banco Inbursa	Mexico	Caixa Bank (offices)	Spain	Finance	566
17	CFR	Chile	Lafranco	Colombia	Pharmaceutical	562
18	Cencosud	Chile	Prezunic	Brazil	Commerce	495
19	Cencosud	Chile	Jumbo Retail Argentina (39%)	Argentina	Commerce	484
20	Tupy SA	Brazil	Cifunsa Diesel and Technocast	Mexico	Iron and steel	439
21	Molymet	Chile	Molycorp Inc (15%)	United States	Mining	390

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

**Table I.6**  
**Latin America and the Caribbean (major economies): outward foreign direct investment, 2000-2012**  
(Millions of dollars)

	2000-2005 <sup>a</sup>	2006	2007	2008	2009	2010	2011	2012
Argentina	533	2 439	1 504	1 391	712	965	1 488	1 089
Brazil	2 513	28 202	7 067	20 457	-10 084	11 588	-1 029	-2 821
Chile	1 988	2 212	4 852	9 151	7 233	9 461	20 373	21 090
Colombia	1 157	1 098	913	2 486	3 348	6 842	8 280	-248
Venezuela (Bolivarian Republic of)	809	1 524	33	1 150	1 838	2 671	-1 141	2 460
Mexico	2 909	5 758	8 256	1 157	8 464	15 045	12 139	25 597
<b>Latin America and the Caribbean</b>	<b>10 375</b>	<b>42 017</b>	<b>23 558</b>	<b>37 600</b>	<b>12 095</b>	<b>46 913</b>	<b>41 742</b>	<b>49 133</b>

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and estimates at 29 April 2013.

<sup>a</sup> Simple average.

Chilean companies invested US\$ 21.090 billion abroad in 2012. This is a new record and more than twice the figure for just two years ago. Chilean companies are still focusing their expansion efforts on other South American countries; some have become regional leaders in the retail, forestry and transport sectors. The most recent case is the merger of Chilean airline LAN with Brazil's TAM, which had been announced in 2010 but was not completed until 2012. The US\$ 6.502 billion transaction via a stock swap created LATAM, a binational airline that is now the largest carrier in Latin America.<sup>18</sup> Another Chilean company that consolidated its leading position in the region in 2012 is Cencosud, by means of new acquisitions in Argentina, Brazil and Colombia.

Chilean companies have benefited from several years of strong economic growth, both in the domestic market and in the main foreign markets where they operate (especially Argentina, Brazil, Colombia and Peru). Despite some recent acquisitions by Chilean companies in the United States and Europe, these groups are just starting to expand beyond South America.

Outward FDI flows from Brazil were negative for the second year in a row, at US\$ 2.821 billion. This is the outcome of the funding strategy followed by Brazilian trans-Latins: channelling foreign subsidiary loans to parent companies in order to avoid Brazil's higher interest rates. For this reason, the intra-company loan component of Brazilian investment abroad has been negative since 2009 and totalled US\$ 20.562 billion in 2011. In 2012 the negative intra-company loan balance shrank to US\$ 10.377 billion, but the capital component declined sharply as well, to US\$ 7.555 billion (61% less than in 2011). This indicates that Brazilian companies invested less abroad than in previous years and that, in some cases, they have also increased the sale of assets abroad (divestments).

The mining company Vale and the oil company Petrobras (two of the largest Brazilian trans-Latins) are following an explicit divestment strategy involving the global sell-off of non-core assets, most of which are outside Brazil. In 2012, Vale sold US\$ 1.167 billion in overseas assets, including manganese operations in Europe, coal mines in Colombia and ore carrier ships. Other major mining companies that are direct competitors of Vale, like Río Tinto and BHP Billiton, are following similar strategies to face rising costs and shrinking operating margins.<sup>19</sup> This strategy will probably continue in 2013: Vale announced the sale of Sudbury Mines in Canada for US\$ 1.2 billion.

Petrobras's ambitious programme for investing in pre-salt oilfields in Brazil has forced it to cancel some foreign investment projects. In 2012 the company announced asset sales totalling as much as US\$ 7 billion, but most have not yet been carried out. Divestments during 2012-2016 are expected to amount to US\$ 15 billion, including refineries in the United States and Japan and operating fields in Nigeria. Petrobras's divestment programme is so large that FDI outflows from Brazil should continue to be modest over the next few years.

Nevertheless, many Brazilian companies have continued to expand abroad. Seven of the twenty largest foreign acquisitions by trans-Latins in 2012 were by Brazilian companies, including Camargo Correa's purchase of a 40% stake in Portuguese cement manufacturer Cimpor. Beyond annual FDI flows, Brazil has the highest level of outward FDI stock in Latin America: more than US\$ 200 billion. This figure is more than twice that of Chile and 50% higher than for Mexico, indicating that, on the whole, Brazilian trans-Latins hold more assets abroad than companies based in these other countries do.

In addition to Brazil, Chile and Mexico, other countries with high levels of outward FDI were the Bolivarian Republic of Venezuela (US\$ 2.460 billion) and Argentina (US\$ 1.089 billion). The state-owned oil company PDVSA accounts for most of the FDI flowing from the Bolivarian Republic of Venezuela. In Argentina, steelmaker Techint accounts for the largest share. Colombia, which for two years had ranked third in the region in terms of outward FDI, posted slightly negative outflows in 2012. This does not indicate a radical strategy shift on the part of the major companies but rather a period devoted to the assimilation of assets acquired in 2010 and 2011.

Outward FDI for the rest of the economies of the region is much more modest. The exceptions are Trinidad and Tobago (US\$ 1.332 billion) and Costa Rica, which posted US\$ 426 million that included Cervecería Costa Rica's US\$ 388 million purchase of the United States-based North American Breweries (NAB) (see annex table I.A-5).

<sup>18</sup> LATAM is headquartered in Santiago and is majority Chilean-owned, although the Brazilian partners hold a majority on the board of directors. The transaction does not seem to have been included in official FDI data from Brazil or Chile (for statistical secrecy reasons).

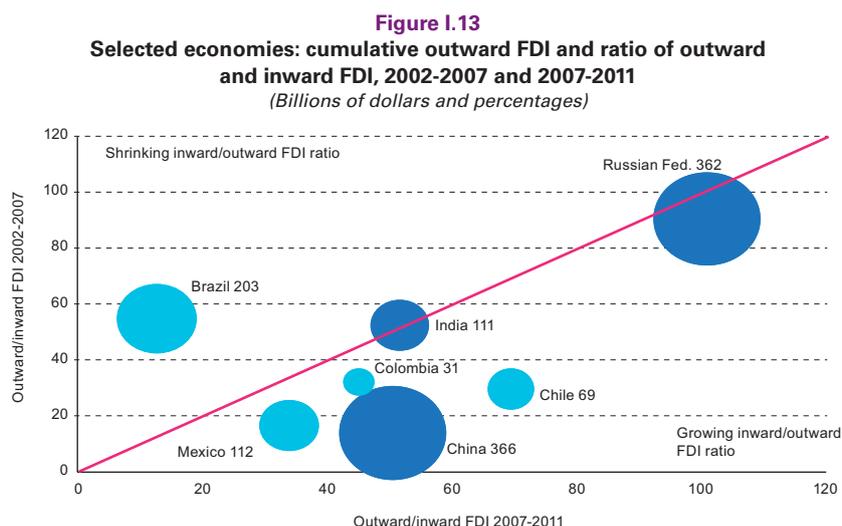
<sup>19</sup> See [online] <http://www.ft.com/intl/cms/s/3/0fab8fa4-8ccd-11e2-aed2-00144feabdc0.html#axzz2PD7z15U0>.

Most of the smaller economies in the region do not report outward FDI, or the data are flawed. While there is anecdotal evidence of FDI outflows from other countries, such as Guatemala (sugar cane sector) and Peru, official data are still incomplete. Panama is a special case; with some foreign companies using it as a base for their operations in Central America and other countries of the region, it receives and sends transit FDI. Panama does not report official data on outward FDI, but International Monetary Fund (IMF) estimates put the figure at some US\$ 400 million over the past two years.

Although outward FDI levels are still very uneven among countries, the overall trend in the region is towards increased investment abroad. This process is a natural counterpart to the increasing flow of FDI into these economies: stiffer competition from transnational corporations is forcing domestic firms to seek business opportunities in other countries. This is a global trend. Developing and transition economies, which already receive more than half of global FDI flows, accounted for a third of outward FDI worldwide in 2011. Ten years earlier their share did not exceed 10%.

Exceptionally, foreign investments by Mexican companies were more than twice the figure for FDI flowing into Mexico in 2012. Taking a longer view, during 2007-2001 outward FDI was 34% of inward FDI for Mexico, 45% for Colombia and 69% for Chile. For all three countries, these percentages are sharply higher than for the previous period (2002-2007), even though Chile and Colombia also saw a surge of inward FDI during the period. The trend was the opposite in Brazil; the ratio of investment abroad by Brazilian firms to the country's outward FDI was smaller (13%) in 2007-2011 than in 2002-2007 (55%). This latter trend is due to the funding strategy adopted by Brazilian trans-Latins, which has generated negative outward flows in recent years even as these companies continue to increase their assets abroad.

Although most of the countries of the region have rather modest levels of outward FDI, Chile, Colombia and Mexico are slowly approaching a more balanced ratio between FDI inflows and outflows. The ratio of outward to inward FDI was in the area of 25% in 2002-2007, rising to nearly 50% the following period (see figure I.13). The trend is the same in China, while in other large developing economies such as India and the Russian Federation, the ratio between inflow and outflow has been more balanced for more than a decade.



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of national sources and information provided by the United Nations Conference on Trade and Development (UNCTAD).

## F. FDI and job creation in Latin America

After the market reforms, most of the governments of Latin America were convinced that foreign direct investment was an engine of development with automatic positive impacts for the receiving economy. Policies aimed at attracting FDI have therefore been a key outward development strategy instrument for many countries as a way to compensate for the lack of financial resources for upgrading, boosting production and, consequently, creating jobs. This approach regarded quantity as more important than quality, so countries adopted strategies aimed at maximizing inward FDI (ECLAC, 2012). For the labour market, FDI inflow was expected to have a beneficial impact on job creation, productivity, wages and working conditions in general. But experience suggests that the impact of FDI on the economies of receiving countries<sup>20</sup> depends on the type of inward investment and the regulatory framework in each country (Lipsey and Joholm, 2005; Dunning, 1993).

One of the traits of FDI flows is the kind of strategy that leads parent companies to invest in the region. The literature classifies these strategies as seeking (i) raw materials; (ii) access to domestic markets; (iii) export platform efficiency gains; or (iv) access to strategically important assets (Dunning, 2002). These strategies are often associated with a certain sectoral profile, such as natural resource extraction, manufacturing, or services, and they impact the local labour market in different ways.

The FDI strategy focus has varied throughout the region over the past few decades. In short, natural-resource-seeking investment has been concentrated in the countries of the Southern Cone and has surged in recent years owing to the high price of raw materials. Market-seeking investment has focused on the larger countries, taking advantage of fast-growing economies and a middle class with more purchasing power. In Mexico and Central America the primary strategy has been the search for export platform efficiency, mainly targeting the United States. (ECLAC, 2012).

FDI flows also differ in how they gain access to local production networks and impact the production profile and local labour markets. Foreign capital enters the picture mainly through (i) greenfield projects; (ii) privatization of public enterprises; or (iii) mergers and acquisitions of domestically-owned companies. Generally speaking, greenfield investment is aimed at building production capacities, including new lines of business, that promote job creation. But FDI can have negative impacts on employment when it seeks to change the ownership of existing production assets, which is often associated with restructuring and layoffs. It can also lead to market displacement of non-competitive domestic firms, substitution of local suppliers with imports or the introduction of job-saving technologies. When FDI targets capital-intensive sectors, even its positive impacts on direct employment tend to be modest. There are also different patterns of FDI access to production systems across the region. In South America it tends to be through acquisition or privatization; in Central America, greenfield investments are the primary route (Ernst, Berg and Auer, 2007; Chudnosvsky and López, 2007).

More productive enterprises would be in a position to pay higher wages and offer better working conditions in general. Since the 1970s, the International Labour Organization (ILO) has been issuing recommendations aimed at promoting best practices.<sup>21</sup> But many studies indicate that since the 1990s multinationals venturing into Latin America have tended to favour job flexibility and the outsourcing of certain tasks. This contributed to precarious conditions in

<sup>20</sup> FDI impacts are usually classified in two kinds: (i) macroeconomic (capital formation, foreign trade, balance-of-payments financing and job creation) and (ii) microeconomic (productivity, innovation and linkages). Its direct impacts differ, in turn, from its spillover impacts, which are particularly important for dimensions such as knowledge, productivity and innovation.

<sup>21</sup> Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy.

the region's labour markets and led to the introduction of a model that was unlike the one prevailing during the import substitution period and even weakened the labour relations system (Pochman, 2003; ILO, 2005; Carrillo 2010).<sup>22</sup> In other words, there is no consensus, either, on the impact of FDI on job quality in the receiving countries according to the type of FDI and the features of labour market institutions.

These arguments highlight the need for better, more broad-based knowledge that will help countries assess what types of projects would be more suitable for their local realities. A better understanding of the impact of the various types of investments would improve the design of policies for attracting quality FDI (for example, through investment agencies) and strengthen the institutions that regulate labour markets.

These arguments also show that greenfield investments would be more likely to enhance the production capacity of an economy and expand labour demand. But, as this section will explain, direct job creation capacity can vary widely across the economies of the region, even for greenfield investments.

The investment announcements in the *Financial Times'* fDi Markets database make it possible to estimate, at least in terms of trends, the impact that greenfield FDI is likely to have on any given country's labour market. The analysis is based on an indicator of direct job content in investment announcements, which is an estimate of the expected number of jobs generated for every US\$ 1 million. Although the source is a broad database of some 10,000 announcements between 2003 and 2012 in virtually all the countries of the region, the fact that it contains projections and incomplete information is a constraint for this type of study.<sup>23</sup>

With these considerations and investment announcement data in mind, it is estimated that every US\$ 1 million invested in expanding production capacity in Latin America during 2003-2012 created three jobs. Labour-intensity has remained relatively stable over the past 10 years, so the number of jobs created by these investments should track fluctuations in the international business cycle, as do investment amounts. The job content of FDI varies substantially from country to country. The countries of the Caribbean can be classified into two general groups according to the job content of inward investments. In the group where FDI targets tourism-related activities, each US\$ 1 million of investment is projected to generate about six jobs. This group comprises Bahamas, Barbados, Belize, Haiti, Jamaica and Saint Lucia. As mentioned above, inward FDI over the past 10 years was oriented towards tourism-related activities (mainly, hotels and transport services). Call centres are major job creators in Jamaica and Saint Lucia.

The situation is virtually the opposite in the second group of Caribbean countries (Aruba, Dominican Republic, Cuba, Guyana, Suriname, and Trinidad and Tobago). Here, investments skew heavily towards the financial sector, mining and some natural-resource-intensive industrial activities; every US\$ 1 million can be expected to generate fewer than two jobs.

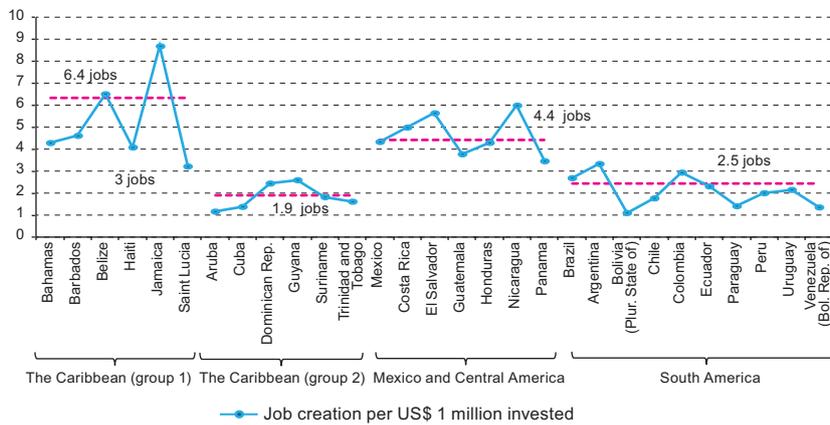
Comparing the countries of Central America and Latin America also reveals sharp contrasts in terms of the sectors and strategies that draw FDI to local production networks. In Mexico and the countries of Central America, FDI patterns have a high job content, creating about four jobs per US\$ 1 million of investment. In Latin America (including Brazil) FDI is estimated to have modest effects on job creation, generating on average 2.5 jobs per US\$ 1 million (see figure I.14).

As explained above, sectoral FDI patterns vary among countries and regions. Location factors such as proximity to major markets and the availability of resources, along with domestic production structure path dependence, explain why greenfield investments target certain sectors. In the Caribbean and South America, nearly 60% of inward FDI was concentrated in extractive activities and natural-resource-intensive manufactures, while in Central America these represent less than 30%. By contrast, in Mexico and Central America, engineering- and natural-resource-intensive manufacturing industries (including the automobile and food industries, respectively) accounted for 54% of the investment amounts announced for the period.

<sup>22</sup> This point is of special interest to the ILO, which argues that it is not enough to create jobs and that job quality is also a concern. It therefore developed the concept of decent work in an attempt to capture, in everyday language, the convergence of these four dimensions that define a good job: employment, labour rights, job security and representation. The underlying idea is to boost labour productivity, not by cutting costs but rather through specialized training.

<sup>23</sup> The source has some limitations for a study of this kind: (i) it is based on investment announcements, which are not necessarily carried out; (ii) it draws on press releases, which might reflect the most optimistic project estimates; (iii) while the source is broad-based, it is not exhaustive; (iv) both variables (investment amount and job creation) are attributed to the year the announcement is made; and (v) for a large proportion of the announcements, investment amount and expected job creation are estimated.

**Figure I.14**  
**Latin America and the Caribbean: subregional differences in the direct job content**  
**of announced FDI, 2003-2012**  
*(Number of jobs created per US\$ 1 million invested)*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), based on fDi Markets investment announcements.

But the sectors that receive the greatest investment in a region are not necessarily the strongest when it comes to employment. Job creation by sector does not mirror investment configuration, as can be seen when comparing the three activities that have the strongest employment impact with the three that draw the largest investments. In Latin America, natural-resource-intensive and engineering-intensive manufactures, along with commerce, account for 67% of the jobs created. In the Caribbean, 65% of all new jobs are in natural-resource-intensive manufactures, personal services and call centres. In Mexico and Central America, natural resource- and engineering-intensive manufactures generate 51% of the jobs. It is only here that the sectors attracting the most investment create the most jobs.

These different patterns of investment amounts and job creation are likely to impact labour productivity in each of the economies. A scenario in which sectors receiving higher amounts of investment are driving the job market would be more favourable than one in which the activities that draw less investment create more jobs.

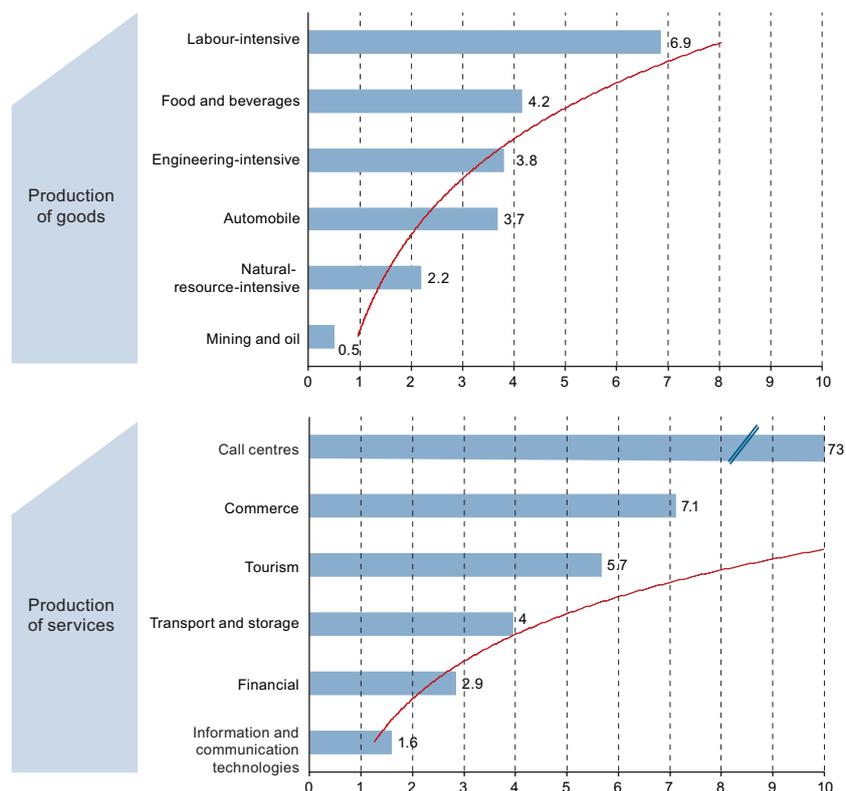
The investment announcement job content indicator varies significantly across sectors of activity. Commerce and construction create the most jobs (seven per US\$ 1 million invested), followed by the manufacturing industry and services (three jobs). Mining (including oil) creates one job for every US\$ 2 million. Labour-intensive manufacturing creates seven jobs per US\$ 1 million; for engineering-intensive manufacturing (including the automobile industry) the ratio is four jobs; this is similar to the food industry. Other natural-resource-intensive activities (other than food) are less employment-intensive, creating two jobs per US\$ 1 million invested.

The service sector is also quite heterogeneous. Call centres are strong job creators: 73 jobs per US\$ 1 million. Many studies note their high employee turnover and low entry barriers. And they tend to relocate in order to take advantage of tax or wage benefits because the labour component figures heavily in their cost structure (Novick and others, 2011; Del Bono and Henry, 2010). Tourism-related activities (transport and personal services) have a higher job content than more modern ones such as financial services and information and communications technologies (ICT) do (see figure I.15).

Sectoral specialization has much to do with the job content of greenfield investments, but there are also other factors behind differences in the employment intensity of similar projects in different locations. These are: the type of technology used, the type of multinational company (how complex its processes are and its role in the global supply chain), each country's institutions, and the local macroeconomic context (relative prices), among others.

The arguments and the evidence set out herein can inform the discussion of how important it is to consider not only the amount of FDI but also the features of investment projects and their alignment with the requirements of each country's development agenda. After all, more FDI does not guarantee greater job creation capacity.

**Figure I.15**  
**Latin America and the Caribbean: differences in direct job content of foreign direct investment by economic activity, 2003-2012**  
*(Number of jobs created per US\$ 1 million invested)*



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on investment announcements in FDI Markets.

#### Box I.4

##### Argentina- and Mexico-based subsidiaries in the global value chain: some comparative outcomes

Over the past two decades, foreign investment in Argentina and Mexico has followed different paths. In the early 1990s the volume of FDI in the two countries was fairly similar: in fact, in 1992 they both posted just above US\$ 4 billion. At that point FDI in Mexico began to grow faster than in Argentina, far outstripping it by 2010.

A breakdown of recent FDI flows highlights major differences across sectors in each of the countries. Investment in export manufactures in Mexico is still heavily skewed towards offshoring outsourcing (the maquila industry) and is a springboard for access to the United States market. This differs from FDI in Argentina, where the investment focus is on natural resources and services. Market strategies prevailing among multinational companies in Mexico are consistent with this pattern: more than half target their sales at the regional market. In Argentina, by contrast, 80% of the multinationals focus on domestic market sales.

As for integration in their respective value chains, most of the subsidiaries of multinational companies in Mexico buy and sell products or services from or to their parent company or other corporate subsidiaries. In Argentina, on the other hand, only a quarter of the subsidiaries engage in intra-company sales or purchases; 40% of the multinational companies neither

purchase nor sell products from or to the parent company or other subsidiaries.

Given their high degree of integration with their respective value chains, subsidiaries of multinationals located in Mexico have less autonomy. Only 15% of them report having considerable decision-making autonomy. In Argentina, on the other hand, two thirds of the subsidiaries have a high degree of decision-making autonomy, which also confirms their predominantly low degree of integration in the global supply chain. Despite differing degrees of integration in value chains, a common feature revealed by the comparison is the frequent use of research and development (R&D) resources provided by the parent company on the part of subsidiaries of multinational corporations in Mexico (50%) and among those located in Argentina (67%).

Lastly, subsidiaries of multinational companies based in these two countries would be expected to have differential impacts on employment practices and labour relations stemming from their different positions in their respective value chains. In this regard, unlike Argentina (where these companies have gradually adapted to the local labour relations system), in Mexico there is evidence of a predominantly involuntional pattern with significant impact on trade unions.

Source: Jorge Carrillo and others, "Las filiales de la Argentina y México en la cadena global de valor," *Multinacionales en la Argentina. Estrategias de empleo, relaciones laborales y cadenas globales de valor*, M. Novick, H. Palomino and S. Gurrera, Buenos Aires, Ministry of Labour, Employment and Social Security/United Nations Development Programme (UNDP), November 2011.

## G. Conclusions

FDI flowing into Latin America and the Caribbean in 2012 grew for the third consecutive year to stand at a record US\$ 174.546 billion. This figure is all the more significant in view of the international context marked by plunging global FDI flows.

Inward FDI was boosted by sound economic growth over the past 10 years, as well high raw material prices and high returns on investment in the exploitation of natural resources.

The effects of the new uptick in FDI in 2012 are also reflected in the rising share of global flows going to Latin America and the Caribbean, which has reached 12%. The FDI to GDP ratio rose as well, to 3% in 2012.

The trans-Latins continue to expand; their operations abroad surged to US\$ 49.133 billion in 2012, which is 5% above the previous record high set in 2010.

This buoyant growth is also reflected in the composition of the region's inward FDI by source. The share coming from a number of developed countries (in particular those of the European Union) declined while investments originating in countries of Latin America and the Caribbean themselves climbed from 9% of the total in 2011 to 14% in 2012.

FDI patterns by destination sector are, increasingly, targeting the exploitation of natural resources, in particular in South America. This is reinforcing the existing production structure in the region. Overall, manufacturing accounts for a fairly small share of inward FDI flows, with the exception of Brazil and Mexico, and the latter saw a sharp decline in inward investment in 2012.

In the vast majority of the countries there is no clear indication that FDI is making a relevant contribution to the creation of new sectors or high technology content activities. However, changing the production structure is one of the most pressing needs that the region must address (ECLAC, 2010 and 2012).

While the growth of FDI income helps generate a considerable flow of reinvested earnings in the receiving countries themselves, it is also pushing up outflows in the form of repatriated profits. These are structural aspects related to the build-up of FDI stocks in the region over the past 15 years. As such, they are deserving of the closer examination set out in chapter II.

The relationship between FDI and employment generation, as well as job quality, can also be complex, especially if the investments are channelled towards sectors whose impact on employment is quantitatively or qualitatively less positive. The evidence presented in this chapter, while preliminary, indicates that several of the sectors that are the strongest FDI draws in the region are not, as a whole, making a significant contribution to employment, at least not in relation to the amounts being invested.

It is quite likely that the factors shaping inward FDI in the region will continue to be relevant in the coming years. This calls for focusing not only on amounts, but also on the nature of FDI inflows and investment projects, as well as their alignment with development agenda requirements at the country level.

The need to set in motion processes for modifying and diversifying the production structure so as to generate activities with a higher value-added and knowledge content as well as production and technology spillover capacities points to the potential for leveraging the region's advantages as an FDI destination in order to improve the production matrix of the countries of Latin America and the Caribbean.

There are several different policy strategy options. One of them could be based on channelling part of the revenue generated by transnational companies towards the creation of funds for financing production development policies (targeting SMEs, manufacturing, technology and other sectors).

It might ultimately be possible to combine the establishment of such funds with targeted policies for attracting inward FDI. However, for this second option to be effective it will be necessary to identify projects that can actually help build local business capacities, boost innovation and create production linkages. There is also a need to define an appropriate incentive system, because the prevailing structure in the region is one in which sectors with higher technology content and production synergies are less profitable. Putting an incentive system in place also entails a

high degree of institutional development on the part of the agencies responsible for defining and implementing it. This in turn calls for a global production development project, shared and supported by economic and social stakeholders, that would guide FDI-related decisions.

## Bibliography

- BCRA (Central Bank of Argentina) (2012), “Las inversiones directas en empresas residentes a fines del 2011”, Buenos Aires [online] <http://www.bcra.gov.ar/pdfs/estadistica/Inversiones%20directas%20al%2031%2012%2011.pdf>.
- Carrillo, Jorge (2010), “Modelos productivos, el modelo de maquila y multinacionales”, *Trabajo y modelos productivos en América Latina. Argentina, Brasil, Colombia, México y Venezuela luego de las crisis del modelo de desarrollo neoliberal*, Enrique De la Garza Toledo y Neffa (comp.), Buenos Aires, Latin American Social Sciences Council (CLACSO).
- Carrillo, Jorge and others (2011), “Las filiales de la Argentina y México en la cadena global de valor”, *Multinacionales en la Argentina. Estrategias de empleo, relaciones laborales y cadenas globales de valor*, Marta Novick, Héctor Palomino and Silvana Gurrera, Buenos Aires, Ministry of Labour, Employment and Social Security/United Nations Development Programme (UNDP), November.
- Chudnovsky, D. and A. López (2007), “Foreign direct investment and development: the MERCOSUR experience”, *CEPAL Review*, No. 92 (LC/G.2339-P/E), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), August.
- COCHILCO (Chilean Copper Commission) (2012), “Inversión en la minería chilena, cartera de proyectos 2012”, Santiago, June [online] [http://www.cochilco.cl/productos/pdf/2012/INVERSIONES\\_MIN\\_2012.pdf](http://www.cochilco.cl/productos/pdf/2012/INVERSIONES_MIN_2012.pdf).
- Del Bono, Andrea and Laura Henry (2010), “Tercerización de servicios en la Argentina: empleo y gestión de RRHH en los “call centers””, *Trabajo, Ocupación y Empleo, - Una mirada a sectores económicos desde las relaciones laborales y la innovación, Serie Estudios*, N° 9, Buenos Aires, Ministry of Labour, Employment and Social Security, July.
- Dunning, John (1993), *Multinational Enterprises and the Global Economy*, Reading Addison Wesley.
- (2002), “Relational assets, networks and international business activity”, *Cooperative Strategies and Alliances*, F.J. Contractor and P. Lorange (eds.), New York.
- ECLAC (Economic Commission for Latin America and the Caribbean) (2012), *Structural Change for Equality: An Integrated Approach to Development (LC/G.2524(SES.34/3))*, Santiago, Chile.
- (2011a), *Economic Survey of Latin America and the Caribbean 2010-2011 (LC/G.2506-P)*, Santiago, Chile. United Nations publication, Sales No. E.11.II.G.3.
- (2011b), *Foreign Direct Investment in Latin America and the Caribbean, 2011 (LC/G.2538-P)*, Santiago, Chile. United Nations publication, Sales No. E.12.II.G.4.
- (2010), *Time for equality: closing gaps, opening trails (LC/G.2432(SES.33/3))*, Santiago, Chile.
- Ernst, C., J. Berg and P. Auer (2007), “Employment challenges and policy responses in Argentina, Brazil and Mexico”, *CEPAL Review*, No. 91 (LC/G.2333-P/E), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), April.
- ILO (International Labour Organization) (2005), “Informe del coloquio tripartito para promover la Declaración Tripartita de Principios sobre Empresas Multinacionales y la política social del Mercosur”, Geneva.
- Lipsey, R. and F. Sjöholm (2005), “The impact of inward FDI in host countries: why such different answers?”, *Does Foreign Direct Investment Promote Development?*, T. Moran, E. Graham and M. Blostrom (eds.), Washington, D.C., Institute for International Economics.
- Ministry of Foreign Affairs, Trade and Integration of Ecuador (2013), *Boletín de Prensa*, No. 208, March.
- Novick, M. and others (2011), “Nuevas actividades económicas surgidas a partir del paradigma TIC: el sector del software y los servicios de call center”, *El desafío de las TIC en Argentina. Crear capacidades para la generación de empleo*, M. Novick and S. Rotondo (comps.), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), November.
- Pochman, M. (2003), “Efeitos da internacionalizacao do capital no mundo do trabalho no Brasil”, *NAFTA y Mercosur: Procesos de apertura y trabajo*, Buenos Aires, Latin American Social Sciences Council (CLACSO).
- SOBEET (Sociedade Brasileira de Estudos de Empresas Transnacionais e da Globalização Econômica) (2013), “Proporção entre ingressos de investimentos diretos estrangeiros e formação bruta de capital fixa alcança o maior nível desde 2004”, *Boletim*, No. 89, January [online] <http://www.sobeet.org.br/boletim/boletim89.pdf>.
- UNCTAD (United Nations Conference on Trade and Development) (2013), *Global Investment Trends Monitor*, No. 11, Geneva, 23 January.

## Annex

**Table I.A-1**  
**Latin America and the Caribbean: inward foreign direct investment by countries, 2000-2012**  
*(Millions of dollars)*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Antigua and Barbuda <sup>a</sup>	67	112	80	179	95	238	361	341	161	85	101	68	74
Argentina	10 418	2 166	2 149	1 652	4 125	5 265	5 537	6 473	9 726	4 017	7 848	9 882	12 551
Bahamas <sup>b</sup>	301	144	181	236	529	641	843	887	1 032	753	960	971	465
Barbados	55	87	81	167	127	240	342	476	464	247	290	532	...
Belize	30	61	26	42	119	155	117	150	180	113	100	99	195
Bolivia (Plurinational State of)	736	706	677	197	85	-288	281	366	513	423	643	859	1 060
Brazil	32 779	22 457	16 590	10 144	18 146	15 066	18 822	34 585	45 058	25 949	48 506	66 660	65 272
Chile	4 860	4 200	2 550	4 334	7 241	7 097	7 426	12 572	15 518	12 887	15 373	22 931	30 323
Colombia	2 436	2 542	2 134	1 720	3 016	10 252	6 656	9 049	10 596	7 137	6 758	13 438	15 823
Costa Rica	409	460	659	575	794	861	1 469	1 896	2 078	1 347	1 466	2 157	2 265
Dominica <sup>a</sup>	20	21	21	32	27	32	29	48	57	43	25	14	20
Dominican Republic	953	1 079	917	613	909	1 123	1 085	1 667	2 870	2 165	1 896	2 275	3 610
Ecuador	-23	539	783	872	837	493	271	194	1 058	306	163	641	587
El Salvador	173	279	470	142	363	511	241	1 551	903	366	117	385	516
Grenada <sup>a</sup>	39	61	57	91	66	73	96	172	141	104	64	45	33
Guatemala	230	499	205	263	296	508	592	745	754	600	806	1 026	1 207
Guyana	67	56	44	26	30	77	102	152	179	164	198	247	294
Haiti	13	4	6	14	6	26	161	75	30	38	150	181	179
Honduras	382	304	275	403	547	600	669	928	1 006	509	969	1 014	1 059
Jamaica	468	614	481	721	602	682	882	866	1 437	541	228	218	381
Mexico	18 282	29 962	23 901	18 672	24 855	24 449	20 292	31 380	27 853	16 561	21 372	21 504	13 431
Nicaragua	267	150	204	201	250	241	287	382	626	434	508	968	810
Panama	624	467	99	818	1 019	962	2 557	1 777	2 402	1 259	2 363	2 755	3 020
Paraguay	104	84	10	27	38	54	95	202	209	95	228	215	273
Peru	810	1 144	2 156	1 335	1 599	2 579	3 467	5 491	6 924	6 431	8 455	8 233	12 240
Saint Kitts and Nevis <sup>a</sup>	99	90	81	78	63	104	115	141	184	136	119	112	101
Saint Lucia <sup>a</sup>	58	63	57	112	81	82	238	277	166	152	127	116	113
Saint Vincent and the Grenadines <sup>a</sup>	38	21	34	55	66	41	110	121	159	111	97	86	126
Suriname	-97	-27	-74	-76	-37	28	-163	-247	-231	-93	-248	70	70
Trinidad and Tobago	680	835	791	808	998	940	883	830	2 801	709	549	1 831	2 527
Uruguay	273	297	194	416	332	847	1 493	1 329	2 106	1 529	2 289	2 505	2 710
Venezuela (Bolivarian Republic of)	4 701	3 683	782	2 040	1 483	2 589	-508	1 505	1 741	-2 169	1 849	3 778	3 216

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of estimates and official figures as of 29 April 2013.

<sup>a</sup> Official estimate of FDI for 2012.

<sup>b</sup> Data for 2012 refer to the cumulative total at the third quarter.

**Table I.A-2**  
**Latin America and the Caribbean: inward foreign direct investment by destination sector, 2005-2012**  
*(Millions of dollars)*

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Argentina<sup>a</sup></b>								
Natural resources	1 766	2 536	2 470	840	751	3 155	1 082	...
Manufactures	2 890	3 041	3 286	6 528	360	5 152	5 477	...
Services	2 092	1 894	2 251	3 382	1 870	2 248	4 517	...
<b>Belize</b>								
Natural resources	8	12	9	37	7	13	29	100
Manufactures	25	6	5	14	14	14	16	20
Services	117	84	103	113	83	68	48	69
Other	5	14	34	16	9	5	5	6
<b>Brazil</b>								
Natural resources	1 722	1 835	4 806	15 085	7 503	18 358	6 296	9 048
Manufactures	5 411	7 851	16 074	15 791	12 810	20 416	31 664	25 649
Services	7 521	8 950	13 163	13 785	6 162	12 332	30 035	32 627
<b>Chile<sup>b</sup></b>								
Natural resources	595	3 384	6 607	4 625	7 092	5 012	13 787	15 198
Manufactures	199	1 149	-431	1 616	921	550	1 553	3 372
Services	1 003	2 766	6 358	8 939	5 511	9 527	7 215	10 921
Other		244	215	256	106	-1 500	-8 534	-6 992
<b>Colombia</b>								
Natural resources	3 288	3 786	4 474	5 267	5 481	4 614	7 619	7 735
Manufactures	5 513	803	1 867	1 748	621	656	792	2 049
Services	1 451	2 067	2 709	3 605	1 035	1 488	5 027	6 040
<b>Costa Rica</b>								
Natural resources	37	62	1	448	68	-6	53	-11
Manufactures	375	436	722	574	412	1 003	680	575
Services	449	971	1 174	1 056	867	469	1 372	1 701
Other	-1	10	4	26	22	23	1	0,0
<b>Dominican Republic</b>								
Natural resources	31	107	30	357	758	298	1 060	1 168
Manufactures	199	-168	184	574	280	466	355	1 384
Services	893	1 146	1 453	1 938	1 128	1 132	860	1 058
<b>Ecuador<sup>c</sup></b>								
Natural resources	222	-69	-77	265	45	168	378	241
Manufactures	75	90	99	206	128	123	121	140
Services	196	250	173	535	148	-134	91	205
<b>El Salvador</b>								
Natural resources	0	29	10	5	1	1	-1	-3
Manufactures	317	17	21	28	56	-58	243	62
Services	191	182	1 315	480	165	147	143	336
Other (maquila)	4	0	101	26	72	-1	0	16
<b>Guatemala</b>								
Natural resources	150	69	70	174	139	120	325	313
Manufactures	131	175	210	175	51	299	150	164
Services	219	328	437	369	401	363	544	674
Other	9	20	28	36	9	23	7	57
<b>Honduras</b>								
Natural resources	53	44	11	5	12	3	46	
Manufactures	270	227	384	215	103	368	392	
Services	263	359	515	681	408	426	577	
Other	14	38	18	0	0	0	0	

Table I.A-2 (concluded)

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Mexico</b>								
Natural resources	229	454	1 832	4 801	875	1 286	1 078	689
Manufactures	11 067	10 102	13 608	7 851	5 674	11 590	9 820	7 045
Services	13 111	9 563	16 053	14 489	9 570	7 833	10 606	4 925
<b>Nicaragua</b>								
Natural resources	0	15	11	49	15	39	114	
Manufactures	87	63	121	122	70	108	226	
Services	155	109	250	447	313	322	522	
Other	0	101	0	8	36	38	105	
<b>Panama</b>								
Natural resources	0	-108	1	-59	-34	104	-6	
Manufactures	-62	105	129	161	104	10	34	
Services	1 693	2 531	1 765	2 106	1 190	2 249	2 727	
Other	-696	19	2	-11	0	0	0	
<b>Paraguay</b>								
Natural resources	-2	-36	-2	3	8	-5	-1	-0,4
Manufactures	-16	60	8	149	-109	53	2	160
Services	53	70	196	56	195	180	214	160
<b>Uruguay</b>								
Natural resources	264	328	338	604	253	329	384	
Manufactures	26	96	263	261	242	131	190	
Services	248	594	592	1 005	965	1 010	1 362	
Other	310	475	136	236	69	820	568	

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of estimates and official figures as of 29 April 2013.

<sup>a</sup> Data from the Central Bank of the Republic of Argentina.

<sup>b</sup> FDI in 2005 corresponds to investments made under Legislative Decree 600.

<sup>c</sup> Data for 2012 refer to the cumulative total at the third quarter.

**Table I.A-3**  
**Latin America and the Caribbean: inward foreign direct investment by country of origin, 2005-2012**  
*(Millions of dollars)*

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Argentina<sup>a</sup></b>								
United States	1 229	845	724	2 158	1 035	1 334	2 193	...
Brazil	1 234	447	859	1 573	-384	1 694	1 576	...
Switzerland	281	38	273	739	207	659	1 167	...
Chile	606	518	507	863	311	1 309	1 067	...
Denmark	-67	79	24	-98	43	251	655	...
Netherlands	1 062	98	599	1 154	157	-37	573	...
Mexico	588	30	547	546	107	295	482	...
Spain	1 302	2 397	1 786	744	1 183	1 103	376	...
<b>Brazil</b>								
United States	4 034	2 784	3 744	5 007	1 963	5 348	5 572	13 509
Netherlands	979	3 317	7 634	3 916	4 260	2 736	17 908	12 003
Luxembourg	-44	397	5 864	6 292	-483	9 132	2 452	7 648
France	1 383	555	1 015	2 231	2 231	3 029	4 383	2 760
United Kingdom	-68	144	1 682	375	1 938	1 334	3 315	2 151
Spain	-582	749	1 787	2 572	3 262	313	9 779	2 073
Japan	572	826	81	4 316	1 709	2 426	7 387	1 255
<b>Chile<sup>b</sup></b>								
United States	9	111	3 726	2 272	991	819	1 915	4 376
Spain	207	822	1 088	2 210	1 220	1 844	4 110	4 052
Canada	86	498	2 612	1 667	2 364	772	1 853	2 638
Japan	47	159	236	-28	350	1 613	1 199	1 860
Netherlands	-21	327	805	824	1 379	173	1 289	1 820
<b>Colombia</b>								
Anguilla	0	0	1 195	1 111	790	257	184	546
Panama	208	240	477	760	337	426	674	478
Chile	6	2	46	45	54	20	651	431
Brazil	8	19	529	125	47	54	206	412
United States	1 410	1 524	1 064	1 215	1 198	400	507	394
Netherlands	319	25	-818	-130	-109	-158	810	333
United Kingdom	3 747	17	35	200	386	194	390	301
Spain	599	492	289	564	-327	44	733	-12
<b>Costa Rica</b>								
United States	532	821	974	1 345	1 022	1 025	1 353	965
Mexico	37	22	71	20	7	40	183	357
Spain	14	13	57	141	79	28	247	303
Venezuela (Bolivarian Republic of)	7	14	21	20	9	15	34	142
Italy	24	16	19	19	10	-2	59	117
Colombia	22	-3	30	50	6	99	152	108
<b>Dominican Republic</b>								
Canada	111	142	113	383	773	329	1 067	1 194
Brazil	12	0	60	54	85	16	2	1 081
United States	457	662	536	360	455	307	459	594
Spain	215	308	605	181	151	299	192	115
Venezuela (Bolivarian Republic of)	6	17	53	11	31	140	2	55
<b>Ecuador<sup>c</sup></b>								
Mexico	7	43	-40	313	621	279	70	83
China	-20	12	85	47	56	45	80	86
Canada	29	-252	49	58	65	105	252	59
United States	-77	-160	50	-29	-607	-535	12	94
Spain	3	7	85	190	50	-18	50	48
Italy	0	0	11	17	1	10	25	27
<b>El Salvador</b>								
Panama	42	68	841	321	80	110	6	178
Luxembourg	...	...	...	...	...	-2	-14	67
United States	332	13	499	129	74	114	80	67
Honduras	...	...	...	...	...	-3	-3	47

Table I.A-3 (concluded)

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Guatemala</b>								
United States	192	198	326	229	151	343	127	200
Canada	3	4	25	54	74	114	305	140
Mexico	26	83	76	76	50	97	81	123
United Kingdom	9	13	63	66	58	-25	121	67
Spain	56	56	42	66	64	50	2	40
<b>Honduras<sup>c</sup></b>								
United States	303	339	460	339	347	325	...	...
Canada	17	107	139	37	24	117	...	...
United Kingdom	48	49	103	71	-89	58	...	...
Costa Rica	-2	2	8	2	6	37	...	...
Guatemala	25	17	15	40	13	39	...	...
Ireland	0	0	0	214	19	33	...	...
<b>Mexico</b>								
United States	11 796	13 035	12 665	11 395	7 319	5 369	10 700	7 403
Japan	168	-1 422	410	528	484	545	897	1 658
Canada	481	635	521	3 075	1 612	1 525	801	1 041
Netherlands	4 018	2 807	6 634	1 865	2 248	8 939	1 480	717
Switzerland	324	578	607	228	81	246	1 163	204
China	15	24	9	13	34	14	21	74
Chile	124	61	33	31	50	73	55	28
Brazil	46	50	25	93	128	379	336	13
Spain	1 702	1 441	5 416	5 105	2 613	1 885	3 492	-1 524
<b>Nicaragua</b>								
Canada	43	14	32	69	51	167	...	...
United States	51	53	84	126	88	88	...	...
Spain	17	10	45	59	25	33	...	...
Mexico	36	53	128	164	48	90	...	...
Venezuela (Bolivarian Republic of)	0	0	47	132	147	29	...	...
<b>Panama</b>								
United States	-74	121	230	492	-19	161	1 900	...
Colombia	18	102	407	49	135	193	540	...
Venezuela (Bolivarian Republic of)	9	69	53	86	68	16	274	...
Brazil		16	68	61	33	4	202	...
Argentina		-152	66	58	-22	12	145	...
Spain	141	172	273	189	327	344	140	...
Switzerland	314	282	190	-122	301	397	129	...
<b>Paraguay</b>								
United States	20	84	107	190	111	265	80	137
Brazil	10	52	41	42	-26	30	13	60
Mexico	0	0	0	0	-8	-18	-13	40
Luxembourg	-22	-66	69	23	13	-46	75	32
Spain	9	7	19	11	16	24	-5	31
<b>Uruguay</b>								
Argentina	106	282	373	534	432	588	814	...
Spain	203	81	153	232	55	75	196	...
Netherlands	29	-18	10	14	110	-2	172	...
Brazil	20	56	86	183	110	108	170	...
United States	35	67	43	144	167	-36	77	...
Belgium	0	1	46	-2	53	55	51	...

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of estimates and official figures as of 29 April 2013.

<sup>a</sup> Data from the Central Bank of the Republic of Argentina.

<sup>b</sup> FDI in 2005 corresponds to investments made under Legislative Decree 600.

<sup>c</sup> Data for 2012 refer to the cumulative total at the third quarter.

**Table I.A-4**  
**Latin America and the Caribbean: inward foreign direct investment by component, 2005-2012**  
*(Millions of dollars)*

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Antigua and Barbuda</b>								
Capital contributions	221	335	328	149	79	96	61	66
Inter-company loans	4	18	0	0	1	1	2	3
Reinvested earnings	13	9	12	12	5	5	5	5
<b>Argentina</b>								
Capital contributions	4 590	2 166	2 578	4 552	2 133	2 176	4 223	3 354
Inter-company loans	-481	263	1 846	4 777	-1 010	2 607	2 600	1 214
Reinvested earnings	1 156	3 108	2 050	396	2 894	2 273	3 059	7 984
<b>Bahamas<sup>a</sup></b>								
Capital contributions	641	843	887	1 032	753	960	971	465
Inter-company loans	0	0	0	0	0	0	0	0
Reinvested earnings	0	0	0	0	0	0	0	0
<b>Barbados</b>								
Capital contributions	192	265	420	339	140	222	381	...
Inter-company loans	26	49	24	80	94	41	176	...
Reinvested earnings	22	28	32	45	13	27	-25	...
<b>Belize</b>								
Capital contributions	88	98	100	141	80	80	103	197
Inter-company loans	21	-15	13	8	6	2	0	0
Reinvested earnings	19	25	30	21	23	15	-8	-4
<b>Bolivia (Plurinational State of)<sup>b</sup></b>								
Capital contributions	-122	-41	-120	-127	-5	-1	3	19
Inter-company loans	-147	55	215	232	-82	-150	-43	-7
Reinvested earnings	30	266	272	407	509	793	899	566
<b>Brazil</b>								
Capital contributions	15 045	15 373	26 074	30 064	19 906	40 117	54 782	52 838
Inter-company loans	21	3 450	8 510	14 994	6 042	8 390	11 878	12 434
Reinvested earnings	...	...	...	...	...	...	...	...
<b>Chile</b>								
Capital contributions	781	1 980	2 622	7 775	1 905	4 662	10 601	9 664
Inter-company loans	-223	-1 697	-232	1 146	463	2 848	2 863	10 078
Reinvested earnings	6 539	7 143	10 182	6 597	10 519	7 863	9 466	10 581
<b>Colombia</b>								
Capital contributions	9 270	5 193	7 462	7 803	4 951	3 814	9 171	9 501
Inter-company loans	-15	-31	42	23	42	-25	268	1 334
Reinvested earnings	996	1 495	1 983	2 332	2 144	2 969	3 999	4 989
<b>Costa Rica<sup>b</sup></b>								
Capital contributions	483	1 034	1 377	1 594	1 050	818	1 077	311
Inter-company loans	286	25	-2	39	-175	150	711	464
Reinvested earnings	92	410	521	446	471	497	368	431
<b>Dominica</b>								
Capital contributions	5	5	28	39	24	9	5	10
Inter-company loans	10	19	9	9	13	13	7	8
Reinvested earnings	16	5	10	9	6	3	2	2
<b>Dominican Republic</b>								
Capital contributions	688	765	1 616	2 199	704	1 333	1 156	...
Inter-company loans	-49	-394	-446	278	1 096	614	617	...
Reinvested earnings	484	714	498	394	365	351	598	...
<b>Ecuador<sup>a</sup></b>								
Capital contributions	119	136	151	229	278	265	252	227
Inter-company loans	-26	-260	-368	530	-227	-315	61	59
Reinvested earnings	400	395	411	298	256	213	328	301
<b>Grenada</b>								
Capital contributions	54	71	140	128	97	56	39	27
Inter-company loans	8	12	17	1	2	3	1	1
Reinvested earnings	11	12	15	12	5	5	5	5

Table I.A-4 (concluded)

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Guatemala</b>								
Capital contributions	18	87	260	197	94	265	198	363
Inter-company loans	118	-21	-30	75	19	-26	105	192
Reinvested earnings	372	526	515	482	488	568	723	652
<b>Honduras</b>								
Capital contributions	169	204	220	567	84	29	284	310
Inter-company loans	63	46	203	-40	65	378	56	52
Reinvested earnings	368	419	505	479	360	562	674	697
<b>Mexico</b>								
Capital contributions	12 989	6 340	17 110	12 015	8 461	14 124	10 088	2 926
Inter-company loans	7 400	6 175	6 121	7 499	3 787	4 410	4 189	5 275
Reinvested earnings	4 061	7 776	8 149	8 339	4 313	2 839	7 227	4 458
<b>Panama</b>								
Capital contributions	47	2078	719	918	898	948	1 025	835
Inter-company loans	448	293	178	136	105	540	426	692
Reinvested earnings	423	187	879	1 348	257	874	1 304	1 492
<b>Paraguay<sup>a</sup></b>								
Capital contributions	65	60	43	20	173	-10	318	148
Inter-company loans	3	-11	129	132	-102	129	219	75
Reinvested earnings	-15	46	30	57	23	110	-322	97
<b>Peru</b>								
Capital contributions	-145	874	733	2 981	1 828	2 445	276	4 637
Inter-company loans	0	240	924	656	-782	693	2 285	-659
Reinvested earnings	2 724	2 353	3 835	3 287	5 385	5 317	5 671	8 263
<b>Saint Kitts and Nevis</b>								
Capital contributions	38	19	41	78	49	40	29	15
Inter-company loans	63	93	98	103	85	77	78	81
Reinvested earnings	3	2	2	2	2	2	4	4
<b>Saint Lucia</b>								
Capital contributions	12	49	56	66	58	59	70	101
Inter-company loans	17	48	54	84	51	34	11	20
Reinvested earnings	12	13	11	9	2	4	4	4
<b>Saint Vincent and the Grenadines</b>								
Capital contributions	53	220	254	135	135	109	97	92
Inter-company loans	4	6	8	21	13	13	14	15
Reinvested earnings	25	11	15	11	3	4	5	6
<b>Suriname</b>								
Capital contributions	0	0	0	0	0	0	0	...
Inter-company loans	28	-163	-247	-231	-93	-248	-51	...
Reinvested earnings	0	0	0	0	0	0	121	...
<b>Trinidad and Tobago</b>								
Capital contributions	664	497	554	2 322	426	309	...	...
Inter-company loans	-16	-20	-21	-16	-12	-11	...	...
Reinvested earnings	292	406	297	495	296	251	...	...
<b>Uruguay</b>								
Capital contributions	231	576	550	1 012	990	1 617	1 409	1 664
Inter-company loans	484	699	448	540	82	8	263	410
Reinvested earnings	133	219	331	554	457	664	832	635
<b>Venezuela (Bolivarian Republic of)</b>								
Capital contributions	502	-134	-1 004	511	-2 855	-1 182	-673	-851
Inter-company loans	1	-2 323	813	110	-455	1 158	2 143	1 340
Reinvested earnings	2 086	1 949	1 696	1 120	1 141	1 873	2 308	2 727

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of estimates and official figures as of 29 April 2013.

<sup>a</sup> Data for 2012 refer to the cumulative total at the third quarter.

<sup>b</sup> Data for 2012 refer to the cumulative total at the second quarter.

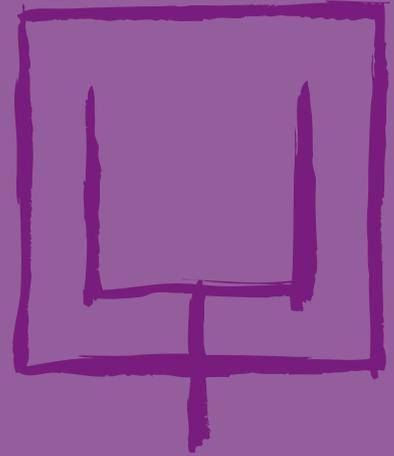
**Table I.A-5**  
**Latin America and the Caribbean: outward foreign direct investment by country, 2000-2012**  
*(Millions of dollars)*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Antigua and Barbuda	23	13	14	13	15	17	2	2	2	4	5	3	3
Argentina	901	161	-627	774	676	1 311	2 439	1 504	1 391	712	965	1 488	1 089
Bahamas <sup>a</sup>	51	42	28	46	256	77	136	141	172	89	88	304	116
Barbados	1	1	0	1	4	9	44	82	-6	-56	-54	-28.5	
Belize	5	0	0	39	5	21	6	5	8	3	2	3	1
Bolivia (Plurinational State of)	3	3	3	3	3	3	3	4	5	-3	-29	0,3	0
Brazil	2 282	-2 258	2 482	249	9 807	2 517	28 202	7 067	20 457	-10 084	11 588	-1 029	-2 821
Chile	3 987	1 610	343	1 709	2 145	2 135	2 212	4 852	9 151	7 233	9 461	20 373	21 090
Colombia	325	16	857	938	142	4 662	1 098	913	2 486	3 348	6 842	8 280	-248
Costa Rica	8	10	34	27	61	-43	98	262	6	7	25	58	426
Dominica	3	4	0.6	0.5	1.3	13	3.0	7	0.3	0.6	0.5	0.0	0.0
El Salvador	-5	-10	-26	19	-3	113	-26	95	79	0	0	0	0
Grenada	2	2	3	1	1	3	6	16	6	1	3	3	2
Guatemala	0	10	22	46	41	38	40	25	16	26	24	17	39
Honduras	7	3	7	12	-6	1	1	1	-1	4	-1	18	6
Jamaica	74	89	74	116	60	101	85	115	76	61	58	75	90
Mexico	0	4 404	891	1 253	4 432	6 474	5 758	8 256	1 157	7 664	15 045	12 139	25 597
Paraguay	6	6	6	6	6	6	7	7	8	8	7	7	0
Peru	0	74	0	60	0	0	0	66	736	411	266	113	-57
Saint Kitts and Nevis	3	2	1	2	7	11	4	6	6	5	3	2	0
Saint Lucia	4	4	5	5	5	4	4	6	5	6	5	4	3
Saint Vincent and the Grenadines	0	0	0	0	0	1	1	2	0	1	0	0	0
Suriname	0	0	0	0	0	0	0	0	0	0	0	0	1
Trinidad and Tobago	25	58	106	225	25	341	370	0	700	0	0	1060	1 332
Uruguay	-1	6	14	15	18	36	-1	89	-11	16	-60	-7	2
Venezuela (Bolivarian Republic of)	521	204	1 026	1 318	619	1 167	1 524	33	1 150	1 838	2 671	-1 141	2 460

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of estimates and official figures as of 29 April 2013.

<sup>a</sup> Data for 2012 refer to the cumulative total at the third quarter.





## Transnational company profits: repatriation and reinvestment

### A. Introduction

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## A. Introduction

Over the past decade the profits of transnational corporations operating in Latin America and the Caribbean have increased fivefold. Returns swelled from an average of US\$ 20 billion (at current prices) between 1998 and 2002 to US\$ 113.067 billion in 2011. This surge reflects both the growing importance of transnational corporations in the region's economy and their higher average returns, on the back of robust domestic demand and high prices for export commodities. The magnitude of this change calls for an examination of the role of FDI as a source of capital for these economies and its contribution to growth and structural change in the region.

FDI has been on the rise in Latin America for two decades. Before 1993, inflows to the countries of the region came to less than US\$ 15 billion a year. Then they began to climb, hitting new highs every year and reaching a record US\$ 88.9 billion in 1999. Since then, FDI inflows have fluctuated with the business cycle, but overall they have continued to trend upwards, surpassing US\$ 165 billion in 2012. To varying degrees almost all countries in the region have built up substantial FDI liabilities over the last 20 years. Transnational corporations are present in almost all sectors of the economy and, in recent years, thanks to rising domestic demand and high export commodity prices, they have been very profitable.

This FDI income rose sharply throughout the region between 2003 and 2007 and has remained at a relatively steady level since then. It is unlikely to drop back down to the levels seen 10 years ago, owing to the region's large inward FDI stock. Between 2006 and 2011, FDI income averaged US\$ 92 billion annually, representing 92% of the value of FDI inflows during the same period. In some countries (such as Argentina, Chile and Peru), capital inflows in the form of FDI are being completely neutralized by capital outflows in the form of FDI income. In other words, the effect that the investments of transnational corporations are having on the balance of payments in Latin America and the Caribbean has changed substantially. FDI can still be seen as a tool with the potential to shift the structure of the economy towards more productive and sustainable sectors and activities, but it is no longer possible to equate FDI with net inflows of capital that help to maintain equilibrium in the balance of payments.

In this context, the profits made by the subsidiaries of foreign companies can affect the sustainability of each country's external balance. The pattern of earnings varies by country depending on the predominant investment strategy. The countries where earnings are highest are those where natural-resource-seeking strategies have been the prime driver. In those countries, FDI income rises and falls in the short term in line with export commodity prices. Other sectors have also experienced surges in the profits generated by transnational corporations, particularly some industries and services oriented towards the domestic market, such as the telecommunications and automotive sectors. Depending on the structure of its FDI stock, each country in the region should take into account how the domestic and external environment affects the profits of transnational corporations and the external balance. Another important factor to consider is whether these companies decide to reinvest these earnings in the countries where they were generated or repatriate them to the parent company.

The rise in foreign company earnings, both in absolute terms and as a percentage of GDP, has an increasingly significant impact in terms of countries' tax revenues. To avoid erosion of the tax base, the region's countries should create mechanisms to prevent the transfer of profits generated in their economies to other jurisdictions with lower tax rates. This presents an administrative, technical and political challenge to the world's increasingly globalized economies and will require international coordination.

Not only has there been an increase in the FDI income that countries in the region generate and send to other countries. With the expansion of the trans-Latins in recent years, there has also been an increase in the income that these countries receive as a result of the profits generated by their companies abroad. This naturally attenuates the balance-of-payments impact of rising FDI income generated in the economy, but necessarily to a limited degree for two reasons. First, a wide gap still separates the FDI income generated in the region (US\$ 113 billion in 2011) from its FDI income inflow (US\$ 17 billion). Second, while almost all the countries in the region generate large amounts of FDI income, income inflows are concentrated in three or four economies.

FDI income is on the rise worldwide. Section B of this chapter charts this variable in the main regions of the world, noting that Latin America and the Caribbean has experienced some of the highest growth in the past decade. Section C compares FDI income with other components of the balance of payments in the region to assess to what extent the profits of transnational corporations now determine the external balance. Although the chapter focuses its analysis on FDI income generated in the region, it also quantifies other capital earnings (those generated in and received by the region), situating them in the overall context of capital flows and tracking them over time. Thus it provides a better understanding of how the region's external financing structure has changed over the past 20 years (becoming more dependent on FDI and less on other types of investment), bringing with it an expansion in FDI income in relation to interest on debt and negotiable instruments.

The aggregate figures for FDI income mask significant variations among the countries in the region and (where data are available) from sector to sector. Section D groups countries according to the average returns on their FDI stock and analyses which sectors generate the most income from FDI in the region, among which the extractive industries stand out in particular. Before setting out conclusions, section E reviews two specific problems caused by the accumulation of profits by transnational corporations: the difficulty of collecting taxes from these entities and disequilibrium in the balance of payments.

## B. The rise in FDI income during the past decade

### 1. Trends in Latin America and the Caribbean and worldwide

FDI income<sup>1</sup> has increased dramatically worldwide over the past decade, especially since 2003. This is attributable primarily to the increase in FDI flows since the 1990s, which has strengthened the role of transnational corporations in the world economy. As FDI flows have shifted towards developing economies (see chapter I), much higher earnings have also been generated in these countries. Thus, FDI income nearly quadrupled (at current prices) in developing regions between 2002 and 2011, while in the United States, the European Union and Japan, it increased just over twofold (see table II.1). More important than those trends, however, is the balance between inflows and outflows: while inward FDI income far exceeded FDI income outflows in Europe, the United States and Japan (which are home to the world's largest transnational corporations), developing economies sent abroad much more than they received.

Apart from Latin America and the Caribbean, East Asia and Africa are the regions where the largest increases in FDI income have been seen in the last decade (see table II.1). In absolute terms, the upsurge in FDI income generated in China stands out in particular, burgeoning from less than US\$ 20 billion in 2004 (less than that generated in Latin America and the Caribbean) to US\$ 145.241 billion in 2011 (30% more than in Latin America and the Caribbean) (see figure II.1).<sup>2</sup> FDI income from South-East Asia has grown at a much more modest pace (merely doubling), as has that from the Middle East. Income from South Asia has grown faster than the average rate, although the total amount of FDI in the region remains relatively small for the size of the economies.

Despite having been overtaken by China, Latin America and the Caribbean is still one of the regions with the highest growth in FDI income in the past decade, in both absolute and relative terms. From 1990 to 2002, the region's FDI income barely doubled (at current prices), but since that year it has increased more than fourfold. Despite a setback as a result of the 2009 crisis, growth rates picked up once again in the two subsequent years. By comparison, from 2006 to 2011, the amount of FDI revenue generated in Latin America and the Caribbean was equivalent to 92% of its FDI inflows.<sup>3</sup>

<sup>1</sup> The FDI income generated in a country is defined as the profits that foreign companies obtain from their subsidiaries in that country. FDI income received by a country is defined as the profits that domestic companies obtain from their foreign subsidiaries. In this document the terms "FDI income" and "transnational company profits" will be used interchangeably depending on the context.

<sup>2</sup> Besides China, the leading FDI income-generating economy in East Asia is Hong Kong Special Administrative Region of China, which topped US\$ 100 billion in 2011.

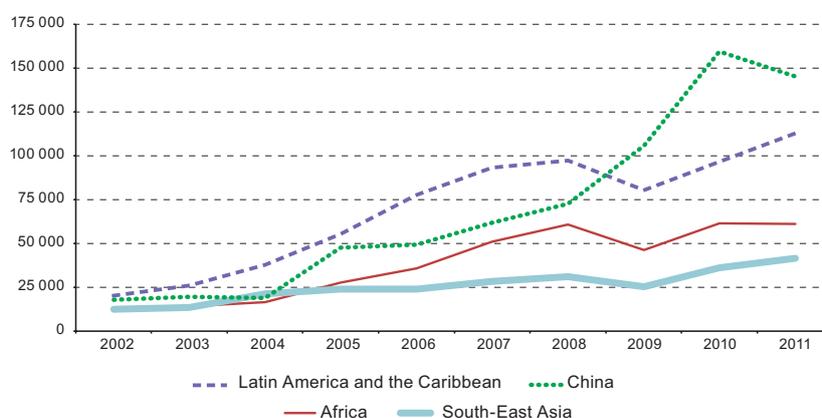
<sup>3</sup> In China, FDI income exceeded FDI inflows in 2009, 2010 and 2011.

**Table II.1**  
**FDI income generated in the major regions, 2000-2011**  
*(Millions of current dollars)*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>World</b>	361 153	285 329	347 433	475 850	622 123	864 959	1 050 336	1 288 434	1 190 426	1 073 605	1 355 039	1 489 920
<b>Developing economies</b>	106 086	108 095	107 269	120 279	152 762	229 876	279 504	355 931	390 455	382 071	509 337	527 827
Latin America and the Caribbean	23 289	21 585	20 425	26 163	37 827	55 303	77 895	93 277	97 427	80 627	96 525	113 067
Africa	10 152	10 697	11 598	14 287	16 654	27 774	35 874	50 960	60 841	46 498	61 584	61 351
Middle East	5 744	7 693	6 939	7 643	9 278	10 793	13 489	17 560	22 083	19 839	23 223	26 074
South Asia	721	2 932	3 206	3 656	5 388	7 979	11 542	15 236	16 585	16 196	19 082	20 562
South-East Asia	11 004	10 945	12 470	13 716	21 274	23 996	24 123	28 330	30 967	25 485	36 083	41 597
East Asia	55 583	54 550	52 727	55 172	62 747	104 166	116 891	151 868	163 980	192 971	271 915	264 654
<b>Developed economies</b>	240 481	159 069	232 936	337 365	452 642	605 592	719 991	865 094	705 004	629 981	765 391	765 391
United States	56 910	12 784	43 244	73 749	99 754	127 978	159 187	136 261	139 073	112 392	153 267	153 267
European Union	137 448	107 360	150 645	209 291	279 967	368 341	447 812	566 078	410 524	402 713	471 555	471 555
Japan	2 615	4 122	5 320	5 041	6 343	9 484	9 011	14 886	11 770	8 766	5 818	5 818

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and data provided by the International Monetary Fund (IMF).

**Figure II.1**  
**Developing economies: FDI income, 2002-2011**  
*(Billions of current dollars)*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and data provided by the International Monetary Fund (IMF).

In 2012 FDI income generated in the region declined slightly compared with 2011, but nevertheless remained high. At an estimated US\$ 105 billion, this was the second highest figure in history. The decline was concentrated in Brazil, where FDI income shrank by 23% with respect to 2011 as the economic downturn impacted the results of transnational corporations that mostly serve the domestic market. Transnational corporations in Chile and Peru also saw their profits fall slightly, while on the contrary in Colombia such companies saw their profits rise.

FDI income flowing into the economies of Latin America and the Caribbean (that is, the profits generated by foreign subsidiaries of the trans-Latins) amounted to US\$ 16.139 billion in 2011 compared with the US\$ 113.067 billion generated in the region. The ratio between foreign-company profits in the region and profits generated by trans-Latins abroad is in line with the amounts invested in each case. However, FDI income received by the region has grown at a similar pace to its FDI income outflow over the past decade, and at a higher rate during the past three years. This reflects the fact that the international expansion of the trans-Latins began relatively late but has accelerated in recent years.

## 2. Repatriation and reinvestment of profits

Income from foreign direct investment can be used in two ways. First, it can be reinvested in the economy where it was generated (usually in the same subsidiary). Second, it can be repatriated to the parent company to be invested

in other countries, distributed as dividends or retained as cash in the business. While all FDI income is recorded as a debit (outflow) on the income side of the balance-of-payments current account, any share of this income that is reinvested counts as a credit in the financial account of the balance of payments, as one of the three components of FDI. In the case of Chile, for example, 55% of the country's FDI inflows in 2011 (US\$ 9.589 billion) was not net income in the balance of payments. This amount represents the portion of the profits of transnational corporations that was reinvested in the country and was therefore recorded as a debit in the current account and as a credit in the financial account.

In Latin America and the Caribbean as a whole, transnational corporations repatriate a slightly higher proportion of their profits (55%) than they reinvest (45%).<sup>4</sup> Within this relative balance at the regional level, there are large differences between countries: Argentina, the Bolivarian Republic of Venezuela Colombia and Dominican Republic, stand out as having a lower percentage of reinvestment. In Guatemala, Honduras, Mexico and Uruguay the reinvestment rate is higher. The high rate of reinvestment in Mexico (64%) is attributable mainly to the predominance of companies from the United States among its foreign investors. The tax treatment of profits in the United States discourages companies from repatriating profits, which is why they keep an extraordinarily high proportion of their foreign subsidiaries' profits offshore (see box II.1).

Repatriation rates are generally higher in Caribbean economies than in Latin America, with the highest rates seen in Barbados, Belize and Suriname. Jamaica and Trinidad and Tobago post average repatriation rates for the region, at 58% and 54%, respectively.

#### Box II.1

##### The fiscal situation of companies in the United States: reinvesting profits to pay less tax

Not all reinvested profits are intended to expand the production capacity of a company's subsidiaries; sometimes money is simply "parked" abroad for financial or tax reasons, as is the case of many United States transnational corporations. These companies had accumulated an estimated US\$ 1.3 trillion in their overseas subsidiaries by the end of 2010, an amount which has undoubtedly increased in the past two years. Of the businesses in the S&P 500 index (the 500 leading publicly listed companies in the United States) 89% are transnational corporations that generate on average 49% of their profits outside the United States.

In the United States, there is a fiscal incentive to reinvest profits abroad. Transnational corporations from that country are taxed in the United States on their global profits, minus any taxes paid in the country where the profits were generated. For example, a company that pays taxes in Mexico on the profits made by its subsidiaries at a rate of 30% must pay a further 5% in the United States on those same profits to match the rate of 35% that is applied in the United States. However, the difference is paid only when the money returns to the United States, thus encouraging companies to keep their profits abroad.

Originally the tax rate on profits in the United States (35%) used to be in line with that applied in the main economies where the country's transnational corporations were operating. However, most of these countries have lowered their corporate rates over the past two decades, which now means that 95% of transnational corporations from the United States have to pay additional taxes to repatriate earnings. Studies put this fiscal cost at an estimated 20% to 28% of profits generated abroad.

In accounting terms, the profits that are not repatriated are referred to as "permanently reinvested earnings," whether they take the form of productive assets (57% of the total) or are held in cash (43%). Over the past decade many companies have been concentrating such income in low-tax jurisdictions, and today one quarter of all such profits are divided between only seven countries with especially low corporate rates; indeed, 12% of all non-repatriated profits of United States transnationals are located in Ireland. On the other hand companies with a small tax liability in the event of repatriating profits to the United States tend to reinvest in high-growth subsidiaries, rather than maintaining large cash balances.

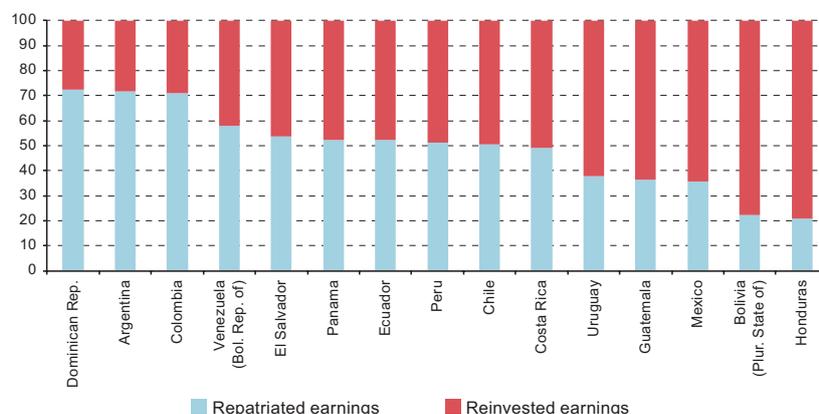
In short, the remarkable growth in reinvested earnings abroad by United States companies is partly driven by the business opportunities that arise overseas and partly by an attempt to reduce the tax burden; in the latter case, profits are held primarily in cash and do not contribute to building capacity in the receiving economies.

Whether measures should be taken to put an end to this incentive is currently a hotly debated issue in the United States. The aims of such a move range from increasing tax revenue (such measures could raise up to US\$ 360 billion) to promoting the investment of these funds in productive projects in the United States. Implementing such a measure could influence corporate behaviour, result in substantial negative FDI flows from the United States and have serious repercussions for some economies in the region, such as Mexico, which receive a large proportion of their FDI from the United States.

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of J. Blouin, L. Krull and L. Robinson, "Where in the world are 'permanently reinvested' foreign earnings?," 2012.

<sup>4</sup> Calculated on the basis of data from Argentina, Bolivarian Republic of Venezuela, Chile, Colombia, Costa Rica, Dominican Republic, Mexico, Panama, Peru, Trinidad and Tobago and Uruguay between 2005 and 2011. These economies account for 66% of total FDI income in the region.

**Figure II.2**  
**Latin America (selected economies): repatriated and reinvested FDI income, 2006-2011**  
*(Percentages)*



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

**Figure II.3**  
**The Caribbean (selected economies): repatriated and reinvested FDI income, 2006-2011**  
*(Percentages)*



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

This pattern of distribution of profits has remained relatively unchanged over the past decade, though some countries have seen more fluctuations than others. The percentage of profits repatriated to parent companies was almost the same before and after the international financial crisis. The percentage of profits that were repatriated even declined slightly, from 54% in 2005-2007 to 52% in 2009-2011.<sup>5</sup> This shows that the economic crisis in the United States and Europe did not force multinational companies operating in the region to repatriate a greater proportion of their profits from Latin America. While some corporations have used the profits generated in the region to recapitalize parent company operations, this will have been offset by the expansion of investment in subsidiaries with the best growth prospects, thus boosting levels of reinvestment.

With the reinvestment rate holding steady during a period in which the income of transnational corporations has increased fivefold, the reinvestment of profits has skyrocketed in virtually all of the region's economies, both in absolute terms and as a proportion of total FDI. As described in chapter I, the reinvestment of profits has gained momentum, building up from only 10% of total flows in 2002 to 43% of total flows in the past five years.

<sup>5</sup> The repatriation rate for Argentina was unusually high in 2008, as a one-off operation by YPF, a subsidiary of the Spanish company Repsol, led to a disproportionate surge in repatriated profits.

The worldwide uptrend in reinvested profits as a proportion of FDI began only after the financial crisis of 2008. In effect, the drop in global FDI flows was seen most markedly in the capital component and inter-company loans, while the reinvestment of profits dipped in 2008 but sprang back in 2009 and 2010 (UNCTAD, 2012).

While all profits that are not repatriated are recorded as reinvested earnings, that money is not necessarily being spent in its entirety on new production capacity. In recent years, there has been a marked increase in the accumulation of cash by the world's leading companies. It is estimated that the assets held in cash and short-term investments by the 100 largest transnational corporations worldwide increased by one third between 2008 and 2010, when their value surpassed US\$ 1 trillion (UNCTAD, 2012), and presumably a good portion of this amount is held by overseas subsidiaries. It is estimated that approximately half of the non-repatriated profits generated abroad by United States companies remain in liquid assets (Blouin, Krull and Robinson, 2012).<sup>6</sup>

## C. Transnational corporation profits in the context of the balance of payments

Regardless of whether transnational corporate profits are repatriated or reinvested they are recorded as outflows for balance of payments purposes. They have become the main component of the income balance, as well as one of the main determinants of the region's aggregate balance of payments equilibrium. The surge in FDI inflows and outflows of FDI earnings has to be analysed in the context of an abundance of capital at the global level at a time when Latin America and the Caribbean has ample access to external financing.

Global capital flows experienced unprecedented growth during the first decade of this century. Cross-border capital movements peaked in 2007 at nearly US\$ 12 trillion (20% of nominal global GDP), up from just over US\$ 2 trillion (6.5% of global GDP) in 2002 (see figure II.4). This overabundance of capital, resulting in part from exceptionally low interest rates in the developed economies, led to the emergence of financial bubbles and growing private debt, sowing the seeds of the subsequent crisis.<sup>7</sup>

In 2008, cross-border capital flows contracted by close to 90%, and even though the global economic recovery since 2010 has caused flows to pick up once again, they still fall short of the 2007 peak. Developed countries have borne the brunt of this decline, while cross-border flows to emerging countries have soared, both in value and as a proportion of the total.

Cross-border flows to Latin America and the Caribbean followed a similar trend to global flows, but they did not plummet quite so dramatically in 2008-2009 and subsequently recovered more rapidly. The financial integration, in GDP terms, of the region's countries has been on the rise in the past decade, reaching 7% in 2010, which is very close to the world average (see figure II.4).<sup>8</sup>

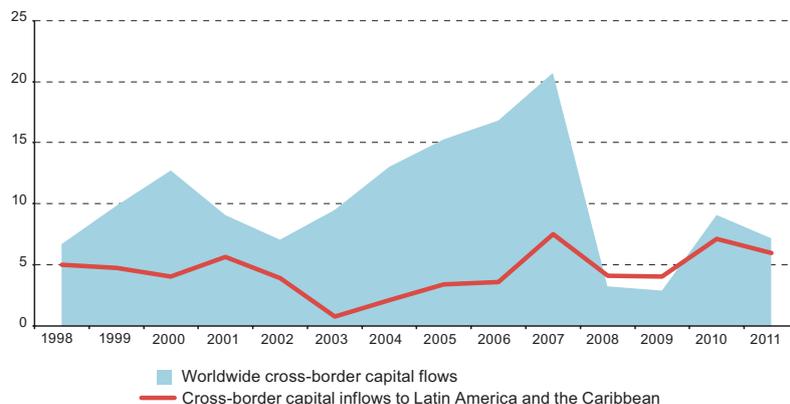
The structure of capital inflows in Latin America and the Caribbean is similar to that in other emerging regions (IIF, 2011), with FDI outweighing other investment (see definitions in box II.2). Indeed, FDI has exceeded portfolio flows and other investment every year except in 1994, 2007 and 2010, and has proved to be significantly less volatile (see figure II.5). Since 1996, the sum of direct investment and other investment has outweighed FDI in only 2007 and 2010.

<sup>6</sup> The United States is the leading direct investor in Latin America and the Caribbean, but the behaviour of firms from that country in this respect is not necessarily representative of other investors, for the reasons given in box II.1. It is also to be assumed that most of these liquid assets are held by subsidiaries located in tax havens.

<sup>7</sup> Interest rates averaged 4.5% between 2005 and 2007, compared with an average of 1.5% between 2001 and 2005, which was the lowest level in recent history (using as a reference the United States discount rate since 1980).

<sup>8</sup> Financial integration is measured as total cross-border capital inflows (direct investment, portfolio investment and other investment) as a proportion of nominal GDP.

**Figure II.4**  
**World and Latin America and the Caribbean: cross-border capital flows, 1998-2011**  
*(Percentages of nominal GDP)*



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and information provided by the United Nations Conference on Trade and Development (UNCTAD).

### Box II.2

#### Foreign investment flows and income as components of the balance of payments

Cross-border capital flows are recorded in the national balance of payments, specifically in the capital and financial account. Foreign investment, both inflows and outflows, is classified into three categories depending on the type of investment:

- (i) Direct investment is the category of investment whereby an entity seeks to obtain a lasting interest in an enterprise and establish a significant degree of influence over the management of that enterprise. In practical terms, a direct investor must own 10% or more of the enterprise's capital. All subsequent financial transactions (acquisition of new assets, bonds and notes, and commercial or financial loans) are also counted as direct investment.
- (ii) Portfolio investment refers to transactions in negotiable securities. The main components of this type of investment are stocks, bonds and notes (public or private) and money-market instruments. Stock transactions that are covered under the category of direct investment are excluded. Financial derivatives, whether negotiable or not, are included in this category, although they are not commonly traded in Latin America and the Caribbean.

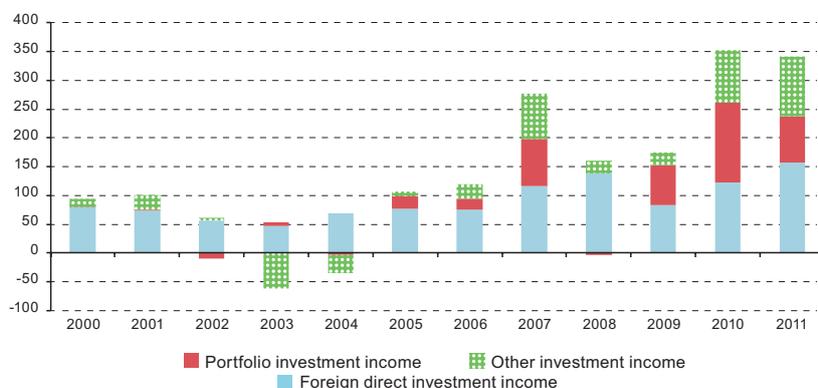
- (iii) Other investment covers commercial and financial loans, and deposits, including foreign exchange holdings. This is a residual category of the financial balance that essentially refers to loans not included in negotiable securities (which are classed under portfolio investment).

The returns on these investments are reflected in the income balance, which is part of the current account, together with the balance of goods, services and current transfers. FDI income reflects the profits made by the subsidiaries of transnational companies; portfolio investment income is the dividends or capital gains generated by fixed- and variable-income investments; and other investment income refers to the interest generated on loans and deposits.

While the sums of foreign investment received are recorded as positive entries, the income they generate is registered as a negative flow. Conversely, investments made abroad by domestic companies are recorded as negative entries, while the income that those investments generate is recorded as positive (revenues).

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC).

**Figure II.5**  
**Latin America and the Caribbean: inflows by type of investment, 2000-2011**  
*(Billions of dollars)*



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

Privatizations and foreign-debt securitization made portfolio investment the primary source of foreign capital for the region between 1990 and 1996. During that period, average portfolio investment inflows to the region amounted to US\$ 40 billion a year, against US\$ 22 billion in FDI (both at current prices).

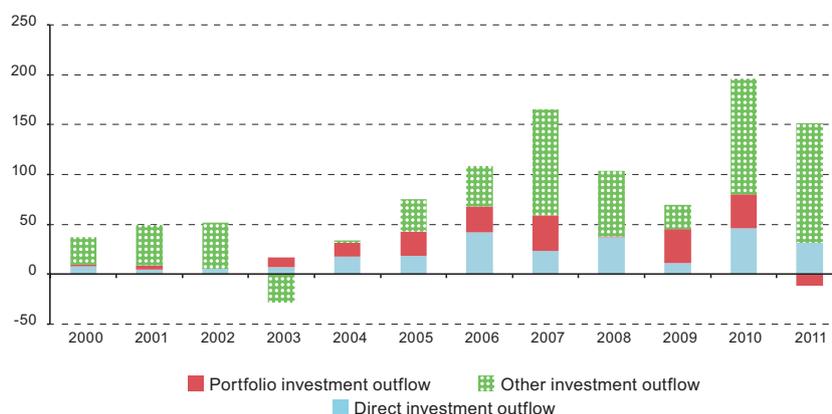
Thereafter, portfolio investment went through a period of decline that steepened between 2000 and 2004 when a wave of divestments was sparked by a series of emerging-market crises that began in Asia in 1997 and continued in Brazil and the Russian Federation in 1998 and in Argentina in 2001. Even though the amounts of portfolio investment rose once again from 2007 (with the exception of 2008), averaging over US\$ 90 billion a year, they remain lower than FDI inflows. Furthermore, portfolio investment is much more concentrated than FDI in a few countries: Brazil, Mexico and Chile, followed at some distance by Colombia and Peru, receive almost all of these investments in the region. The smaller economies of Central America and the Caribbean are virtually excluded from these investments, with the partial exceptions of the Dominican Republic, El Salvador and Panama. The reason for this is that the region's equity and debt markets lack the depth of their counterparts in the advanced economies. In addition, the need for external financing to cover the fiscal deficit has been modest.<sup>9</sup>

The "other investment" category predominated in Latin America and the Caribbean until the 1980s, but the external debt crisis caused bank loan and deposit flows to the region to turn negative between 1990 and 2005 (with some fluctuations); only since then have they regained significant levels. Between 2006 and 2011, other investment averaged US\$ 50 billion a year (just over half of the amount of FDI).

Investment flows originating in the countries of Latin America and the Caribbean have a completely different structure, with a predominance of loans and deposits amounting to more than double the combined sum of FDI and portfolio investment. Thus, the region's funding capacity over much of the past decade, attributable to current account surpluses, has been used primarily to provide the rest of the world with loans and deposits and to accumulate reserve assets. Almost all the region's countries have significant outflows of loans and deposits in relation to the size of their economies, but in absolute terms the countries that stand out the most are Argentina, the Bolivarian Republic of Venezuela, Brazil and Mexico.

The region's portfolio investments abroad have shown very little momentum in the past few years, and are even lower (at current prices) than they were 10 years ago. Only Chile stands out as a major investor in shares and negotiable securities abroad. It accounted for 45% of all flows from the region between 2005 and 2010, owing to the creation of sovereign wealth funds in 2006 and 2007 (whose assets must be invested in top-rated fixed-income instruments) and pension fund investment activity.

**Figure II.6**  
**Latin America and the Caribbean: outflows by type of investment, 2000-2011**  
(Billions of dollars)



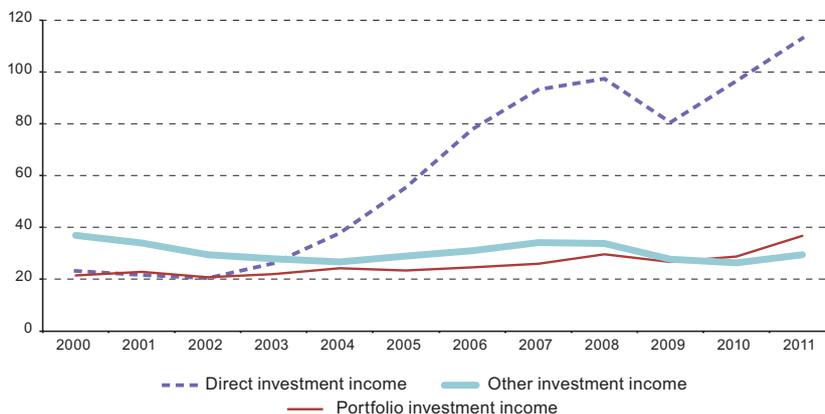
**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures.

<sup>9</sup> For more details on financial market flows, structure and characteristics in Latin America and the Caribbean, see Manuelito and Jiménez (2010).

These contrasting trends in the region's inward and outward investment flows are reflected in its corresponding income outflows and inflows. While outflows of FDI income have surged, the income generated by foreign portfolio investment has risen only modestly, from approximately US\$ 20 billion per year between 1997 and 1999 to US\$ 30 billion at current prices over the past few years, which means that its share as a percentage of GDP has shrunk by one third. Outflows of income generated by other investment (interest paid) are, in current dollars, lower now than in 1990 or in 2000, and slightly less than portfolio investment income outflows (see figure II.7).

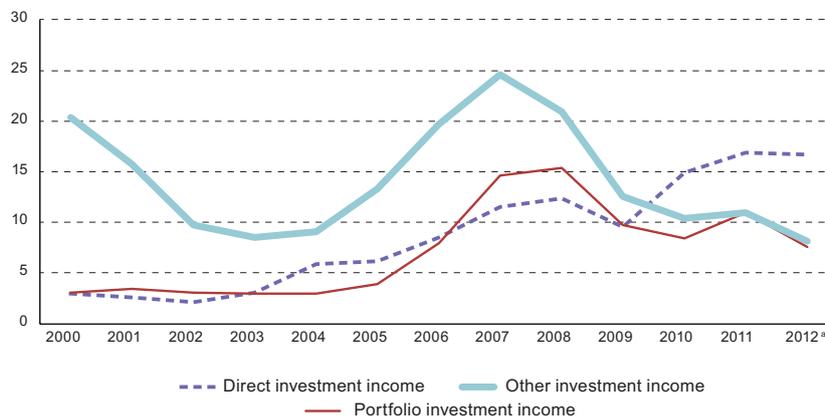
Other investment income inflows were higher than for the other categories until 2009, peaking at US\$ 24.623 billion in 2007. Since then, they have fallen by more than half owing to the worldwide drop in interest rates (especially in the United States and other developed economies) and were surpassed for the first time by FDI income and even by portfolio investment income (see figure II.8).

**Figure II.7**  
Latin America: capital income outflows, 2000-2011  
(Billions of dollars)



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

**Figure II.8**  
Latin America: capital income inflows, 2000-2012  
(Billions of dollars)



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

<sup>a</sup> Preliminary figures.

Changing capital flows to the region over time have marked three distinct periods according to the predominant form of external financing. Bank loans (other investment) were the main type of foreign investment until 1990, when this source dried up in the aftermath of the external debt crisis of the 1980s. For a short period of time, until 1996, portfolio investment was the main component of foreign investment flowing to the region. This was attributable to

the conversion of a certain amount of bank debt into negotiable assets, the financial opening and liberalization of many countries in the region and an international context in which priority was given to portfolio investment in the economies that would come to be renamed the “emerging markets”. This context changed dramatically with the crises that hit these markets between 1997 and 2001, and although portfolio investment in Latin America has picked up, and even reached record levels in 2005, it has not regained the top spot from FDI in terms of the amounts invested.

The patterns in income from the various types of investment are consistent with their flows. While income from portfolio investments and loans and deposits grew modestly or even decreased over time (even at current prices), income paid to transnational corporations has skyrocketed. In the 1980s, external debt interest payments accounted for 87% of the total investment income flowing from Latin America and the Caribbean, while FDI income represented a minor flow. Towards the end of the 1980s this pattern was broken and a new framework emerged whereby portfolio investment income (sovereign bonds and private securities) played a central role in the outflows from the region. Portfolio investment income began to increase in 1989, accounting for 26% of total investment income between 1994 and 2004 and mirroring the change in capital flows to the region described above.

Another change in the funding pattern, and thus in the flows of investment income, began to take shape in the wake of the emerging-market financial crises between 1997 and 2001. The amount of portfolio investment income has remained significant since the 1990s, but its growth slowed owing to the crises and FDI income began to climb in 2003.

Considering the balance of payments for the region as a whole, total FDI income (almost US\$ 100 billion on average between 2008 and 2011) far outweighs the goods trade surplus (less than US\$ 50 billion) (see table II.2).

**Table II.2**  
**Latin America and the Caribbean: main components of the balance of payments, 2005-2011**  
(Millions of dollars)

Heading	2005	2006	2007	2008	2009	2010	2011
<b>Balance on current account</b>	34 681	48 470	9 131	-35 455	-27 230	-57 600	-75 193
Exports of goods, f.o.b.	571 556	684 041	770 189	895 935	695 685	882 435	1078 697
Imports of goods, f.o.b.	495 006	590 127	706 325	859 171	649 420	839 020	1014 303
<b>Balance on goods</b>	76 550	93 913	63 864	36 764	46 265	43 415	64 393
Services (credit)	79 088	88 883	104 559	119 079	108 589	120 977	133 096
Transportation (credit)	16 600	18 440	21 005	25 235	20 801	24 128	27 208
Travel (credit)	38 524	42 197	46 942	50 381	46 786	50 036	51 644
Other services (credit)	23 965	28 246	36 612	43 463	41 002	46 813	54 245
Services (debit)	91 899	102 731	125 271	148 261	138 561	167 522	196 577
Transportation (debit)	33 603	38 135	46 107	56 007	43 139	53 674	62 308
Travel (debit)	23 617	26 200	31 320	35 325	33 087	39 890	47 235
Other services (debit)	34 679	38 396	47 844	56 929	62 335	73 958	87 034
<b>Balance on goods and services</b>	63 739	80 066	43 152	7 582	16 292	-3 129	912
<b>Income (credit)</b>	25 595	38 409	53 143	51 401	34 398	36 271	41 497
Employees' compensation (credit)	2 212	2 277	2 313	2 743	2 550	2 534	2 780
Investment income (credit)	23 383	36 132	50 831	48 657	31 848	33 737	38 717
Direct investment income (profits and dividends) (credit)	6 114	8 473	11 538	12 337	9 575	14 883	16 871
Portfolio investment income (credit)	3 919	7 923	14 669	15 387	9 711	8 454	10 912
Other investment income (interest received) (credit)	13 351	19 735	24 623	20 934	12 562	10 401	10 935
<b>Income (debit)</b>	108 090	134 193	154 065	161 523	135 536	152 177	179 853
Employees' compensation (debit)	509	657	552	638	476	531	615
Investment income (debit)	107 581	133 535	153 512	160 884	135 060	151 645	179 237
Direct investment income (profits and dividends) (debit)	55 303	77 895	93 277	97 427	80 627	96 525	113 067
Portfolio investment income (debit)	23 391	24 638	26 019	29 700	26 736	28 785	36 727
Other investment income (interest paid) (credit)	28 887	31 003	34 216	33 757	27 697	26 336	29 444
<b>Balance on income</b>	-82 495	-95 783	-100 921	-110 122	-101 138	-115 906	-138 355
Current transfers (credit)	57 484	68 919	73 550	74 714	66 128	71 869	72 974
Current transfers (debit)	4 047	4 731	6 650	7 629	8 513	10 434	10 724
<b>Balance on current transfers</b>	53 437	64 188	66 900	67 085	57 615	61 435	62 250
Balance on capital account	2 663	6 993	7 312	2 469	5 931	9 793	3 482
Balance on financial account	32 691	6 191	115 591	69 952	77 528	158 090	192 263
Errors and omissions	-23 891	-3 251	-4 203	5 657	-15 543	-27 308	-16 355

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

Investment income inflows cannot offset this imbalance. In fact, between 2005 and 2011, they were equivalent to about 26% of the region's outflows under the same heading. The greatest difference is in relation to direct investment, where inflows represented only 13% of outflows. Outbound capital income in 2005-2011 totalled US\$ 1 trillion; inbound capital income came to US\$ 263 billion.

This imbalance is consistent with the fact that Latin America receives more FDI than it sends; despite the growth in FDI outflows, this pattern is expected to continue in the coming years. Furthermore, while FDI income outflows are significant for all countries of the region, inflows under the same heading are notable only in those economies with substantial direct investments abroad (Brazil, Chile, Colombia and Mexico).

It is important to note that, in the past decade, Latin America and the Caribbean has been a net lender in the global economy: the current account for the countries of the region as a whole posted a surplus of US\$ 12.2 billion (at its peak in 2003-2007, the cumulative surplus for this account was US\$ 133 billion). Even though the region has been able to maintain a healthy current account and, consequently, has the capacity to provide funding for other regions, its capital income outflows have remained higher than inflows. In fact, the income sub-account has been the poorest performer for the region during the past decade, owing primarily to the outflows of direct investment income.

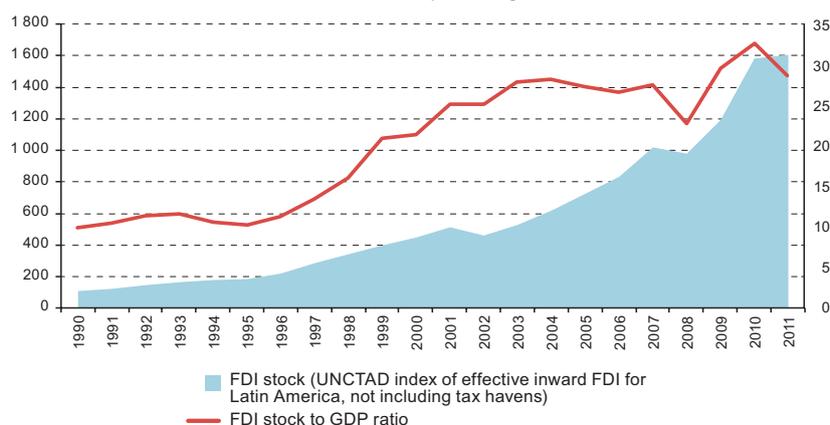
## D. Profits by country and sector

### 1. FDI stock and profitability

The profits of transnational corporations in Latin America and the Caribbean have soared since 2003 owing to a combination of two factors: a substantial FDI stock and higher returns on that stock.

Chronologically, the first factor was the sharp increase in FDI flows to the region between 1996 and 2001, which tripled, in less than 10 years, the foreign capital accumulated in the region in the form of foreign-company subsidiaries. In absolute terms, the region's FDI stock has grown constantly, but at varying speeds. This indicator is presented at current prices, so in order to appreciate its significance in the region's economies it is helpful to view it as a percentage of nominal GDP (see figure II.9). Thus, the role of FDI in the economies of the region increased significantly between 1996 and 2001 and later stabilized at about 30% of GDP.

**Figure II.9**  
**Latin America and the Caribbean: FDI stock, 1990-2011**  
(Billions of dollars and percentages of GDP)



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and information provided by the United Nations Conference on Trade and Development (UNCTAD).

The real FDI boom in Latin America and the Caribbean took place in the second half of the 1990s, more specifically, between 1996 and 2001, when many State-owned assets were privatized and many sectors, which until then had received little FDI, were opened up and deregulated. It was during this period that transnational corporations began to expand their role in the region's economies. Their level of influence held steady in the years immediately after the boom (between 2002 and 2009) and has recently started to trend slightly up again.

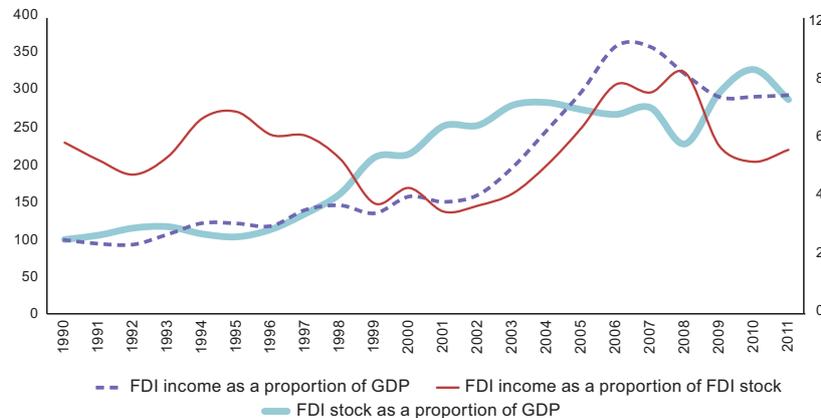
Like FDI flows, the significance of FDI stock in an economy is not the same in all countries. Rather, it is much larger in smaller economies. In Mexico and the countries of South America, FDI stock accounts for between 26% and 28% of the economy. In the economies of Central America it represents about 40%; in the larger countries of the Caribbean, such as Trinidad and Tobago and Jamaica, it reaches 80%. And in the economies of the Organisation of Eastern Caribbean States (OECS) it is as much as 200%. As a result, the smaller economies are most vulnerable to the balance-of-payments impact of rising FDI income.

Even in those countries where the weight of FDI in the economy is lower than average, many important sectors are virtually dominated by transnational corporations. The banking sector in Mexico, mining in Peru, telecommunications in Brazil and the automotive industry in the region as a whole are all examples. This selective concentration of transnational corporations in different sectors has implications when it comes to explaining FDI income patterns for each country of the region, as will be outlined in the next section.

The second factor that has contributed to the increase in FDI income since 2003 was the sharp rise in the profitability of FDI in the region. This reflects, above all, a global trend. In recent years, the profits of large companies have continued to swell, despite worldwide economic uncertainty and stagnant growth in the developed countries. In the United States, for example, corporate profits hit a historic peak as a percentage of national income in 2012. The same has happened in Latin America (Manuelito and Jiménez, 2013).

Subsidiaries of transnational companies operating in the region have seen relatively high profitability in the past few years. Measured by the return on FDI stock in the region, profitability rose from a low of 4% during the 2001-2002 crisis to a high of 10% in 2008. Figure II.10 shows how this rise in the profitability of FDI coincided exactly with the upsurge in FDI income as a proportion of FDI stock, which doubled during the same period.

**Figure II.10**  
Latin America and the Caribbean: FDI stock, FDI income and average profitability of FDI, 1990-2011  
(Index 1990=100 and percentages of GDP)



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

The 2009 crisis scaled back the profitability of FDI to 7%, which is the average for the past two decades. In spite of this decline in profitability, income has increased in absolute terms owing to the steady growth in FDI stock during the years of record inflows (see chapter I).

A similar decline in the average profitability of FDI had been seen a decade earlier, when it fell from 7% to 4% during the crisis in 1998-2001, pointing to the close relationship between profitability and the economic cycle. These variations cause ups and downs in the FDI income generated in the region, but the overall amount will remain at a

far higher level than a decade ago because average returns are unlikely to fall below 4% and the region's FDI stock will not decrease in the near future.

This structural factor will ensure that in the coming decades the economies in the region will experience high levels of FDI income. While FDI flows, as seen in chapter I, are highly variable, the fluctuations in FDI stock are much smaller. Moreover, given the substantial reinvestment of profits outlined under heading 2 of section B, even if Latin America did not attract new foreign investors for a long period of time, its FDI stock could continue to expand.

There could indeed be a shift in the balance between outflows and inflows of FDI income, as has been seen to a certain extent in recent years. But that change is as yet incipient and limited to only four of the region's economies. Thus, the level of FDI income and the imbalance between inflows and outflows will hold steady for the foreseeable future, although with significant differences between countries, as discussed in the next section.

## 2. FDI income by country and sector

The profits of transnational corporations have surged in the region as a whole, but this increase has not been spread evenly across countries. While almost all countries have seen significant growth since 2003, there are notable differences in the amount of income they generate, how much that income has grown in the last decade and the relative importance of these revenues to the national economy.

In absolute terms, FDI income is highly concentrated in a small group of countries, in particular Brazil (with 29% of the total income generated in the region in 2011), Chile (17%), Colombia (13%), Peru (12%) and Mexico (9%) (see table II.3). As expected, this distribution reflects the size of the different economies, the significance that FDI has for each of them and the different levels of return obtained by the foreign companies in each country.

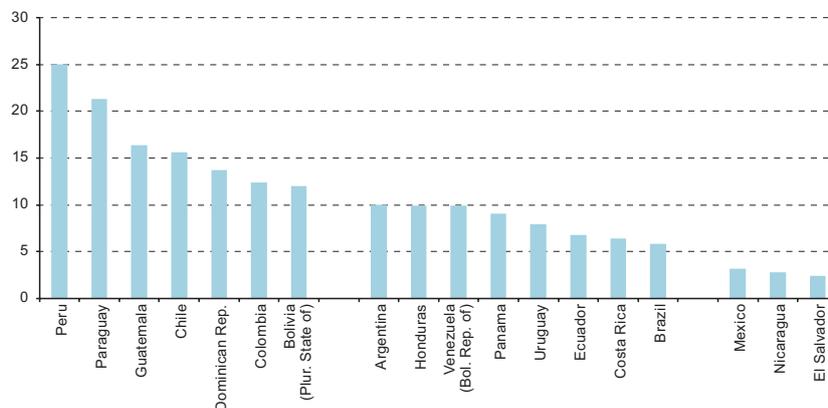
**Table II.3**  
**Latin America: outflows of FDI income, 1990-2011**  
(Millions of dollars)

	1990-2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Argentina	1 820	1 626	3 712	5 456	7 112	7 283	7 902	8 360	8 530	8 956
Bolivia (Plurinational State of)	74	234	292	271	392	644	681	769	863	977
Brazil	3 671	5 984	6 860	11 035	13 884	19 692	28 773	21 029	26 584	31 716
Chile	1 652	4 611	8 231	11 416	19 913	22 832	17 430	14 801	18 980	18 136
Colombia	639	1 525	2 453	3 585	4 615	6 667	8 765	7 666	9 877	14 315
Ecuador	211	595	964	1 004	977	1 160	785	821	539	698
Paraguay	71	60	192	158	271	366	505	555	760	530
Peru	317	1 112	2 567	4 030	6 741	7 788	8 346	8 172	10 714	12 866
Uruguay	27	127	229	228	261	531	843	767	1 126	1 253
Venezuela (Bolivarian Republic of)	989	1 802	3 498	3 895	6 540	4 733	4 608	2 413	3 889	5 789
Mexico	3 919	4 010	3 989	8 145	10 200	13 442	11 201	8 011	7 102	10 122
Costa Rica	379	644	330	743	853	1 131	749	986	606	503
El Salvador	39	85	80	181	91	159	39	175	215	252
Guatemala	126	319	270	370	608	819	886	951	1 001	1 343
Honduras	90	292	390	479	621	535	488	499	567	910
Nicaragua	39	77	80	82	85	93	113	121	135	146
Panama	415	739	967	1 048	1 197	1 521	1 747	1 310	1 829	2 096
Dominican Republic	...	1 391	1 652	1 765	1 932	2 194	1 669	1 518	1 528	1 800

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

It is particularly useful to categorize the countries in the region according to their FDI income in relation to the FDI stock in their economies. This indicator, already used for the region as a whole in the previous section, measures the average profitability of FDI in an economy. This revealed two groups of economies in the region with completely disparate trends (see figure II.11).

**Figure II.11**  
**Latin America and the Caribbean (selected countries): FDI income**  
**as a proportion of FDI stock, 2007-2011**  
 (Percentages)



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

The first group is made up of countries where the strategy of transnational corporations has focused on the extraction of raw materials for export (Chile, Colombia, Peru, the Plurinational State of Bolivia and, to a lesser extent, the Dominican Republic). These economies have seen average returns on FDI of over 10% in the past five years—and as high as 25% in the case of Peru—while the average for the region as a whole was 7.8%. The figures for Guatemala and Paraguay are very high too, but this profitability indicator is more difficult to interpret for these two countries as they receive very little foreign direct investment.

Of this group of countries, only Chile and Colombia provide data disaggregated by sector, which clearly show how important natural resources are. The vast majority of the FDI income generated in Chile comes from the mining sector, with returns of 25%. Electricity, gas and water services were also highly profitable (12%), but fell far short of the returns achieved by mining.

At the opposite end of the spectrum are Mexico and some of the Central American economies (El Salvador, Nicaragua and, to a lesser extent, Costa Rica) where transnational corporations have largely adopted efficiency-seeking strategies in the production of manufactured goods for export. The profitability of FDI in these economies is well below average and has grown very modestly in the last decade. These low returns are due, on the one hand, to the sluggish growth of domestic demand in these economies compared with those of South America, which has adversely affected businesses in the service sector (accounting for approximately half of all FDI). On the other hand, the manufacturing sector (40% of FDI) has a preponderance of export platforms that are highly integrated into global value chains and tend to operate with narrow profit margins.

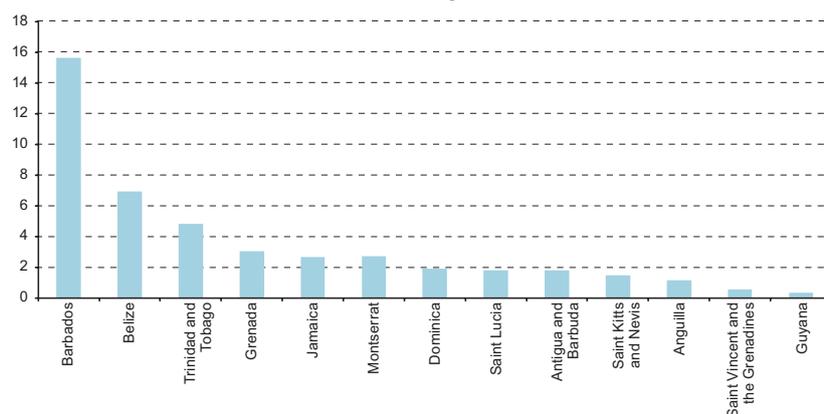
In Mexico and Central America, data on FDI income are not disaggregated by sector, but it is possible to analyse the data reported by the United States companies that invest in these countries. Of the profits reported by United States companies in Mexico in 2011, 39% were in manufacturing, while 25% were not attributable to any specific sector. The percentage for manufacturing was even higher in Costa Rica (80%), Honduras and the Dominican Republic (more than 100% in both owing to losses in other sectors) and in El Salvador and Nicaragua (45% each).

In Ecuador, FDI has been concentrated in natural-resources extraction; however, the Government has reformed the oil sector to ensure that the public sector receives a higher percentage of the income generated. The reform crystallized in 2010 when transnational corporations in this industry began to operate under provision-of-services contracts giving them a flat-rate payment based on the amount of oil extracted. About half of the foreign companies in the sector accepted the new terms while the rest decided to liquidate their assets in the country (ECLAC, 2010). These measures, which had been expected for some years, are behind the decline in FDI income since 2007 in Ecuador, which is one of the few countries in Latin America and the Caribbean to have experienced such a drop.

The returns on FDI are below average for the region in the Caribbean economies, with the exception of Barbados, where FDI income is very high (see figure II.12). Among the Caribbean countries where data are available, Trinidad

and Tobago is the only exporter of primary products (hydrocarbons). Though its FDI income is above average for the region, it still falls far short of the level of the metal-exporting countries. The other countries receive FDI mainly in the services sector, where stagnant tourist arrivals since the 2009 crisis and slower growth in domestic demand (compared with Latin America) have dragged down the profits of transnational corporations. In absolute terms, the FDI income generated in these countries increased only very slightly during the last decade, unlike in Latin America (see table II.4).

**Figure II.12**  
The Caribbean: FDI income as a proportion of FDI stock, 2007-2011  
(Percentages)



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

**Table II.4**  
The Caribbean: outflows of FDI income, 2000-2011  
(Millions of dollars)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Anguilla	10	8	7	6	5	4	4	4	11	9	1	1
Antigua and Barbuda	22	26	24	24	25	31	42	44	41	36	33	41
Barbados	30	38	41	54	116	129	220	224	265	311	250	...
Belize	31	33	33	31	42	35	52	87	107	56	102	40
Dominica	33	19	18	16	22	23	7	13	13	13	8	5
Grenada	28	34	32	26	25	23	22	36	32	55	31	21
Jamaica	290	301	434	326	362	454	376	533	376	232	127	112
Montserrat	3	1	3	1	2	2	2	3	3	3	3	3
Saint Kitts and Nevis	21	23	23	23	20	20	20	23	23	20	18	19
Saint Lucia	33	31	23	32	49	51	34	45	52	35	32	12
Saint Vincent and the Grenadines	13	11	15	21	25	22	23	20	18	12	11	7
Suriname	51	96	37	40	62	45	55	0	0	1	100	266
Trinidad and Tobago	381	374	295	489	271	566	722	664	904	780	827	...

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

FDI profitability is slightly above average in countries including Argentina, the Bolivarian Republic of Venezuela, Honduras, Panama and Uruguay. Each of these economies has followed a very different path. Uruguay, for example, has seen the highest FDI income growth over the past decade, reflecting a rapid expansion in FDI inflows, in particular those received by the forestry sector. Argentina and the Bolivarian Republic of Venezuela rank above average in the region in terms of profitability, but they stand out for having seen only very modest growth or even zero growth in FDI income in recent years (see table II.3). The fall in profits in the Bolivarian Republic of Venezuela can be attributed to two factors. First, the nationalization of foreign companies, especially in manufacturing and some services, has led to a decline in real terms in the stock of foreign capital in the country. Second, in a process similar to that which took place in Ecuador, operating conditions for transnational corporations involved in oil extraction (the main destination of FDI) changed radically in the last decade. Under the new conditions, transnational corporations must operate in partnership with the State-owned PDVSA; this, in practice, limits the profits that they can obtain from their concessions.

In Argentina, FDI income has hardly grown since 2007. Sectoral data show that the services sector has generated the least income in recent years (25% of the total).<sup>10</sup> The rate freeze for many public services has without doubt had an impact on the profits of transnational corporations, particularly in the energy sector. Many transnational corporations operate in the electricity sector, financial services and trade, areas in which profits have been below average; indeed, only communications and transport have recorded above-average profits. Of the income generated, 36% is from manufacturing, where the metallurgical industry stands out in particular, and 39% is attributable to the natural-resources sector, where mining and the extraction of hydrocarbons generated above-average profits (20% and 16%, respectively) between 2005 and 2010, although lower than the average calculated for the other countries in the region.

Lastly, Brazil (which drew more than one third of the region's total inward FDI in the past two years) includes only repatriated FDI income in its figures on FDI income and does not count reinvested profits, which suggests that the data presented in table II.3 understate the real level.<sup>11</sup> Sectoral data for Brazil indicate that between 2010 and 2012, most repatriated profits were from companies in the manufacturing sector (56%), followed by services (41%) and, trailing far behind, natural resources (3%). Within manufacturing, automotive companies repatriated more than US\$ 12 billion in these three years, representing 16% of the total repatriated from Brazil and more than three times the amount of FDI received by the industry during the same period. In this industry, all of the assembly firms and the largest producers of car parts are subsidiaries of transnational corporations that have been very successful in the past few years in Brazil. The beverage industry (with strong growth in 2012 as a result of new acquisitions) and the chemical industry have also performed well. All of these industries are geared towards the Brazilian domestic market.

Within the services industry, the finance sector stands out with more than US\$ 7 billion, followed by the telecommunications, electricity and gas, and retail sectors. Of these sectors, telecommunications is the only one in which transnational corporations dominate the Brazilian market. In the other three, foreign companies compete with Brazilian companies for market share.

In terms of profitability, the automotive sector stands out once again, having repatriated an annual amount equivalent to 13% of FDI stock for the past three years—four times the national average and double that of the next most profitable sectors, such as paper and pulp (7%), electricity and gas (6%) and chemicals (6%).

The low level of profits repatriated from Brazil by mining and hydrocarbon companies (both in absolute terms and in relation to the amounts invested) is somewhat exceptional and can be attributed to two factors. First, the country has an abundance of natural resources, but since Brazilian companies dominate the sector, only 17% of FDI stock is invested in the primary sector. Second, FDI in the hydrocarbon sector is relatively recent and is focused on the exploitation of pre-salt oilfields that are still coming online. The profits of the foreign companies in this sector are expected to increase as these sites are developed in the coming years.

The preponderance of FDI in non-export sectors in Brazil is the reason why the country scores above average for the region when measuring FDI income as a percentage of exports of goods and services, despite the fact that only repatriated FDI income is taken into account (see figure II.13). Although this measure ignores other components of the balance-of-payments current account, notably investment income inflow, it does indicate what percentage of a country's income from exports is used to offset FDI. Being the largest economy in the region, exports account for a relatively small percentage of Brazil's GDP; however, the country has attracted a lot of FDI in recent years, mainly in manufacturing and services aimed at its domestic market.

As expected, the profits of transnational corporations in each country are concentrated in the sectors where they have invested more: manufacturing in Mexico and Central America, and natural resources in the South American countries.

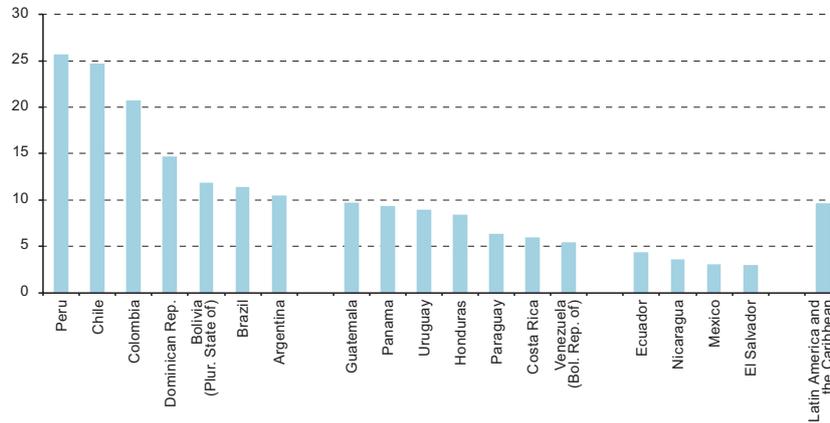
As shown above, the amount of profits, their growth and their relative importance in the economy vary greatly by country. Returns range from 3% in Mexico to 25% in Peru. Differences of this magnitude can be explained, first, by the variations in the economic performance of the countries in recent years, by their production structure and,

<sup>10</sup> The sectoral data for Argentina does not match the aggregate data as they come from different sources.

<sup>11</sup> If transnational corporations in Brazil were to follow a strategy similar to that employed by companies in other countries in the region, they would be reinvesting in their subsidiaries just a little less than the amount they repatriate to their parent companies. If that were the case, total FDI income for the Brazilian economy would be about double that indicated in table II.3, that is, about the same amount as for the rest of the economies in South America combined. Estimated FDI profitability in Brazil shown in figure II.11 would not have to be adjusted to the same extent as the FDI stock calculated for Brazil also excludes reinvested earnings.

primarily, by the type of strategy that transnational corporations have chosen to apply in each country. The natural resources sector has been the key driver of FDI income in the region.

**Figure II.13**  
Latin America: average FDI income as a share of goods and services exports, 2007-2011  
(Percentages)

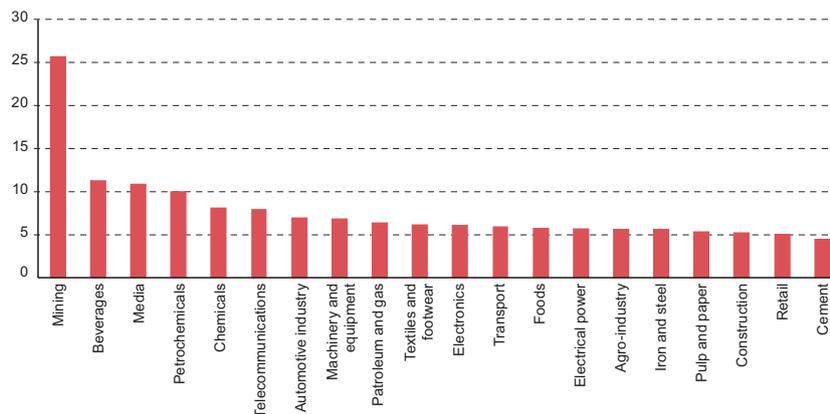


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures.

### 3. Natural resources

Sectoral data for Argentina and Chile, as well as the exceptionally high returns in other countries with strong extractive industries (Colombia, Peru and Plurinational State of Bolivia), point to the key role of companies that specialize in the exploitation of natural resources in the increase in FDI income in the region (apart from in Brazil). These data from the countries' balance-of-payments position are consistent with the balance sheets of individual companies: the return on assets for companies in the mining sector included in the top 500 companies in the region was more than double that of the second-ranked sector (beverages) in 2010 and three times higher than for the hydrocarbons sector (see figure II.14).<sup>12</sup>

**Figure II.14**  
Latin America and the Caribbean: return on assets of the top 500 companies,  
by industry, 2010  
(Percentages)



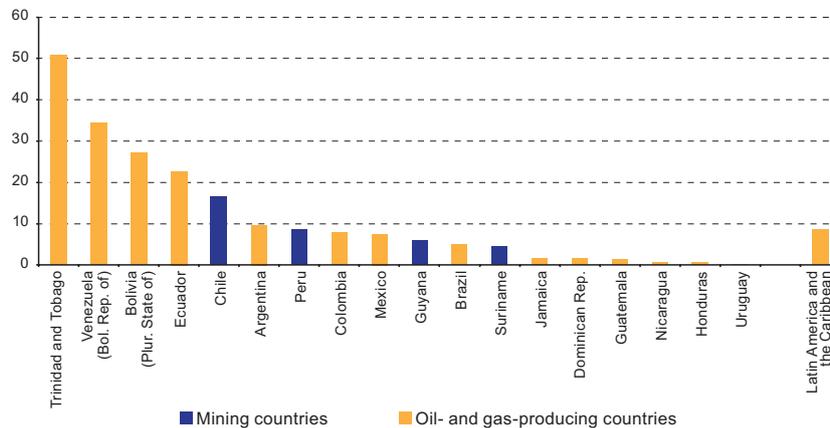
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of figures from *América Economía* [online] <http://www.americaeconomia.com>.

<sup>12</sup> This indicator is not completely objective since mining companies do not count their mineral reserves among their assets (oil companies do include these figures). Therefore, the assets that are included in these companies' balance sheets are understated and their average profitability is overstated.

The profits generated by the natural resources sector<sup>13</sup> in Latin America have risen by a similar amount and within a similar time frame as FDI income as a whole, as shown in section A (ECLAC, 2012a). In the mining sector, profits as a percentage of regional GDP nearly quadrupled during 2004-2009 in relation to the previous decade; in the hydrocarbons sector, the increase was about 60%. While the latter is a considerable increase, the difference between the two sectors is attributable to rising maintenance costs in traditional hydrocarbon fields and higher development costs in non-traditional areas.

Although mining income has shot up at a much faster rate than hydrocarbon income in the region, the latter is still much higher in quantitative terms. Figure II.15 shows that, in countries where natural-resources income exceeds 10% of GDP, mining income accounts for the lion's share only in Chile; in those where natural-resources income exceeds 2% of GDP, mining generates more income than hydrocarbons in only Guyana, Peru and Suriname.

**Figure II.15**  
Latin America and the Caribbean: average income from natural resources, 2003-2010  
(Percentages of GDP)



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of World Bank, World Development Indicators [online database].

The income generated from mining and from oil and gas extraction counts as FDI income depending on the extent to which these sectors are dominated by transnational corporations. Even though hydrocarbons are responsible for a larger proportion of income in the natural-resources sector, FDI income is concentrated in mineral-exporting countries because of the dominance of State-owned companies in the hydrocarbons sector. In some cases this is due to a statutory monopoly (as in Mexico) or special sector regulations that grant a leading role to domestic firms, as in Brazil, the Bolivarian Republic of Venezuela and Ecuador (as mentioned above). Even the countries that are more open to FDI in hydrocarbons, such as Chile, Colombia and Peru, also have State-owned oil companies. In 2012 Argentina renationalized YPF, an oil company which had been State-owned prior to 1999.

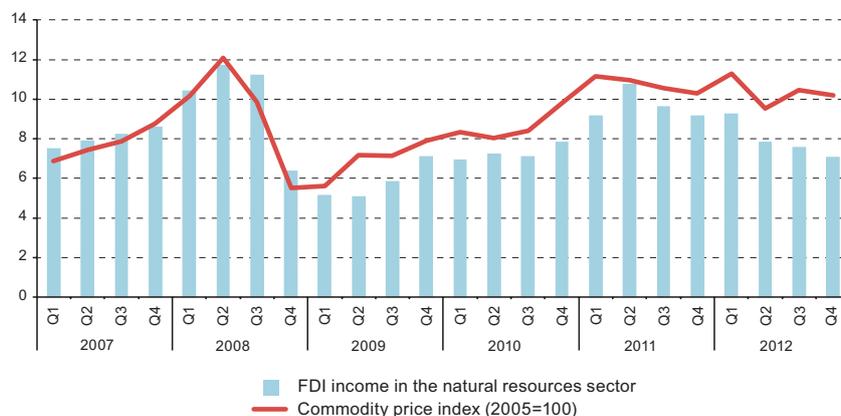
Mining, in contrast, is an industry dominated in many countries by transnational corporations. The main exceptions are Mexico, where it is dominated by private domestic capital, Brazil, where the quasi-State enterprise Vale is the main player, and Chile, where the State-owned CODELCO extracts a third of all copper (although its tax contributions are higher than those of the private companies accounting for the other two thirds).<sup>14</sup>

FDI income in the natural-resources sector fluctuates in accordance with international market prices. This is one of the main reasons why FDI income began to rise in 2003 and has remained high since then. In the short term, changes in international prices immediately translate into variations in corporate profits in the sector (see figure II.16); this is why FDI income suffered a slight fall in 2012.

<sup>13</sup> Income from the natural resources sector is the sum of revenues from mining and oil. Each of these is calculated as the value of production at international prices minus the relevant production costs.

<sup>14</sup> ECLAC (2012a) concludes that States obtain a larger share of the income generated by natural resources when they have State enterprises in the sector, in comparison with those who collect revenues solely through profit taxes, special taxes and royalties. Overall, as a percentage, the revenues collected in Latin America are in line with international parameters, though they are somewhat lower in the smaller countries.

**Figure II.16**  
**United States: FDI income generated by mining and oil companies and commodity prices, 2007-2012**  
*(Billions of dollars and quarterly index, 2005=100)*



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

## E. Latin America and the Caribbean in this new scenario

While there is no doubt that the natural-resources sector is the main cause of the rise in FDI income in the region, it is far from the only one. Proof of this is that profits have gone up in all developing economies, even in those where FDI in the primary sector has been very limited. The clearest example of this worldwide is China, which has seen an even higher rise than Latin America and the Caribbean and where FDI has been concentrated in the manufacturing sector. In Latin America, Brazil has seen a remarkable rise in FDI income, mainly in some areas of manufacturing and services. Even in countries such as Chile, where most income is concentrated in mining, other sectors have also experienced higher-than-average rates of return in recent years. Among them are electricity and banking.

Transnational corporations involved in the extraction of natural resources are not the only ones to have enjoyed record profits in Latin America in recent years. Service providers and manufacturing companies have also taken advantage of the generally positive economic performance of developing economies over the past decade. Indeed, the growth gap between developed and developing countries widened from only 0.1% of GDP in 2003 to 4% from that year onwards (ECLAC, 2012b). The disparity is particularly notable between Latin America, which has maintained high rates of economic growth in recent years, and the European Union (the region's main source of FDI), which has seen very slow growth since the 2009 crisis.

Major Spanish companies, which have significant assets in Latin America and face a severely recessionary domestic market, are among those that seen the most growth in their dependence on profits generated in the region (ECLAC, 2013). The two largest Spanish banks (Santander and BBVA) generated almost half of their profits in 2011 in Latin America (ECLAC, 2012c). The largest Spanish electricity companies also saw an increase in the percentage of their profits generated in the region up to 25% for Iberdrola and 39% for Gas Natural Fenosa.

In short, Latin America has stood out in recent years for its capacity to generate substantial profits for the transnational corporations that have invested there. While the rates of return have reached historic highs in recent years and are likely to decline in the medium term, the absolute level of FDI income generated in the region will remain very high. This will require rethinking the role that transnational corporations should play in the region's development and of the policies that States should implement to that end.

Evaluating the significance of transnational corporation profits in the region's tax base and considering the effect of increasing income on the balance of payments and on growth and development are two of the more immediate requirements.

## 1. Transnational corporations and tax revenues

There are no disaggregated data giving an exact figure for how much transnational corporations pay in taxes in Latin America and the Caribbean. However, considering the expansion in FDI income in the balance of payments of almost all the region's countries, transnational corporations account for an ever larger share of taxes on profits. Today, they account for about 10% of tax revenues in the region, but this percentage should go up as the region adopts tax structures that more closely resemble those of developed countries.

Subsidiaries of transnational corporations contribute to tax revenues mainly through taxes on profits, in which respect they generally have the same obligations as domestic firms. There are some important exceptions to this general practice of non-discrimination by origin (national treatment). For example, in some cases foreign investors sign tax stability agreements upon entering the country (as in the mining sector in Chile), and in practice some major foreign companies are the primary beneficiaries of tax benefits aimed at specific sectors or activities. Even when foreign companies are subject to the same tax rate on their profits as domestic firms, the mobile nature of international capital creates room for tax competition between countries to attract FDI.

Some studies have suggested that this tax competition has led to a loss of revenue, particularly for developing economies (Keen and Simone, 2004), although this does not seem to be the case in Latin America. A more recent study (Abbas and others, 2012) concluded that in 1996-2007 Latin America was the only region in the world where the effective corporate tax rate did not go down but remained unchanged while revenues soared. In fact, today Latin America has higher corporate tax rates than other regions of the world (PricewaterhouseCoopers, 2012). In addition, in the aggregate companies pay a little more than the theoretical tax rate because they have to add other taxes that more than outweigh any savings they might make owing to exemptions in other areas. The result is that the actual tax rate in the subregion is around 30%: the highest worldwide. In short, there is little evidence of tax competition among Latin American countries to attract FDI, though there may be some in specific areas, such as export platform investments. In the Caribbean, however, there is evidence of tax competition to attract FDI (Nassar, 2008): corporate tax rates have been reduced by 30% in recent years while tax holiday schemes have eroded the tax base.

The tax rate is applied to the profits that companies report in each economy, but transnational corporations have at their disposal mechanisms that allow them to transfer a portion of those profits to subsidiaries in other countries, thus reducing the taxes that they have to pay in a given country. The main mechanism used to this end is transfer pricing.

Transfer prices are charges for goods and services between subsidiaries in the same group. They are an inevitable necessity in a world in which many major companies form value chains with their subsidiaries. There are different methodologies for calculating these prices. For example, they can be based on similar arm's-length transactions or by allocating each party's share according to its contribution to the production process. In any case, companies can easily find ways to implement aggressive transfer prices that reduce profits in some countries (those with high tax rates) and inflate them in others (those with low rates or no tax on profits).

There are no official data on how widespread this practice is worldwide or on the effects it has on tax revenues in different countries, but available estimates point to a very significant impact. The Government of the United States, for example, estimates that the country loses US\$ 100 billion a year in tax revenue for this reason.<sup>15</sup> In the case of Latin America, a private study estimated that the region loses 2.2 billion euros in revenue owing to transfer pricing by European companies and US\$ 29.1 billion owing to the practices of companies from the United States (Christian Aid, 2009).

<sup>15</sup> See [online] <http://www.oecd.org/ctp/fightingtaxevasion.htm>.

It also seems clear that as businesses grow more globalized the use of these instruments is becoming more widespread. In 2011 almost half (47%) of the income generated by foreign subsidiaries of United States companies was located in just seven economies (Bermuda, British Virgin Islands, Ireland, Luxembourg, Netherlands, Singapore and Switzerland), which are not those where the companies are most active but rather where they receive more favourable tax treatment; this proportion was up from 28% in 1994 (Blouin, Krull and Robinson, 2012).

Given the increased profits generated by transnational corporations in the region, and taking into account that the tax pressure in these countries remains above the world average, it is to be expected that transnational corporate profit-shifting to low-tax jurisdictions will have an impact on the revenues of the region's countries. In developed economies, the erosion of the tax base by transnational corporations is a matter of public concern, and governments, businesses and civil society are reacting to this problem (see box II.3). In addition, burgeoning direct investment by Latin American entities abroad will just add another potential source of tax base erosion, since local businesses will be able to access the same tools to reduce their tax obligations. For example, 8 of the 20 largest Chilean trans-Latins have subsidiaries in the Cayman Islands or the British Virgin Islands.

### Box II.3

#### Governments and civil society demand that transnational corporations pay taxes

The coffee chain Starbucks opened its subsidiary in the United Kingdom in 1998 and since then has posted a total of 3 billion pounds (£) in sales at its more than 700 locations. Since it opened, the company has paid only £8.6 million in taxes, despite having repeatedly stated that its subsidiary in the United Kingdom was successful. Its corporate tax return for 2009—a year in which the board described the company's performance as positive—it reported losses amounting to £52 million (see [online] <http://uk.reuters.com/article/2012/10/15/us-britain-starbucks-tax-idUKBRE89E0EX20121015>).

Starbucks uses different strategies so as not to report profits in the United Kingdom, all of which are perfectly legal. For example, the company pays an amount equal to 6% of its sales to another subsidiary in the Netherlands in license fees; it buys coffee from a subsidiary in Switzerland, which is then transported by another subsidiary in the Netherlands, where taxes on commodity trading are particularly low. In addition, the United Kingdom subsidiary is funded entirely by intra-group loans at LIBOR plus 4%, which is much higher than the rate paid by the group on its debt with outsiders.

Cases like this have begun to be widely discussed in the United Kingdom and other European countries. Several civil society groups have criticized these practices of transnational corporations from various angles: Tax Justice Network (see [online] [www.taxjustice.net/cms/front\\_content.php?idcatart=2&lang=1](http://www.taxjustice.net/cms/front_content.php?idcatart=2&lang=1)) opposes the existence of tax havens and the abuse of transfer pricing and proposes specific solutions; Christian Aid (see [online] [www.christianaid.org.uk/resources/policy/tax.aspx](http://www.christianaid.org.uk/resources/policy/tax.aspx)) believes that these practices particularly affect developing countries. In the context of public spending cuts, organizations including UK Uncut, US Uncut and Citizens for Tax Justice believe that increasing the taxes paid by transnational corporations would ease the need for cuts in social benefits and would reduce public deficits. Some have called for a boycott of specific companies.

Governments have also begun to take action. At its meeting in Los Cabos in June 2012, the Group of 20 (G20) supported the

Organisation for Economic Cooperation and Development (OECD) initiative on tax base erosion, which is being followed by the tax authorities in many countries. In January 2013 the OECD published a report on the subject, requesting international cooperation and concluding that the international tax system had not kept pace with changes in global business practices. The problem is rooted in a tax system designed to support international trade and avoid double taxation. Transnational corporations have taken advantage of these regulations to reduce their tax burden. For example, the OECD Model Tax Convention on Income and on Capital does not help reduce these opportunities, while the United Nations Model Double Taxation Convention between Developed and Developing Countries, which facilitates a more equitable distribution of fiscal revenues, is much less commonly used.

One possible way to tackle the problem is to use a simpler method of attributing profits to the countries where a company operates. In the United States, for example, profits are allocated to states on the basis of the number of employees that the company has in each. These solutions would likely have other disadvantages, such as giving priority to the locations that are more labour-intensive, and could even seriously distort companies' recruitment strategies.

There are still many questions regarding the ability of governments and international institutions to significantly reform the tax system worldwide. Meanwhile, it will be necessary to see what effect civil society campaigns can have in this area. Many companies' corporate social responsibility efforts are being negated by their reputation as tax evaders. For some companies, however, paying their fair share of taxes is an explicit part of their social responsibility (Scheiwiller and Symons, 2010).

Public pressure has forced the United Kingdom subsidiary of Starbucks to announce that in 2013-2014 it will voluntarily pay £10 million more in taxes than it is required to pay by law (*The Economist*, 2012).

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Organisation for Economic Cooperation and Development (OECD), *Addressing Base Erosion and Profit Sharing*, Paris, 2013; PricewaterhouseCoopers, *Corporate income tax – a global analysis*, London, 2012; T. Scheiwiller and S. Symons, "Corporate responsibility and paying tax," *OECD Observer* [online] [http://www.oecdobserver.org/news/fullstory.php/aid/3132/Corporate\\_responsibility\\_and\\_paying\\_tax.html](http://www.oecdobserver.org/news/fullstory.php/aid/3132/Corporate_responsibility_and_paying_tax.html); M.A. Sullivan, "Apple reports high rate but saves billions on taxes," *Tax Analysis*, 2012; and "Wake up and smell the coffee," *The Economist*, 15 December 2012.

It is no coincidence that the profit-transfer practices of transnational corporations have become a matter of political concern as the European Union economies slide into recession and there is increased pressure on public finances. It is therefore to be expected that the same concerns will arise in Latin America when the economic cycle changes, tax revenues fall and demand for public expenditure increases.

In the particular case of natural resources (mining and hydrocarbons), royalties are another fiscal instrument by which States can obtain a fraction of transnational corporation profits. In fact, royalties are designed in part to prevent transfer pricing and other financial practices from unduly limiting the State's revenues from national resources that are non-renewable and, in many cases, of great economic and political importance. A notable case was that of *Disputada de Las Condes*, a Chilean mining company that, during the years it was owned by ExxonMobil, drastically reduced the taxes it paid in Chile by obtaining 99% of its funding by borrowing from its subsidiaries; it thus paid 4% tax on the interest on those loans instead of the 35% it would have paid on capital gains. In 2001, ExxonMobil sold the mining company to Anglo American for US\$ 1.3 billion, which reflects the profitability of the asset (ECLAC, 2003).

Nevertheless, royalties account for only a small share of the tax contributions that mining and oil companies pay in Latin America and the Caribbean (ECLAC, 2012a).

## 2. Transnational enterprises and balance-of-payments sustainability

As discussed in section C, over the past decade the profits of transnational corporations have become one of the main components of the aggregate balance of payments in Latin America and the Caribbean. It is therefore important to consider their potential impact on the economies of the region, both at present and in the future.

A country's current account deficit will be sustainable and will not jeopardize economic growth if it can be funded on the international market (ECLAC, 2012d). The growth rate to which countries can aspire without coming up against this external constraint depends on four variables: (i) the net exports of each economy; (ii) the terms of trade; (iii) capital flows between the economy and the rest of the world; and (iv) net payments to non-resident factors of production.

In addition to the influence of these four variables in the balance of payments, each country will face potential deficits from a different position, depending on its level of reserves, sovereign funds (if any) and degree of access to international markets, which is mainly determined by its credit history. The combination of these conditions means that in the short term the countries of Latin America and the Caribbean are subject to very different external constraints.

The external shocks that periodically affect the region's economic growth typically take the form of sudden changes in the terms of trade and capital flows. As described in section C, capital flows tend to be less volatile if a larger share of them is in the form of FDI than in the form of portfolio investment and bank loans and deposits. Although FDI flows vary greatly from year to year, these variations are never comparable to those suffered by other types of investment and are very rarely negative.

While FDI has become the main component of the financial account, FDI income is also the main component of investment income and the main cause of income balance deficits. The earnings of transnational companies in the region (minus those generated by the trans-Latins abroad) are the main net payment to non-resident production factors and, therefore, have become a determinant of external constraints on the economies of the region (Abeles, Lavarello and Montagu, 2013).

When looking at the connection between sustainable economic growth and external constraints, it is necessary to consider not only the amount of net FDI income that the countries in the region pay out to the rest of the world, but also the effects that FDI has on other variables that affect external constraints, particularly net exports and the terms of trade. Large FDI inflows, which are expected to generate high outflows of FDI income, should also generate an equivalent net export balance or contribute to structural change in the host economy that in turn changes the terms of trade, so as not to impact the external constraints on the economy. High FDI earnings in sectors such as natural resources thus go hand in hand with high export flows, while FDI income in sectors that meet domestic demand do not have this export equivalent.

It is also necessary to consider how FDI income can be expected to react to an external shock. The strong link between the profits of transnational corporations in the region and export commodity prices would suggest that a drastic drop in these prices, which would adversely affect the terms of trade of most countries in the region, would also trigger a decline in FDI income. Beyond the natural-resources sector, FDI income can be considered a countercyclical variable, since outflows increase in times of vigorous economic growth and decrease in recessions when capital

flows into the economy decline or turn negative. While the income earned by direct investors is closely linked to the performance of the economy, interest on loans or bonds must be paid regardless of the current situation.

In short, while in the 1990s and early 2000s FDI inflows were seen as an indisputable boon for the balance of payments in many countries, their contribution to external equilibrium is now regarded as doubtful and, in many cases, negative. Given the large stock of FDI in the region, this situation will undoubtedly continue in the medium term, alleviated to some extent in certain countries by the income produced by the trans-Latins. The long-term impact on the economic cycle will depend on the type of investment received.

## F. Conclusions

The increased profitability of the operations of transnational corporations in Latin America and the Caribbean since 2003 is part of a global trend. This is attributable, first, to the continuous rise of corporate profits in most countries, both in absolute terms and relative to GDP. Second, because of business internationalization many companies are conducting an increasing proportion of their activities—and, therefore, generating an ever larger share of their profits—in third countries. As a result, a growing portion of the business surplus is recorded in the balance of payments as FDI income.

In the long term, therefore, FDI income worldwide can be expected to remain at high levels. In Latin America and the Caribbean, there will continue to be a significant imbalance between outward and inward FDI income. Although in these economies inward FDI income is equivalent to only 13% of their FDI income outflow, inward and outward FDI trends have been narrowing the gap since 2009 (see chapter I); this pattern can be expected to continue in the near future. However, the gap will not be closed throughout the region in the foreseeable future: while almost all the countries of Latin America and the Caribbean receive substantial amounts of FDI (and, therefore, generate FDI income), very few have comparable FDI outflows (are recipients of FDI income).

There are great disparities in the FDI income levels generated in the different countries in the region, depending on the prevailing business strategies in each. In general, those countries where a large share of FDI has focused on the extraction of natural resources (particularly mining) have generated the most FDI income in the past decade. Current FDI income levels in the region have thus been contingent on high export commodity prices; in the short term, significant fluctuations can be expected in line with price trends. Because of this relationship, an external shock caused by worsening terms of trade would be buffered by a decline in capital outflows in the form of FDI income.

Given the substantial profits attained by transnational corporations in the region and the fact that a significant share of them are generated by exploiting non-renewable resources, ensuring that these companies contribute fairly to tax revenues is a matter of particular urgency. The ability of transnational corporations to transfer their profits legally from the originating country to jurisdictions with more favorable tax treatment has caused concern among governments as to the potential for tax base erosion. While initiatives to minimize erosion have so far been limited to developed countries, especially in Europe, the countries of Latin America and the Caribbean should join efforts to adjust their domestic tax regulations and to coordinate on an international level to achieve a worldwide agreement to rein in the more aggressive practices of transnational corporations. For the important case of natural resources, revenues raised by taxing corporate income should be supplemented with other fiscal instruments (such as royalties) and even with a review of the role of State enterprises in the sector.

Beyond the impact that these profits might have on countries' tax bases, the level that they have reached over the past decade has meant that in recent years FDI as a whole has had an ambiguous effect on the balance of payments in the region. In many countries, FDI inflows now pale in comparison with outflows of FDI income, making it all the more urgent to measure the impact of FDI in terms of its contribution to employment, exports, local value added and, in a more dynamic sense, structural change.

For FDI to continue contributing to these objectives, it will be necessary to maintain adequate incentives for productive investments. But at the same time, it is important to recognize that the record profits of recent years can be challenged by public authorities and civil society, especially if it is perceived that transnational corporations are not contributing fairly to tax revenues, the creation of good-quality jobs and economic development in the broadest sense. Governments should fine-tune their policies and regulations to strike a balance between investment incentives and the equitable distribution of profits. Transnational corporations themselves should also be aware of this challenge and duly adjust their corporate social responsibility stance.

Finally, it is vital to remember two important elements that lie behind the figures for soaring FDI income in Latin America and the Caribbean. The first is that almost half of these profits are reinvested in the economies in which they are generated and, even though these reinvested earnings continue to increase the financial liability of the economies involved, they also boost production capacity. The second consideration is the growth of outward direct investment by some economies (Mexico and Chile in particular, but also Brazil and Colombia), which means that in the medium term FDI income outflows will be partially offset by the income generated by trans-Latins abroad.

## Bibliography

- Abbas, S. M. Ali and others (2012), "A Partial Race to the Bottom: Corporate Tax Developments in Emerging and Developing Economies", *IMF Working Paper*, No. WP/12/28, Washington, D.C., International Monetary Fund (IMF).
- Abeles, M., P. Lavarello and H. Montagu, (2013), "Heterogeneidad estructural y restricción externa en la economía argentina", *Hacia un desarrollo inclusivo. El caso de la Argentina* (LC/L.3569), Ricardo Infante and Pascual Gerstenfeld (eds.), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), January.
- Blouin, J.L., L.K. Krull and L.A. Robinson (2012), "Where in the World are "Permanently Reinvested" Foreign Earnings?". ECLAC (Economic Commission for Latin America and the Caribbean) (2013), *European Union and Latin America and the Caribbean: Investments for growth, social inclusion and environmental sustainability* (LC/L.3535/Rev. 1), Santiago, Chile.
- (2012a), "Seminario Gobernanza de los Recursos Naturales", Santiago, Chile, April.
- (2012b), *Economic Survey of Latin America and the Caribbean 2012* (LC/G.2546-P), Santiago, Chile. United Nations publication, Sales No. E.12.II.G.3.
- (2012c), Espacios iberoamericanos. La inversión extranjera: oportunidades para impulsar una relación renovada (LC/G.2548), Santiago, Chile.
- (2012d), *Structural Change for Equality: An Integrated Approach to Development* (LC/G.2524(SES.34/3)), Santiago, Chile.
- (2010), *Foreign Direct Investment in Latin America and the Caribbean 2010* (LC/G.2494-P), Santiago, Chile. United Nations publication, Sales No. E.11.II.G.4.
- (2003), *Foreign Investment in Latin America and the Caribbean. 2002 Report* (LC/G.2198-P), Santiago, Chile.
- Christian Aid (2009), "False profits: robbing the poor to keep the rich tax-free", *Christian Aid Report*, March.
- IIF (Institute of International Finance) (2011), "Capital flows to emerging markets economies", *IIF Research Note*, June.
- Keen, M. and A. Simone (2004), "Tax Policies in Developing Countries: Some Lessons from the 1990, and some Challenges Ahead", *Helping Countries Develop: The Role of Fiscal Policy*, S. Gupta, B. Clements and G. Inchauste (eds.), Washington, D.C., International Monetary Fund.
- Manuelito, S. and L.F. Jiménez (2013), "La inversión y el ahorro en América Latina: nuevos rasgos estilizados, requerimientos para el crecimiento y elementos de una estrategia para fortalecer su financiamiento", Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).

- (2010), “Los mercados financieros en América Latina y el financiamiento de la inversión: hechos estilizados y propuestas para una estrategia de desarrollo”, *Macroeconomía del Desarrollo series*, No. 107 (LC/L.3270-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC). United Nations publication, Sales No. S.10.II.G.76.
- Nassar, K. (2008), “Corporate Income Tax Competition in the Caribbean”, *IMF Working Paper*, No. WP/08/77, Washington, D.C., International Monetary Fund (IMF).
- PricewaterhouseCoopers (2012), “Paying Taxes 2013. The Global Picture”.
- Roxburg, Ch., S. Lund and J. Piotrowski (2011), “Mapping global capital markets 2011”, McKinsey Global Institute, August.
- UNCTAD (United Nations Conference on Trade and Development) (2012), *World Investment Report 2012* (UNCTAD/WIR/2012), Geneva. United Nations publication, Sales No. E.12.II.D.3.



**Table II.A-2**  
**Latin America and the Caribbean: outward investment flows by country, 2000-2012**  
*(Millions of dollars)*

	Direct investment												Portfolio investment												Other investment													
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>South America</b>	8 024	-178	4 103	5 071	13 416	11 837	35 484	14 534	35 142	3 219	31 201	19 087	4 627	5 055	1 706	8 848	8 818	9 307	21 743	18 729	5 407	12 769	24 494	-16 008	13 018	15 375	15 680	17 808	14 122	24 603	20 150	71 309	40 528	62 183	86 972	99 825		
Argentina	901	161	-627	774	676	1 311	2 439	1 504	1 391	712	965	1 488	1 252	-212	-477	95	77	-1 388	1	2	12	2	-1 261	9	1 373	1 910	8 886	4 400	2 347	-2 005	4 501	11 729	14 385	6 825	9 762	16 309		
Bolivia (Plurinational State of)	3	3	3	3	3	3	3	4	5	3	-29	0	-55	23	19	68	35	153	25	30	208	154	90	-156	146	167	183	463	94	-124	262	-101	223	426	32	128		
Brazil	2 282	-2 258	2 482	249	9 807	2 517	28 202	7 067	20 457	-10 084	11 588	-1 029	1 686	795	321	-179	755	1 771	-6	-286	-1 900	-4 125	4 784	-16 858	2 989	6 885	3 211	9 752	2 065	5 035	8 416	18 552	5 289	30 376	42 567	39 005		
Chile	3 987	1 610	342	1 709	2 145	2 212	4 852	9 151	7 233	9 231	11 822	-786	1 386	3 316	4 689	4 400	4 227	10 085	15 953	10 252	14 269	15 380	-685	2 065	1 126	-1 141	106	2 773	2 498	3 414	7 987	5 346	612	6 694	2 148			
Colombia	325	16	867	938	142	4 662	1 098	913	2 254	3 088	6 562	7 843	1 173	3 460	-2 026	1 745	1 564	1 695	3 657	564	-67	2 756	2 290	1 531	503	-260	-315	-1 688	-554	126	362	2 620	-17	1 752	-922	4 304		
Ecuador	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312	191	228	641	116	-217	152	721	-48	391	181	-570	-218	-953	-882	-2 148	-1 962	-1 778	-1 460	108	-2 495
Paraguay	6	6	6	6	6	6	7	8	8	7	7	-20	-07	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	212	64	16	-184	39	-423	-90	-470	99	-184	-2	-213			
Peru	0	74	0	60	0	0	0	66	736	411	266	113	374	237	-522	773	257 8	867 81	327 3	866 7	-200 331	75 6	1 109	1 185	-191	-665	0	-127	-14	1 084	508	443	-860	-116	1 948	1 343		
Venezuela (Bolivarian Republic of)	521	204	1 026	1 318	619	1 167	1 524	33	1 150	1 038	2 671	-1 141	954	-397	1 354	623	813	2 311	5 965	1 559	-2 735	-4 321	221	150	4 639	3 919	7 169	4 030	8 233	18 181	6 341	30 474	28 597	22 487	27 135	39 941		
<b>Central America</b>	10	13	37	103	93	109	112	385	101	37	47	93	223	864	125	418	680	1 813	1 296	1 361	-232	966	1 025	590	246	100	-3 132	-74	2 133	1 182	3 483	6 562	3 532	2 182	3 636	5 485		
Costa Rica	8	10	34	27	61	-43	98	262	6	7	25	58	18	81	-28	92	-53	681	1 109	756	1 082	464	1 021	1 061	849	-329	-976	-3 146	-442	1 571	486	3 790	5 119	3 001	1 568	3 665	3 613	
El Salvador	-5	-10	-26	19	-3	113	-26	95	79	0	0	9	127	289	264	125	-39	-50	103	-196	-350	118	-99	245	629	224	-20	160	247	-73	473	-26	646	-110	111			
Guatemala	0	10	22	46	41	38	40	25	16	26	24	17	36	-105	-132	25	-12	40	60	-17	10	-23	46	143	-213	136	80	382	340	435	509	597	2	261	-132	649		
Honduras	7	3	7	12	-6	1	1	1	-1	4	-1	18	59	13	6	7	12	23	21	22	27	-3	19	-44	140	28	93	63	59	-12	-84	29	-17	-150	-66	437		
Nicaragua	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	248	-150	106	-275	182	-5	189	-113	189	101	232			
Panama	0	4 404	891	1 253	4 432	6 474	5 758	8 256	1 157	7 864	15 045	12 139	-3 137	-2 081	-1 771	-1 215	1 754	10 792	2 051	13 285	-5 570	20 588	7 876	3 647	-4 895	-392	-1 719	-2 406	4 471	-5 847	-4 110	10 302	15 364	-14 967	28 358	3 674		
<b>Mexico</b>	8 034	4 239	5 030	6 428	17 940	18 421	41 355	23 175	36 400	10 921	46 592	31 328	1 713	3 837	60	8 052	11 253	21 912	25 090	33 375	-394	34 303	33 335	-11 771	8 369	15 083	10 828	15 328	20 726	19 938	27 743	88 773	59 425	49 398	119 165	108 984		
<b>The Caribbean</b>	101	240	181	342	89	452	500	198	772	5	5	93	-141	166	508	1 687	1 888	1 859	1 073	2 044	952	431	419	83	19 060	25 707	35 660	-44 282	-16 060	12 709	12 579	18 189	6 310	-25 068	-2 811	11 174		
Anguilla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Antigua and Barbuda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bahamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Barbados	1	1	0	1	4	9	44	82	-6	-56	-54	29	31	29	23	30	76	-4	85	125	-29	-1	....	-53	57	181	83	-31	297	492	963	261	-272	9	....			
Belize	0	0	0	0	0	1	1	1	3	0	1	1	0	0	0	0	0	0	0	0	-3	5	2	7	51	-1	-7	10	4	39	14	-5	14	-14	13	24		
Dominica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dominican Republic	0	0	0	0	0	0	0	0	0	0	0	0	-268	-124	14	20	8	82	329	-173	-108	-47	11	-37	165	156	1 402	1 159	429	-62	1 368	783	-541	-255	-522	-6		
Grenada	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Guyana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Haiti	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Jamaica	74	89	74	116	60	101	85	115	76	61	58	75	70	39	351	1 105	1 133	1 406	506	1 769	814	352	352	71	96	216	161	308	127	291	269	238	242	-21	1 143	274		
Montserrat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Saint Kitts and Nevis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Saint Lucia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Saint Vincent and the Grenadines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Suriname	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Trinidad and Tobago	25	150	106	225	25	341	370	0	700	0	0	18	30	206	70	509	680	258	200	252	82	120	....	....	-398	-285	291	283	326	391	981	39	1 293	469	516	....		
<b>Latin America and the Caribbean</b>	8 134	4 479	5 211	6 770	18 030	18 073	41 855	23 374	37 172	10 926	46 297	31 421	1 573	4 004	588	9 739	13 150	23 771	26 163	35 418	559	34 734	33 814	-11 689	27 430	40 790	45 888	-29 954	2 646	32 647	40 322	106 362	65 735	24 311	116 955	120 159		

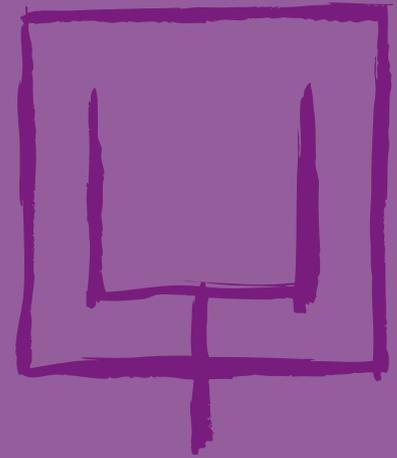
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official figures and estimates.

**Table II.A-3**  
**Latin America and the Caribbean: outflows of investment income by country, 2000-2012**  
(Millions of dollars)

	Foreign direct investment												Portfolio investment												Other investment													
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>South America</b>	12 966	12 351	13 078	17 676	29 041	41 078	60 721	71 695	78 645	65 370	81 872	95 239	20 599	22 014	19 757	20 814	22 913	21 564	22 452	23 280	26 371	23 595	24 539	30 974	19 961	18 275	14 616	13 549	12 669	13 632	13 639	15 643	16 047	13 144	12 070	14 539		
Argentina	3 086	1 397	854	1 626	3 712	5 456	7 112	7 283	7 902	8 360	6 830	6 956	7 344	6 963	5 809	6 181	6 342	3 386	2 423	2 686	2 793	2 336	2 418	2 775	4 510	4 895	3 807	3 209	2 668	2 663	2 185	2 451	2 328	1 624	1 556	1 867		
Bolivia (Plurinational State of)	148	168	183	234	292	271	392	644	681	769	864	977	0	0	0	0	0	0	0	0	0	0	0	0	0	211	159	118	133	161	220	234	208	195	130	105	142	
Brazil	4 238	5 005	5 960	5 994	6 903	11 035	13 899	19 692	28 773	21 029	26 584	31 716	9 404	11 084	9 767	10 066	11 173	12 563	14 101	14 020	16 734	15 041	14 882	19 211	7 707	6 758	5 578	5 681	5 495	5 452	5 721	7 024	7 361	6 378	5 350	7 047		
Chile	2 539	2 250	2 447	4 611	8 231	11 416	19 913	22 832	27 430	14 801	18 980	19 136	490	527	711	817	1 137	928	327	1 156	1 198	1 168	1 735	1 408	1 192	787	598	437	579	929	966	1 096	641	1 117	1 050			
Colombia	6 74	938	1 070	1 525	2 453	3 585	4 615	6 667	8 765	7 666	9 877	14 315	758	960	1 177	1 219	1 340	1 630	1 381	1 523	1 610	1 472	1 873	2 272	1 905	1 632	1 335	1 204	1 175	1 317	1 464	1 706	1 733	1 645	1 591	1 893		
Ecuador	329	382	406	595	964	1 004	977	1 160	792	838	547	702	464	301	292	317	344	372	416	399	337	65	64	62	677	723	630	636	625	646	716	741	631	569	500	537		
Paraguay	84	89	39	60	192	158	271	366	505	555	760	530	0	0	0	0	0	0	0	0	0	0	0	0	154	105	114	111	107	105	118	127	115	97	102	103		
Peru	344	141	479	1 112	2 567	4 030	6 741	7 788	8 346	8 172	10 714	12 866	194	190	204	314	432.6	554.2	733.8	831.8	903.1	634.8	817	1 072	1 608	1 450	1 144	1 039	1 018	1 117	1 137	1 326	1 362	979	829	883		
Uruguay	99	108	-264	127	229	228	261	531	843	767	1 126	1 253	158	162	186	220	267	296	456	492	477	457	516	602	585	611	422	382	464	534	463	378	354	348	313	263		
Venezuela (Bolivarian Republic of)	1 424	1 084	1 915	1 802	3 498	3 995	6 540	4 733	4 608	2 413	3 989	5 789	1 768	1 800	1 611	1 678	1 677	1 624	2 017	2 163	2 318	2 421	2 684	3 246	1 196	904	681	556	520	999	662	727	652	532	600	963		
<b>Central America</b>	2 216	1 562	1 048	1 994	2 118	2 903	3 454	4 257	4 069	4 145	4 467	5 340	448	449	531	652	759	797	846	883	890	875	908	933	2 374	2 101	1 589	1 389	1 443	1 741	2 221	2 616	2 520	2 185	2 045	2 159		
Costa Rica	1 141	568	348	644	330	743	853	1 131	749	986	606	483	97	41	49	65	49	74	80	82	63	62	48	223	232	165	177	158	210	190	348	288	240	244	217			
El Salvador	60	73	89	85	80	181	91	159	39	175	215	252	21	10	87	163	185	134	174	182	171	171	158	186	295	325	285	291	304	326	377	386	339	267	219	233		
Guatemala	224	55	111	159	270	370	607	819	886	951	1 001	1 453	37	49	25	22	87	109	108	105	87	98	96	102	122	137	161	150	272	299	368	465	499	408	390	404		
Honduras	161	212	235	292	390	479	621	535	534	602	681	910	0	0	0	0	0	0	0	0	0	0	0	0	197	158	141	126	132	139	112	115	98	75	73	89		
Nicaragua	69	77	71	77	80	82	85	93	113	121	135	146	0	0	0	0	0	0	0	0	0	0	0	0	257	193	184	171	160	140	177	169	150	143	153	117		
Panama	562	569	194	739	967	1 048	1 197	1 521	1 747	1 310	1 829	2 096	293	349	370	401	427	504	489	526	548	544	582	597	1 280	1 056	662	474	417	629	976	1 124	1 166	1 053	966	1 098		
<b>Mexico</b>	6 086	5 892	4 157	4 010	3 989	8 145	10 200	13 442	11 201	8 011	7 102	10 122	140	162	159	197	269	625	887	1 318	1 908	1 791	2 881	4 331	13 555	12 531	11 807	11 473	10 953	11 634	12 900	13 468	12 709	9 868	9 811	11 500		
<b>Latin America</b>	21 768	19 965	18 283	23 681	35 147	52 126	74 375	89 394	93 941	110 701	121 888	22 625	20 447	21 663	23 942	22 986	24 188	25 491	29 168	26 261	28 337	36 239	35 890	32 907	28 022	26 411	25 065	27 007	28 769	31 747	31 276	25 316	23 926	28 197				
<b>The Caribbean</b>	2 021	2 091	2 142	2 482	2 679	3 177	3 520	3 883	3 513	3 101	3 084	2 366	204	209	267	334	359	405	450	528	532	475	448	469	1 015	1 142	1 398	1 439	1 550	1 880	2 233	2 470	2 460	2 381	2 410	1 246		
Anguilla	10	8	7	6	5	4	4	4	4	11	9	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
Antigua and Barbuda	22	26	24	24	25	31	42	44	41	36	33	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bahamas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Barbados	30	38	41	54	116	129	220	224	265	311	250	131	144	150	157	119	137	117	74	89	91	70	...	1	4	4	5	61	40	37	81	61	51	22	...	...		
Belize	31	33	33	31	42	35	52	87	107	56	102	40	4	11	10	30	37	50	39	37	26	25	29	34	20	27	25	28	36	30	39	37	33	26	25	24		
Dominica	33	19	18	16	22	23	7	13	13	13	8	5	4	5	5	5	3	3	0	1	2	0	0	0	7	5	8	9	11	9	11	15	14	5	7	9		
Dominican Republic	1 068	1 690	1 153	1 391	1 652	1 765	1 932	2 194	1 669	1 518	1 528	1 839	48	34	74	85	140	155	224	356	377	324	312	387	206	217	202	235	334	376	371	416	380	313	310	371		
Grenada	28	34	32	26	25	23	22	36	32	55	31	21	0	2	7	12	16	0	0	0	0	1	1	1	11	10	13	17	30	17	20	21	22	19	18	18		
Guyana	6	5	4	2	3	7	9	-7	0	17	12	6	0	0	0	0	0	0	0	0	0	0	0	0	54	59	53	52	35	30	57	38	41	24	23	...	...	
Haiti	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225	316	354	388	421	464	518	530	609	626	565	532	...	...
Jamaica	290	301	434	326	362	454	376	533	376	232	127	112	8	7	9	25	19	35	42	27	19	13	15	52	9	9	14	14	12	35	12	20	12	18	10	3		
Montserrat	3	3	1	2	2	2	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	2	0	
Saint Kitts and Nevis	21	23	23	23	20	20	20	23	23	20	18	19	3	5	10	12	13	12	13	10	8	11	10	5	8	7	8	11	11	10	12	10	11	18	15	9		
Saint Lucia	33	31	23	32	49	51	34	45	52	35	32	12	1	2	3	8	9	10	9	6	10	6	7	5	14	16	14	16	17	20	23	29	18	24	20	21		
Saint Vincent and the Grenadines	13	11	15	21	25	22	23	20	18	12	11	7	0	0	0	1	1	2	2	1	1	1	2	2	10	8	6	6	9	13	14	14	13	13	12	12	...	...
Suriname	51	96	37	40	62	45	55	0	0	1 100	266	0	0	0	0	0	0	0	0	0	0	0	0	0	6	112	50	55	73	15	32	16	15	...	...	...		
Trinidad and Tobago	381	374	295	489	271	566	722	664	904	780	827	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	379	383	311	585	812	939	1 043	1 019	1 128	...	...	
<b>Latin America and the Caribbean</b>	23 289	21 895	20 425	26 163	37 827	55 303	77 895	93 277	97 427	80 827	96 525	113 067	21 392	22 684	20 713	21 997	24 300	23 391	24 659	25 019	23 970	26 736	28 785	36 727	36 905	34 04												







## Foreign direct investment in the agricultural and agro-industry sector in Latin America and the Caribbean

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### Bibliography



## A. Introduction

Agriculture<sup>1</sup> and agro-industry<sup>2</sup> are currently the focus of a global debate on food security, energy security and climate change. The world population is expected to reach 9 billion by 2050; to meet the demand for food, agricultural production will need to increase by 70% over the level recorded in 2006 (FAO, 2009). Virtually all of the net population increase of 2 billion will be in the emerging and developing economies. This demographic trend is accompanied by rising family incomes<sup>3</sup> (see figure III.1) and an increasingly Westernized diet based on higher consumption of animal protein (see figure III.2) and more highly processed food.

At the same time, the rising price of oil, the pursuit of energy security and the commitment to mitigate climate change have led the governments of a number of countries to support the production and use of biofuels. Maize and sugar cane have been ethanol feedstocks in the United States and Brazil, respectively, while canola (rapeseed) has been the biodiesel feedstock in the European Union. According to World Bank estimates (2010), the total area under biofuel crops has grown at a dizzying pace in recent times, more than doubling between 2004 and 2008 when it hit the 36 million hectare mark.

All of these changes are creating challenges and opportunities in the agricultural and agro-industry sector, particularly in the case of grains, oilseeds, sugar cane and other flex-crops that can be used for human consumption or animal feed or for making biofuels but compete for the same basic inputs: land and water.

To respond to the increasing new food and biofuel demand it is necessary to address the physical, technological and institutional factors that limit the growth of agricultural supply. The physical constraints (such as the number of hectares of land available for agricultural use) are relevant, especially locally, because worldwide studies (Roudart, 2010) indicate that there is enough land for expanding food production.

Estimates of agricultural productivity in Latin America and the Caribbean suggest that the region is closer to its potential than Africa but is still below the levels reached in other, more developed economies (GAEZ, 2013). Therefore, a key objective is to increase productivity and achieve full potential. This poses challenges in the spheres of science, technology and innovation for development and involves adopting new techniques that, in turn, mitigate environmental risks (not only those related to climate change, but also those associated with the rise in specialization, or mono-cropping, in many countries of the region). The use of new technologies for controlling biotic conditions (genetically modified organisms are one example) raises new issues, as well, because weeds, insects and diseases adapt and climate change could make them evolve in unexpected directions and become resistant.

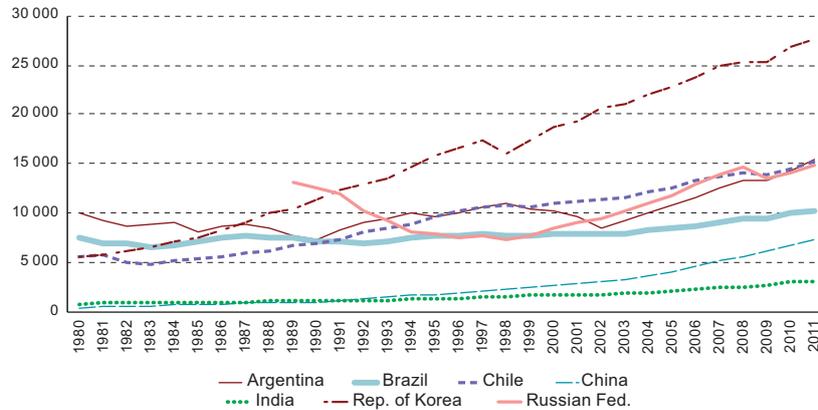
Another challenge is the slowing rate of growth of agricultural yields shown in empirical studies (Atlas and Achoth, 2006; Estudillo and Otsuka, 2004), to a degree that varies by geographical area and level of climate stress. Pingali (2007) pointed out three factors to explain this downtrend in the major grains for human consumption: (i) land degradation due to more intensive farming; (ii) the rising opportunity cost of agricultural labour; and (iii) declining agricultural infrastructure and research investment.

<sup>1</sup> For the purposes of this chapter, agriculture includes all primary activities related to the production of crops (that is, activities that seek to obtain agricultural raw materials) and livestock (cattle, sheep, pigs and poultry). It thus includes all economic activities that have their basis in the exploitation of the earth's resources, favoured by human action (FAO, 1997).

<sup>2</sup> A common and traditional definition of agro-industry refers to the subset of manufacturing that turns out intermediate or end products derived from the agricultural sector. Agro-industry therefore refers to processing agriculture, forestry and fisheries products (FAO, 1997). This chapter looks at agro-industry activities in the areas of food (or agro-food) and agro-energy (specifically, the production of biofuels).

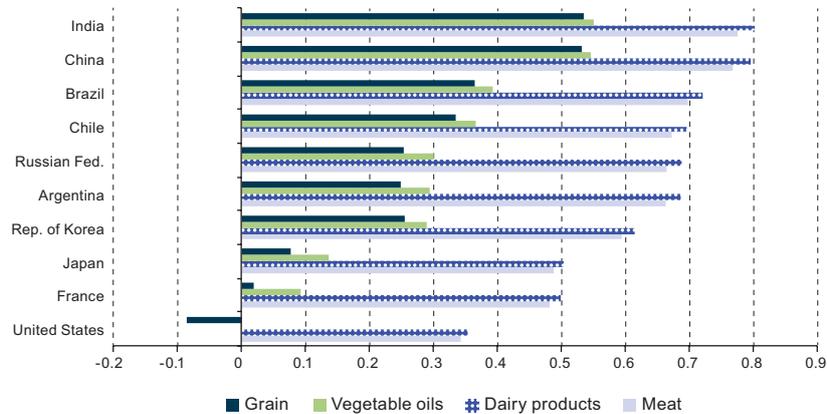
<sup>3</sup> Mainly in the case of the emerging economies (such as Brazil, China, India and Indonesia, with a combined population of 3 billion and annual economic growth rates between 4% and 9%).

**Figure III.1**  
**Selected emerging countries: real per capita income, 1980-2011**  
*(In 2005 PPP<sup>a</sup> dollars)*



Source: World Bank, World Development Indicators [database], 2012.  
<sup>a</sup> Purchasing power parity.

**Figure III.2**  
**Selected countries: food consumption patterns, 2005**  
*(Income elasticity for food subcategories)*



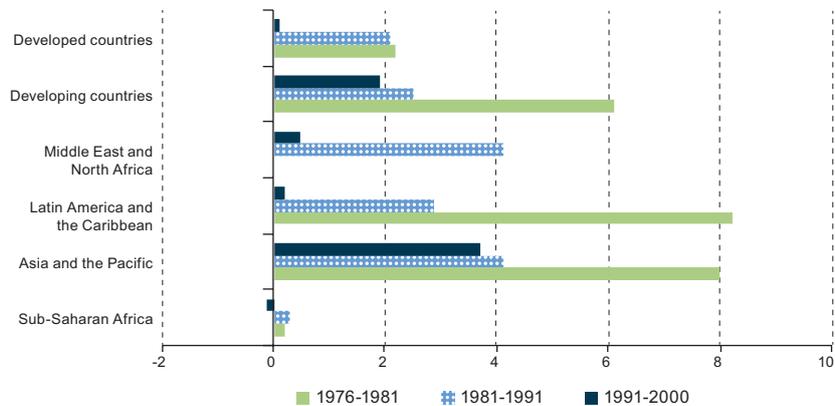
Source: United States Department of Agriculture (USDA), International Food Consumption Patterns, 2012.

Figure III.3 illustrates this last point. Between 1975 and 2000, public expenditure and investment in agricultural research dropped throughout the world; the percentage decrease is particularly significant in Latin America and the Caribbean. With public spending on agriculture trending down, foreign direct investment (FDI) in the sector can play a very important role (particularly in low-income countries), not only by disseminating new technologies to achieve high yields while sustainably managing natural resources, but also by contributing to economic growth in rural areas (where much of global poverty is still concentrated).

Another factor that is putting pressure on agricultural supply is food waste. According to estimates, approximately one third of the food produced is not consumed (Saravia-Matus and others, 2012). In low-income countries, food loss tends to occur before or after harvesting; in high-income countries wastage is concentrated almost equally in supply chains (from farm to supermarket) and at the consumer level (Hodges and others, 2011; Gómez and Paloma and others, 2012).

Institutional factors can be a drag on the growth of agricultural supply, especially in the short and medium term. This is what happens, for example, when exchange rate appreciation or agricultural price volatility (which reached record highs between 2007 and 2008) make agriculture less competitive, or when the export tax structure is a key factor. In the longer run, increasing the area under cultivation is also constrained by infrastructure bottlenecks (such as difficulty of access and lack of irrigation systems or storage) and governance issues (like ownership rights).

**Figure III.3**  
**Annual growth rates of agricultural research expenditures by geographical area, 1976-2000**  
 (Percentages)



**Source:** N. Beintema and H. Elliot, "Current trends in food retailing and consumption and key choices facing society," *European Food System in a Changing World*, R. Rabbinge and A. Linnermann (eds.), Brussels, 2009.

Owing to factors such as these, the World Food Programme (WFP) has noted that the world has gone from a structural food surplus to a structural food deficit (WFP, 2007). This, together with the demand for biofuels, explains the renewed interest in controlling and securing access to natural and agricultural resources (land, water and nutrients). At the agro-industry level, transnational food mega-companies are consolidating and a new generation of transnationals is emerging.

In short, technological and institutional innovations are needed to address the challenges involved in reversing the downtrend in agricultural yields, promoting land fertility conservation and the sustainable use of water, and developing agricultural production and trade infrastructure. Despite technological and infrastructure constraints in Latin America and the Caribbean, land and water are available for increasing the area under production.<sup>4</sup> However, this will require new and strategic investments that are environmentally and socioeconomically responsible and involve realigning institutions and supporting innovation.

Because the sector has been low on government investment and international cooperation agendas in recent decades, FDI flows to agriculture and agro-industry are playing a strategic role in meeting current demographic and climate challenges.

This chapter focuses on three major areas of interest. Section B puts the strategic value of FDI into context, discussing major trends and developments in agriculture and agro-industry in the region. Recent investments in agricultural land worldwide are examined in order to understand the situation in Latin America and the Caribbean. Section B goes on to describe the changing role of agro-industry in the global and regional food market, and it ends with a look at the macroeconomics of FDI flows to agriculture and agro-industry.

The second focus is on foreign investment in two major production subsectors: the agro-commodities cluster and the agricultural inputs sector (see section C).<sup>5</sup> The goal is to identify linkages in the production of flex-crops to produce food, energy and fodder and track the flow of investments in seeds and fertilizers as key inputs for increasing agricultural yields. This section seeks an understanding of the strategies followed by major transnational corporations in the region (including the trans-Latins) and the dynamics of the supply chains of which they are a part. It therefore provides an overview of the production dynamics of each agro-chain and the business strategies involved, based on available statistics (often weak or incomplete), a review of the literature and field work done specifically for this report.

Lastly, Section D sets out the conclusions of the study, reviewing the dynamics of FDI in the region's agricultural and agro-industry sector, the strategies behind FDI flows and the public policy instruments available to attract and regulate these flows. The emphasis is on innovation, environmental responsibility and social inclusion of small and medium-sized producers, as well as on potential synergies for accelerating the growth of rural economies in Latin America and the Caribbean.

<sup>4</sup> Latin America and the Caribbean has enormous potential for producing food. It has the largest reservoir of arable land in the world (576 million hectares, equivalent to 30% of the worldwide total), 30% of the planet's renewable water reserves, 25% of the world's forest area (including 46% of its tropical forests) and 30% of the world's biodiversity (Sotomayor and others, 2011).

<sup>5</sup> The focus is on these issues because they are more directly linked to the challenges of food security, energy supply and environmental preservation. Because of space limitations, other important sectors such as dairy products, coffee, cocoa, fruits, vegetables, non-alcoholic beverages, wine, beer, mineral water, baked goods and sweets are not discussed.

## B. Global and regional patterns and trends in foreign direct investment in agriculture and agro-industry

### 1. The emerging issue of investment in land

The recent wave of information from academia and the media on agricultural land “mega-deals” throughout the world has helped propel agriculture onto the political and socioeconomic agenda, mainly in countries with inflows of this type of FDI (see box III.1).

#### Box III.1 What is land grabbing?

The term “land grabbing” has drawn media attention and been a focus of academic and policy discussions over the past few years. But sources and authors disagree on how to define and measure it and gauge its impact because there is no standard approach that is widely accepted in the literature.

In English, the term “land grabbing” has a negative connotation and refers to the purchase or leasing of large tracts of agricultural land. In Spanish, the term has sometimes been translated as land ownership concentration and foreignization, but this does not provide an accurate picture of contested definitions.

According to the Land Matrix database, land grabbing is a matter of scale because of the size of the deals involved: as much as half a million hectares (which is unprecedented). This database

records and classifies transfers of more than 1,000 hectares of agricultural land anywhere in the world.

A recent FAO study (2011) defines land grabbing as purchases of agricultural land driven by foreign investors with the support of their governments. It assesses the impact in terms of changes in food security levels in the countries where these investments are made.

According to Borras and others (2012), land grabbing is the purchase of land, regardless of the type of investor (including nationality) or whether it is for agricultural or non-agricultural use. This definition explicitly includes the role of national and regional actors in land grabbing in Latin America.

None of these definitions include cross-border movement or migration because it involves the purchase or leasing of agricultural land on a smaller scale.

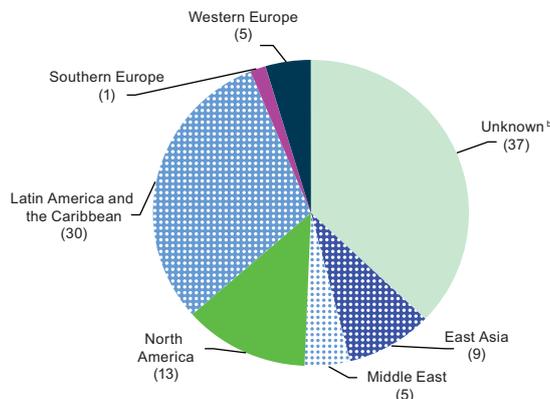
**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Fernando Soto Barquero and Sergio Gómez (eds.), *Dinámicas del mercado de la tierra en América Latina y el Caribe: concentración y extranjerización*, Food and Agriculture Organization of the United Nations (FAO), 2011; and S. Borras and others, “Land grabbing in Latin America and the Caribbean”, *Journal of Peasant Studies*, vol. 39, No. 3-4, 2012.

According to a World Bank study (2010), in 2009 foreign investors expressed interest in acquiring about 56 million hectares around the world. The same study notes that owing to institutional constraints and lack of transparency in some deals, confirming that the investments actually took place and that the land was indeed put to agricultural use was possible for only 20% of the land in question. Despite the difficulty in obtaining reliable data, according to the same source it is clear that interest in purchasing or leasing agricultural land has grown exponentially over the past decade. Early this century, agricultural land was expanding by about 4 million hectares per year, but between 2006 and 2009 the average rose to 11.3 million hectares per year. The World Bank (2010) has estimated that by 2030 an average of 6 million hectares of new land will be put into agricultural production each year. Experts regard this figure as a conservative estimate.

According to the Land Matrix database (2012), between 2000 and 2010 about 50 million hectares were or had been announced as part of investment projects. Although most such transactions take place in Africa, it is estimated that nearly 6.5 million hectares (13% of the worldwide total) correspond to land acquisitions in Latin America and the Caribbean. Excluding forestry and conservation projects brings the overall number of hectares down to about 30 million, of which 4.3 million hectares (14% of the total) are in Latin America and the Caribbean. Figure III.4 breaks down those 4.3 million hectares by investor country of origin (according to the data available in the Land Matrix database), showing that 30% are investors from the region and 33% are from elsewhere; for the remaining 37%, the country of origin could not be confirmed and is therefore classed as “unknown”.

A recent FAO study (2011) on agricultural land concentration and foreign land acquisition in Latin America and the Caribbean suggests that this phenomenon is in its infancy and is mainly concentrated in Argentina and Brazil. In the study, which covers 17 countries of the region, the discussion of land grabbing is focused on States as investors in land. The study looks at land deals that meet two conditions: they involve large areas targeted for the production of food, and at least one foreign government is among the actors or stakeholders. Depending on the context in each country, the review extends to deals involving other crops and other investors. It highlights codes of conduct or good practices aimed at mitigating negative externalities for the countries where the land deals take place and for the local population. On the basis of the study it can be concluded that the region’s land market is growing briskly, especially since the 2007-2008 agricultural price crisis.

**Figure III.4**  
**Latin America and the Caribbean: origin of investors in agricultural land purchase or lease operations, 2000-2011<sup>a</sup>**  
 (Percentages)



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Land Matrix DataBase 2012.

<sup>a</sup> Does not include investments in forests or conservation. The total number of hectares (4.3 million) refers to 2000-2011, although the exact year of the deal could be determined for just 7% of this total.

<sup>b</sup> Investors whose nationality is not specified in the Land Matrix database.

### Box III.2

#### A different kind of foreign investment: cross-border migration in Latin America

Offshoring agricultural activities is nothing new, but it is on the rise (Dirven, 2012). The main migration flow is associated with the massive displacement of Brazilian farmers towards Argentina, Paraguay, the Plurinational State of Bolivia and Uruguay. Brazil was settled in waves once the population was established in the coastal areas, and the process continued towards central and north-eastern Brazil and then intensified in the south. Because the country is much narrower there, settlers quickly reached the border areas with Argentina, Paraguay and Uruguay. In the 1970s these areas were sparsely populated, so it is not surprising that large-scale Brazilian farmers set up operations there and were followed by a large contingent of rural workers. The process gathered momentum in the 1980s, leading to the current levels.

The largest contingent of small and medium-scale farmers went to Paraguay, drawn by the wide availability of land. Smaller numbers moved into Argentina and Uruguay because less land was available and the cost was not as low. The triple interaction between agroindustrial modernization, the gradual closing of the agricultural frontier and relatively flexible controls over the movement of persons allowed large contingents of itinerant workers to drift from one country to another across extensive stretches of the border (Galeano, 1997). As new land was deforested, territory settled and an array of services set into motion, the Brazilians have consolidated a large-scale production model that is heavily industrialized but not very diversified; this has changed the production landscape and Brazil's economy. Although Argentina has laws that bar foreigners from settling in border areas, many small-scale Brazilian growers have done so. But they have not radically changed the nature of the rural economy. This is not the case in Uruguay, which is exposed to pressure on two fronts: from Argentina and Brazil.

In the Plurinational State of Bolivia, one of the most recent cross-border movements has been in the department of Santa Cruz, which saw a surge towards the end of the twentieth century. This department is one of the country's richest, and in the past two decades its growth has outpaced the national rate. Much of this growth has been fuelled by a boom in agricultural activity, which accounts for 56% of the department's foreign trade. Its main products are oilseeds, sugar, hides, timber, cotton, and vegetable oil and alcohol products (Urioste, 2011). Modern

agroindustrial farming in low-lying areas of the department has been displacing traditional rural farming (concentrated in the valleys and Andean highlands) and expanded the agricultural frontier from 413,320 hectares in 1990 to 1,821,631 hectares in 2007. Of this total, an estimated 1 million hectares is devoted to the soybean complex and the rest to other crops. Santa Cruz thus accounts for 66% the 2.7 million hectares of land under cultivation in the Plurinational State of Bolivia (Urioste, 2011).

As noted above, much of the agricultural boom is directly related to the expansion of soybean farming, driven to a large part by land owners from Brazil who arrived in the Plurinational State of Bolivia in three waves. The first and smallest was in the late 1980s. The second, and largest, was between 1993 and 1999, when the government was promoting its Eastern Lowlands programme to encourage the use of very productive land and the development of infrastructure, thus expanding the supply of cheap fertile land (Urioste, 2011). Lastly, since 2005 there has been a new wave of immigration from Brazil. This time, however, it is not restricted so much to the soybean business but rather to the search for land for livestock (Urioste, 2011). In addition to the Brazilians, recent years have brought reports of an equally large wave of immigrants from Argentina, although it is not known whether this relates to businesses with operations in Argentina or Brazil, private interests, or a combination of both (Urioste, 2011).

In addition to the high mobility of Brazilian farmers in the Southern Cone, there is an emerging trend: Brazilian growers are beginning to settle in Africa, drawn by similar agroecological conditions. Since 2009, a number of major producers have been growing cotton, soybeans, rice and maize, among other crops, on land under concession from the Governments of Angola, Ghana, Kenya, Mozambique, the Sudan and other countries (PIB, 2009; VOA, 2011). This is taking place in the private sector, but it is associated with Brazil's growing presence in Africa boosted by several government initiatives. One of these is the Mais Alimentos programme coordinated by the Ministry of Agrarian Development (MDA), which is aimed at improving food and nutrition security in Ghana, Kenya, Mozambique, Senegal and Zimbabwe through lines of credit for the purchase of Brazilian agricultural machinery, which is particularly suited to family agriculture in Africa.

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of M. Urioste, *Extranjerización de la tierra boliviana*, La Paz, Fundación Tierra.

Based on a review of the data used in the FAO study (2011), Borras and others (2012) conclude that at least 10 countries of the region—in addition to Argentina and Brazil—are seeing a surge in agricultural land deals. According to these authors, the differences in how the data are interpreted lie in how agricultural land deals are defined and in the scope of the term “land grabbing”. FAO (2011) analyses land grabbing on the basis of its potential negative impact on food security in the host country and the profile of the foreign investors involved. Borras and others (2012) emphasize that a large part of land deals in the region are being handled by trans-Latin companies with contacts and representatives in the country in question. Table III.1 summarizes the type of land use involved in most of these deals in selected countries of the region, according to the definition used by these authors.

**Table III.1**  
**Latin America (selected countries): intended uses in land investments**

Country	Branches of production	Others
Argentina	Soybeans, wheat, sugar cane, livestock	Tobacco, conservation
Bolivia (Plurinational State of)	Soybeans, livestock	Logging
Brazil	Soybeans, sugar cane, livestock, poultry, fruit	Logging
Chile	Fruit, dairy products, wineries, seeds, poultry	Conservation and logging
Colombia	Palm oil, sugar cane, soybeans, rice and maize	Logging
Ecuador	Bananas, sugar cane, palm oil	Logging, minerals
Paraguay	Soybeans, maize, wheat, livestock	
Peru	Fruit, vegetables, sugar cane, palm oil	Minerals
Uruguay	Soybeans, dairy products, wheat, rice, livestock	Logging
Mexico	Maize (supply chain), sugar cane, fruit, coffee	Flowers, tequila, conservation
Costa Rica	Bananas, pineapples, palm oil	
Guatemala	Sugar cane, palm oil	Logging
Nicaragua	Livestock, rice, palm oil, sugar cane, citrus	Tourism, logging
Dominican Republic	Sugar cane, bananas, fruit, vegetables	
Guyana	Sugar cane, livestock, rice, pineapples	Logging
Trinidad and Tobago	Sugar cane, cocoa, fruit	

**Source:** S. Borras and others, “Land grabbing in Latin America and the Caribbean”, *Journal of Peasant Studies*, vol. 39, No. 3-4, 2012.

The figures from Paraguay provide an idea of the scale and pattern of agricultural land purchases. Borras and others (2012) note that between 2006 and 2010, 1.8 million hectares of land were acquired by foreign companies, bringing the area under foreign ownership in Paraguay up to almost 6 million hectares. Urioste (2011) stresses that of the 5.5 million hectares used to produce some kind of food, about 1 million hectares are in the hands of foreign nationals. Brazilian nationals have acquired ownership of nearly 700,000 hectares, Argentines 100,000 hectares, and Mennonites and Japanese nationals another 200,000 hectares. The existence of a similar dynamic in other countries (with deals that are not in the Land Matrix database) would mean that the data in figure III.4 might be understating the scale of land acquisition in Latin America and the Caribbean. Moreover, the fact that the purchase of land by foreign nationals is defined and measured in different ways shows that it is more important to focus on trends rather than on exact numbers. In any case, these differences cast light on the ongoing discussion of investment in and acquisition of agricultural land, which must be put into context in order to avoid comparing sources that use different methodologies.

The nature and interests of investors involved in the acquisition of land have changed, too. On the one hand, the ranks of traditional investors (agricultural and agro-industry companies) whose primary goal is to ensure inputs for the production of food or fodder are being joined by a growing group of companies venturing into biofuel production. On the other hand, public enterprises and mixed consortia financed by sovereign wealth funds (especially in Asian and Middle Eastern countries) are playing an ever larger role as they seek, among other things, to secure access to natural resources so as to offset their own limitations, avoid the impact of international agricultural price volatility or enhance their countries’ food self-sufficiency. In addition, the financial crisis and the commodity price boom made investing in land and agro-commodities more attractive for investment banks and pension fund managers. As a result, the actors interested in investing in agricultural land have grown more diverse; the long-term consequences remain to be seen.

Evidence submitted by Borrás and others (2012) and Land Matrix data indicate that in Latin America and the Caribbean, trans-Latin companies operating in a variety of sectors account for most of the agricultural land deals where the origin of the investors is known. However, the presence of these new actors and their interests should not be overlooked; even though their operations in the region are still incipient, their growing presence in the future could change how land and natural resources are used and have significant medium- and long-term impacts. In that regard, it should be borne in mind that 37% per cent of the investments in purchasing or leasing land are from investors whose origin is unknown.

## 2. Restructuring agro-industry in the food markets

The past few decades have seen the consolidation of a small set of large, global food companies like Nestlé (dairy; Switzerland), Kraft Foods, Inc. (food; United States) and Unilever (food; the Netherlands).<sup>6</sup> This phenomenon is part of a broader shift from the agro-industry stage to a new one that some authors have labelled “agro-tertiary” (Ayadi and others, 2006). In this new phase, the influence of the major agro-industrial processing and distribution transnationals is growing as they draw ever closer to the end consumer by managing globally recognized brands that go beyond food.

In addition to the consolidation of food industry mega-transnationals,<sup>7</sup> a new generation of transnationals is emerging. It includes new Asian commodities giants, Latin American transnationals (the agro-food trans-Latins) with an increasingly high global market profile, and much smaller, flexible and decentralized companies with high-quality (specialty) products.

The list of the 500 largest companies in Latin America and the Caribbean (*América Economía*, 2011) includes 51 agro-food companies (or agro-industry firms whose products target the food market). Some of them are, on the basis of volume of sales, in a class with the major global transnationals in the sector. Of these 51 companies, 23 are from Brazil, 15 from Mexico, 4 from Argentina, 4 from Peru, 3 from Chile and 2 from Colombia. Brazil’s JBS-Friboi ranks first in the agro-food sector and is the ninth largest company in the region (see table III.2). Of the 51 Latin American and Caribbean agro-food companies on the *América Economía* list, at least 21 are trans-Latins<sup>8</sup> whose growth is based on successful mergers and acquisitions strategies not only in countries of the region but also in Canada, Europe and the United States (see point 1 in section D).

The strategy for growing through agro-industry mergers and acquisitions is favoured by the tighter regulation—national and global—of food production and distribution (and, more recently, by policy incentives for producing biofuels) because setting up subsidiaries and joint ventures or acquiring local enterprises creates economies of scale that make it easier to comply with these regulations.

Mergers and acquisitions also boost value creation. From the point of view of economic content, food tends to be transformed into services: agricultural raw materials account for less than 20% of the value of the final product. The rest comes from activities associated with industrial processing, packaging, shipping, marketing, financial services, insurance and taxes. The reason for this trend is that in the new knowledge economy, food manufacturers not only sell food, but intangible goods and images as well in order to meet growing consumer demand for health, beauty, longevity, vitality, well-being and identity (Barrera, 2010).

At the international level, mergers and acquisitions in the agricultural and agro-industry (food processing) sector rose sharply worldwide during 2007-2008 (UNCTAD, 2009). The net value of these transactions in the agricultural sector amounted to US \$1.8 billion in 2007 and US \$ 2.1 billion in 2008. The figure for the agro-industry sector was much higher: US \$ 33 billion in 2007 and US \$86 billion in 2008.

<sup>6</sup> It is estimated that, in 2002, 27% of global food production was concentrated in the 100 largest transnational food corporations, mainly from the United States and Europe. The top 15 of these corporations had a total combined sales value of US\$ 336.392 billion in 2002 (Ayadi, Rastoin and Tozanli, 2006).

<sup>7</sup> The same is true of the large transnational mega-companies that supply agricultural inputs (see point 2 in section C). By contrast, it is still too early to tell whether biofuel mega-production will follow a similar trend. In any case, the entry of companies such as BP and Shell could help reshape this sector in the same way if they decide to invest more in this area.

<sup>8</sup> Companies were classed as trans-Latins if their web pages gave information on investments in the region (as of 15 January 2013).

**Table III.2**  
**Latin America and the Caribbean: agro-food companies ranked among the 500 largest firms,**  
**according to 2011 sales**  
*(Millions of dollars)*

	<b>Agro-food company</b>	<b>Country</b>	<b>Sector</b>	<b>Sales</b>	<b>Ranking</b>
1	JBS-Friboi <sup>a</sup>	Brazil	Agro-industry	32 944.2	9
2	Femsa <sup>b</sup>	Mexico	Beverages	14 557.7	25
3	AmBev <sup>a</sup>	Brazil	Beverages	14 461.4	27
4	Brasil Foods (BRF) <sup>a</sup>	Brazil	Food	13 704.1	28
5	Bunge Alimentos <sup>b</sup>	Brazil	Agro-industry	12 340.0	34
6	Cosan <sup>b</sup>	Brazil	Agro-industry	12 214.7	35
7	Marfrig <sup>a</sup>	Brazil	Agro-industry	11 667.0	37
8	Coca-Cola <sup>b</sup>	Brazil	Beverages	11 000.0	42
9	Cargill <sup>b</sup>	Brazil	Agro-industry	10 065.0	46
10	Grupo Bimbo <sup>a</sup>	Mexico	Food	9 586.7	50
11	Coca-Cola Femsa <sup>b</sup>	Mexico	Beverages	8 941.7	59
12	Grupo Modelo <sup>a</sup>	Mexico	Beverages	6 539.0	77
13	Copersucar <sup>a</sup>	Brazil	Agro-industry	5 987.0	84
14	Nestlé <sup>b</sup>	Brazil	Food	5 082.0	99
15	Grupo Industrial Lala <sup>a</sup>	Mexico	Food	4 802.7	104
16	Cargill <sup>b</sup>	Argentina	Agro-industry	4 743.0	106
17	Louis Dreyfus Commodities <sup>b</sup>	Brazil	Agro-industry	4 187.0	125
18	Gruma <sup>a</sup>	Mexico	Food	4 133.0	129
19	Cervecería Cuauhtémoc – Heineken <sup>b</sup>	Mexico	Beverages	3 986.4	135
20	Pepsico de México <sup>b</sup>	Mexico	Beverages	3 835.2	138
21	Nestlé de México <sup>b</sup>	Mexico	Food	3 226.4	171
22	Embotelladoras Arca <sup>a</sup>	Mexico	Beverages	3 211.8	173
23	Molinos Río de la Plata <sup>a</sup>	Argentina	Agro-industry	3 106.7	182
24	Arcor <sup>a</sup>	Argentina	Food	3 100.0	183
25	Coamo <sup>c</sup>	Brazil	Food	2 960.0	189
26	Souza Cruz <sup>c</sup>	Brazil	Agro-industry	2 958.8	190
27	Sigma Alimentos <sup>a</sup>	Mexico	Food	2 945.1	191
28	Aceitera General Deheza <sup>a</sup>	Argentina	Agro-industry	2 900.0	196
29	Bavaria <sup>c</sup>	Colombia	Beverages	2 565.6	220
30	Grupo Nutresa <sup>a</sup>	Colombia	Food	2 553.2	224
31	Spal <sup>c</sup>	Brazil	Beverages	2 222.0	259
32	Syngenta Brasil <sup>b</sup>	Brazil	Agro-industry	2 152.0	267
33	Agrosuper <sup>c</sup>	Chile	Agro-industry	2 149.5	268
34	Minerva <sup>a</sup>	Brazil	Agro-industry	2 120.1	274
35	Industrias Bachoco <sup>a</sup>	Mexico	Agro-industry	1 988.5	286
36	Embotelladora Andina <sup>a</sup>	Chile	Beverages	1 884.8	303
37	Aurora Alimentos <sup>c</sup>	Brazil	Food	1 875.0	306
38	CCU <sup>a</sup>	Chile	Beverages	1 859.3	310
39	Holding Alimentario del Perú <sup>a</sup>	Peru	Food	1 790.8	320
40	Ajegroup <sup>b</sup>	Peru	Beverages	1 719.3	338
41	Grupo Schincariol <sup>b</sup>	Brazil	Beverages	1 684.0	344
42	Cooxupé <sup>c</sup>	Brazil	Food	1 622.0	358
43	Alicorp <sup>a</sup>	Peru	Food	1 578.5	368
44	M. Dias Branco <sup>c</sup>	Brazil	Food	1 551.9	382
45	Sukarne <sup>c</sup>	Mexico	Food	1 511.3	393
46	Syngenta Agro <sup>b</sup>	Mexico	Agro-industry	1 496.2	400
47	C. Vale <sup>c</sup>	Brazil	Agro-industry	1 429.0	413
48	Primo Schincariol <sup>b</sup>	Brazil	Beverages	1 248.0	461
49	Danone <sup>b</sup>	Mexico	Food	1 198.1	476
50	LBR Lácteos Brasil <sup>c</sup>	Brazil	Food	1 180.0	481
51	Backus y Johnston <sup>b</sup>	Peru	Beverages	1 114.8	498

**Source:** *América Economía, Ranking de las 500 mayores empresas de América Latina, December 2011.*

<sup>a</sup> Trans-Latin.

<sup>b</sup> Foreign-owned (countries outside the region).

<sup>c</sup> Operating in the domestic market, according to information provided on web pages as of 15 January 2013.

In short, the rearrangement of agro-industry chains is the result of mergers and acquisitions strategies employed by transnational corporations in order to compete in the global market. These operations are influenced by competition among companies in each production sector and by multilateral agreements and policy instruments implemented by national governments. These political and institutional frameworks are in turn very much determined by the dynamics of world agriculture. For example, it is likely that rising agricultural prices in 2007-2008 curbed a general trend towards deregulation, as evidenced by the stalled Doha Round of World Trade Organization (WTO) talks. Highly volatile agricultural prices, together with poverty and food problems for a significant portion of the world's population, along with the environmental impact of the current agricultural development model, are also likely to operate in favour of a change at the institutional level that could change the behaviour of transnational companies and further spur interest in controlling and securing access to natural resources, especially in the form of agricultural land and water.

### 3. Evolution of foreign direct investment flows in the agricultural and agro-industry sector

In the agricultural and agro-industry sector, FDI is driven primarily by an interest in securing the control and use of assets that make it possible to tap natural resources (land, water, forests) and use animals for human consumption, as well as assets that make it possible to obtain infrastructure for agricultural processing, acquire and develop technology, build production partnerships or carry out new mergers and acquisitions.

Between 1989-1991 and 2005-2007, global FDI flows towards primary activities (agriculture, hunting, fishing and logging) and agro-industry operations (food, beverages and tobacco) quadrupled, driven by a number of factors including the liberalization of trade and capital flows, the consolidation of free trade agreements and the growth of emerging economies (UNCTAD, 2009). The share of FDI going to the agro-food industry (food, beverages and tobacco), primarily from developed countries, did not change significantly during this period and went from 98% to 95%. Meanwhile, the percentage of FDI towards the primary sector in developed countries plummeted from 91% to 52% because some developing countries began to generate important flows in this area (Rama and Martínez, 2012).

The UNCTAD report (2009) on FDI in agriculture stresses that, in relative terms, these flows are not significant in Latin America and the Caribbean and accounted for just 0.47% of the total between 2005 and 2007. However, during this period these flows were important for some countries, ranging, for example, between 6% and 10% of the total in Ecuador, Peru, and Honduras and between 1% and 3% in Chile, Costa Rica and Brazil. Moreover, all of these countries were listed in the top 20 recipients of FDI in agriculture among the countries considered in the study, and the region ranked second after Asia and Oceania as an FDI destination (UNCTAD, 2009). The study shows that in South America, investment was concentrated in grains and oilseeds, fruit and meat, while in Central America and the Caribbean it was concentrated in fruit and sugar cane. According to the study, the main draws for such investments include the structure of the economy, the diversity of agricultural land and national public policies.

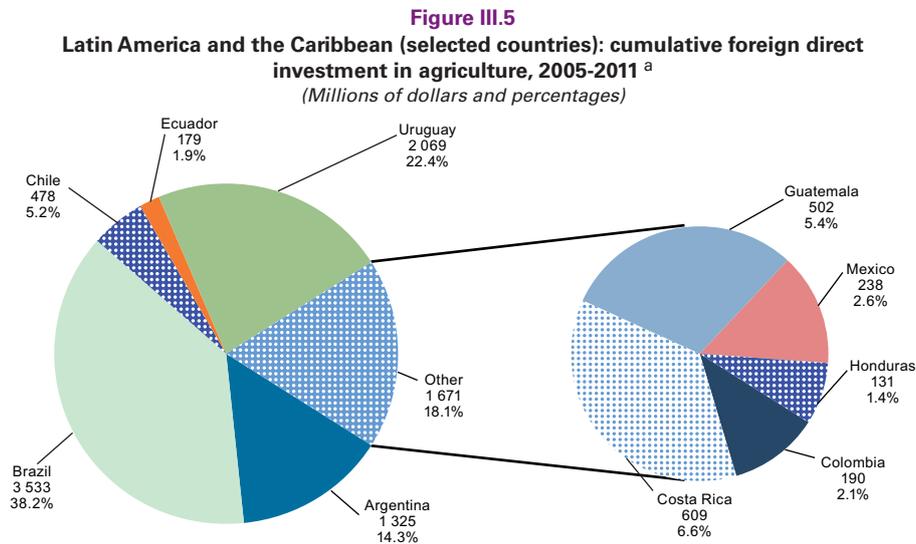
This suggests that not all countries in the region have the same potential for boosting their agricultural sector or attracting FDI flows. Noteworthy among the countries with the most potential are Argentina, Brazil, Paraguay, the Plurinational State of Bolivia and Uruguay, which have water in abundance and vast areas of available land. These countries are seeking to leverage these resources so as to become major exporters of agricultural and agro-industry products, as indeed they already are in sugar, coffee, soybeans, wheat, orange juice, poultry meat, beef, tobacco, ethanol and biodiesel, among other products. At the other extreme are the countries of the Caribbean, where the shortage of available land and slow growth in the sector have turned them into food importing countries. Between these two extremes are the countries of Central America, Mexico and the Andean countries, many of which are constrained by, for example, more limited integration into the global market or a more fragmented agrarian structure with a high proportion of smallholders.

National statistics from the countries of the region on FDI flowing into the agricultural and agro-industry sector vary widely in availability. In some countries, the data are not recorded separately; in countries where flows are recorded, they are grouped according to different criteria. For example, some countries report agricultural FDI together with other primary activities (such as fishing). Others include mining sector flows in the same account (Guatemala is one example). In addition, FDI in agro-industry operations is often grouped with other industrial

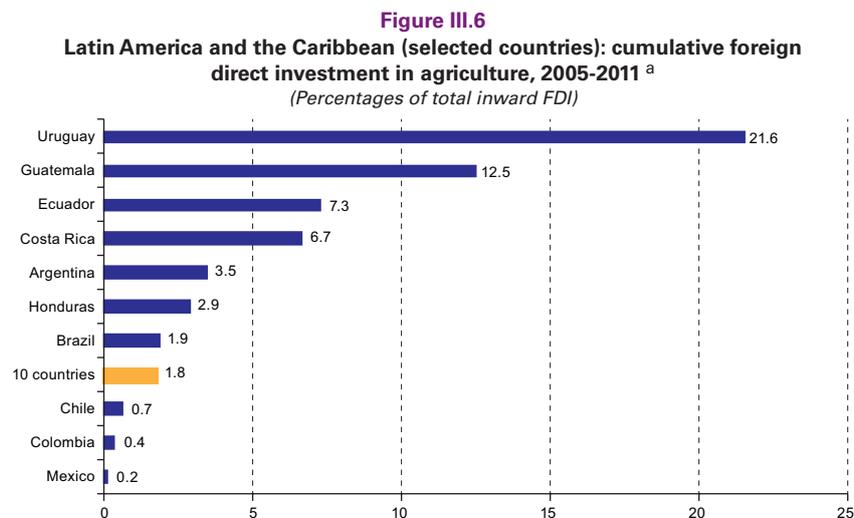
processes. For this reason, analysing data on FDI in this sector poses a challenge that can be addressed only partially. The analysis set out in this section is restricted to the countries that have statistics for agricultural activities or agro-industry operations.

Figure III.5 shows cumulative FDI between 2005 and 2010 in the agricultural sectors of 10 countries of the region for which such data were available: US\$ 9.255 billion, which is 1.8% of the combined total inward FDI for this group of countries (US\$ 517.217 billion).

The importance of agricultural FDI varies greatly from one economy to another (see figure III.6). In Uruguay it accounts for nearly 22% of total inward FDI between 2005 and 2011. It also makes up a substantial proportion in Guatemala (12.5%), Costa Rica (7.3%) and Ecuador (7.2%). As agricultural prices spiralled up in 2007-2008, the countries for which data are available saw rising FDI flows to the agricultural sector, particularly in Argentina, Brazil, Costa Rica, Guatemala, Peru and Uruguay (see figure III.7).

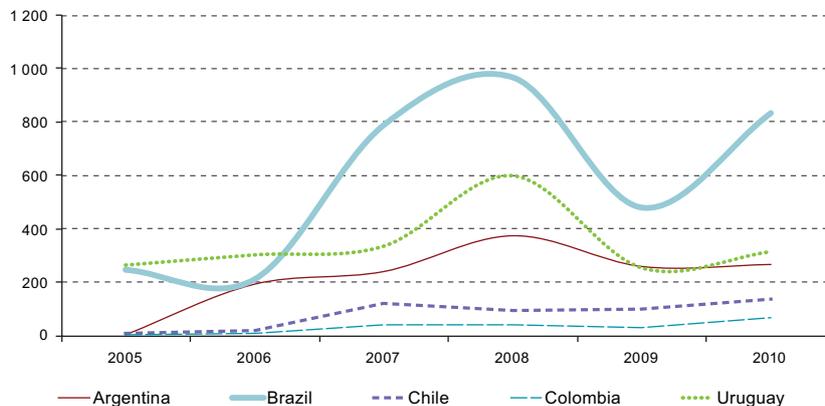


**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the national accounts of the central banks of the respective countries.  
<sup>a</sup> FDI records include the forestry sector. Data on FDI by economic sector in Colombia and Ecuador include the fisheries subsector. In Guatemala, this information includes mining. Data on FDI by economic sector in Central Bank of Chile national accounts only began to be issued in 2009. Data prior to 2009 are estimates provided by the International Trade Center.



**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the national accounts of the central banks of the respective countries.  
<sup>a</sup> Data on FDI by economic sector in Colombia and Ecuador include the fisheries subsector. In Guatemala, this information includes mining. Data on FDI by economic sector in Central Bank of Chile national accounts only began to be issued in 2009. Data prior to 2009 are estimates provided by the International Trade Center.

**Figure III.7**  
**Latin America and the Caribbean (selected countries): foreign direct investment in agriculture, 2005-2010<sup>a</sup>**  
 (Millions of dollars)



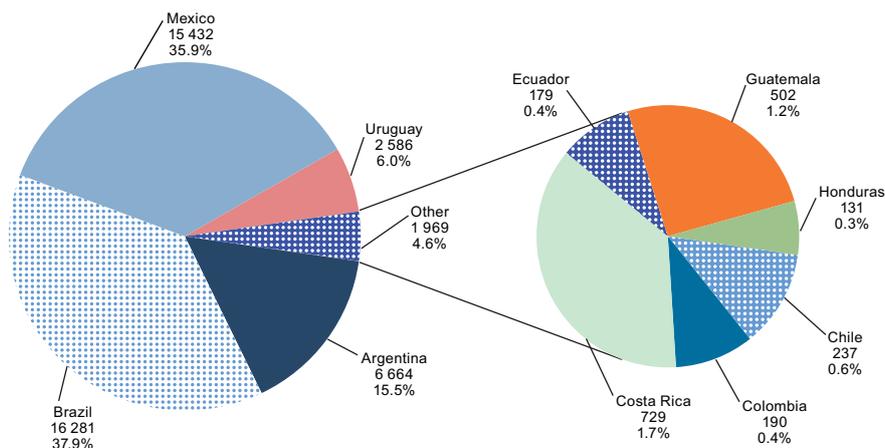
**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the national accounts of the central banks of the respective countries.  
<sup>a</sup> FDI records include the forestry sector. Only countries with complete historical series are included.

FDI in agro-industry in the same 10 countries totalled US\$ 42.933 billion between 2005 and 2010 (see figure III.8). Most of these flows went to Brazil (37.9%), Mexico (35.9%) and Argentina (15.5%). FDI targeting the agro-industry sector in these 10 countries averaged 8.3% of total inward FDI between 2005 and 2010 (US\$ 517.217 billion), with the lowest percentages in Chile (0.3%) and Colombia (0.4%) and the highest in Uruguay (27.0%) and Argentina (17.5%) (see figure III.9).

FDI flows to the agro-industry sector (see figure III.10) are growing at the fastest pace in Mexico and Brazil.

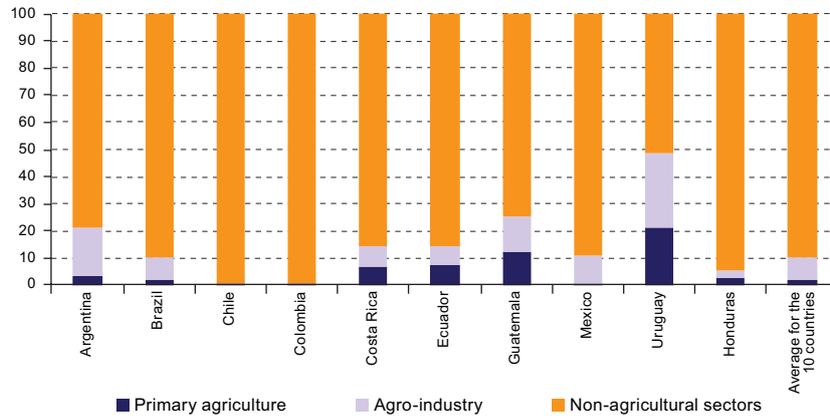
While the amounts of FDI flowing into the agricultural and agro-industry sector in Latin America and the Caribbean are not large compared with inward flows in other sectors, they do (especially those targeting agriculture) have a direct impact on rural economies and region-wide. That impact can spread out to a large part of the population—especially in rural areas, where the population depends on this activity and where, in Latin America and the Caribbean, the poorest households tend to be (Rodríguez and Meneses, 2011).

**Figure III.8**  
**Latin America and the Caribbean (selected countries): cumulative foreign direct investment in agro-industry, 2005-2010<sup>a</sup>**  
 (Millions of dollars and percentages)



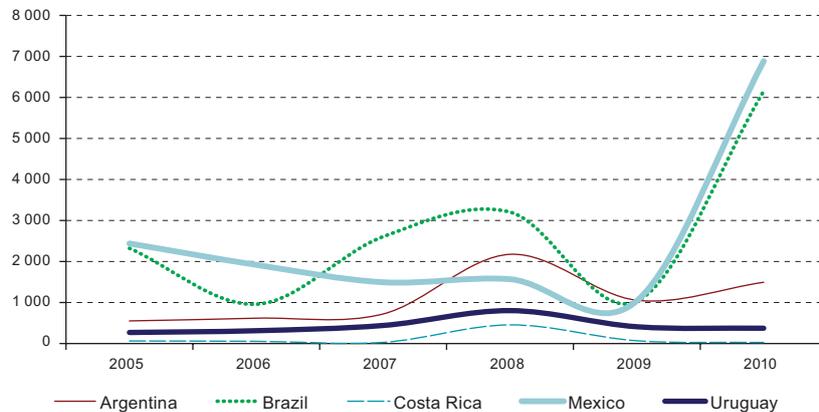
**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the national accounts of the central banks of the respective countries.  
<sup>a</sup> Data include mainly food, beverages and tobacco. Excludes the agricultural machinery industry and biofuel processing.

**Figure III.9**  
**Latin America and the Caribbean (10 countries): distribution of cumulative foreign direct investment in the primary agricultural sector, agro-industry and non-agricultural sectors, 2005-2010**  
*(Percentages of total inward FDI in each country)*



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the national accounts of the central banks of the respective countries.

**Figure III.10**  
**Latin America and the Caribbean (5 countries): foreign direct investment in agro-industry, 2005-2010**  
*(Millions of dollars)*



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the national accounts of the central banks of the respective countries.

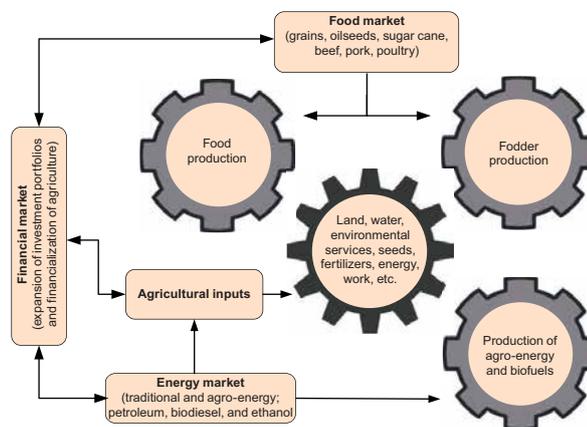
## C. Foreign direct investment trends by subsector

### 1. Food-biofuel-fodder agro-commodities clusters

Agro-commodities are agricultural products that are traded in large volumes on a global scale; their properties are standardized in the market because they are usually used as raw material for other production processes (Gibbons, 2009). This section looks at a subgroup of agro-commodities which are termed “flex-crops” because they can be used for a variety of purposes (to make food, fodder or biofuels). For this reason they are at the heart of the ongoing discussion about food security, energy supply and maintaining the environmental balance of the planet. The crops examined here are grains, oilseeds and sugar cane.

Diagram III.1 shows the interrelated uses of flex-crops in different sectors and their linkages in various markets. Flex-crops, regardless of whether they are intended for producing food, fodder or biofuel, compete for the same basic agricultural inputs (land, water, seeds, fertilizers and fuel). There is also a linkage between the biofuel market and the energy market, because the agro-energy business (like other alternative energies) will be profitable if fossil energy sources become less competitive or government policy promotes the use of cleaner energies, creating a synergy between agricultural markets and energy markets. Another connection that has always existed but has grown stronger in recent years is between the financial markets and agricultural activity, especially in the wake of the 2008 financial crisis when rising agricultural prices drove international portfolio investment to diversify into this sector. As will be seen, FDI in land, along with mergers and acquisitions in the flex-crop sector, are largely shaped by strategies in which the linkages described in diagram III.1 play a fundamental role.

**Diagram III.1**  
**Agricultural product uses and linkages to the inputs, food and energy markets**



Source: Economic Commission for Latin America and the Caribbean (ECLAC).

This section is divided into three large blocs: production of grains, oilseeds and sugar cane (agro-commodities in the food-biofuel-fodder cluster); production of biofuel (ethanol and biodiesel); and meat agro-chains that rely heavily on fodder as input.

### (a) Grains, oilseeds and sugar cane: the flex-crops

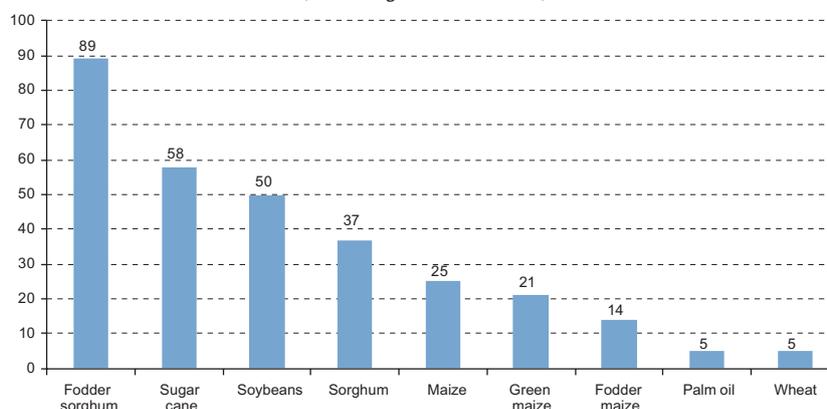
The set of agricultural commodities discussed in this subsection includes wheat, maize, sorghum, soybeans, palm oil and sugar cane. These crops are often called flex-crops because they can be used for making biofuels in addition to their traditional uses as food for human consumption and as fodder. They account for a large part of total production in the region and, in the case of sugar cane and soybeans, worldwide.

#### (i) Overview of agricultural production and the role of Latin America and the Caribbean

Surging demand for grains, oilseeds and sugar cane in recent years is perhaps one of the major developments in global agriculture. Latin America and the Caribbean is playing a leading role in both production and consumption. In 2010, the countries of the region accounted for a large part of the global output of the agro-commodities examined in this section (see figure III.11), producing more than 50% of the world total for soybeans and sugar cane (as biofuel feedstocks) and fodder sorghum (important for the production of animal protein).

As can be seen in table III.3, a large portion of the world planted area is in Latin America and the Caribbean. Between 2006 and 2010, there were increases in almost all of the aforementioned crops: oil palm (14%), soybeans (13%), sugar cane (12%) and sorghum (11%). The region's average maize and wheat area remained virtually unchanged. Growth of the area under cultivation between 2006 and 2010 took place largely in the Southern Cone; soybeans and sugar cane were the two crops that saw the most expansion (adding 5.3 million hectares and 2.8 million hectares, respectively). The biggest increases were in Brazil: almost 100% in the case of sugar cane and 25% in the case of soybeans. Argentina accounted for 53% of the region's increase in the number of hectares planted in soybeans.

**Figure III.11**  
**Latin America and the Caribbean: main agro-commodities in the flex-crop cluster as a portion of global agricultural output, 2010<sup>a</sup>**  
*(Percentages of world total)*



Source: Food and Agriculture Organization of the United Nations, FAOSTAT database.

**Table III.3**  
**Regional and global cultivated area, by flex-crop cluster agro-commodity, 2010**

Crop	Hectares cultivated worldwide	Hectares cultivated in Latin America and the Caribbean	Percentage
Wheat	217 219 395	8 811 744	4
Fodder maize	12 105 840	1 684 784	14
Sorghum	40 935 896	5 762 459	14
Maize	161 765 388	35 786 869	22
Soybeans	102 556 310	46 334 967	45
Sugar cane	23 877 378	12 944 472	54
Fodder sorghum	1 135 006	1 046 272	92

Source: Food and Agriculture Organization of the United Nations, FAOSTAT database.

## (ii) Foreign direct investment in selected agro-commodities

### Wheat

Wheat is one of the most widely consumed grains, both for human food and for fodder. Latin America and the Caribbean produced 33.1 million tons of it in 2010. Wheat production is concentrated in Argentina (44%), followed by Brazil (18%) and Mexico (11%). Region-wide, the area planted changed very little between 2006 and 2010.

In both Argentina and Brazil, the marketing chain is dominated by transnational companies specialized in the export of agricultural commodities. Four transnationals (ADM, Bunge, Cargill and Louis Dreyfus) control as much as 90% of the world grain market. The international press has dubbed these four multinationals or the “ABCD of food” (*The Guardian*, 2011). It is not surprising, therefore, that the same companies operating in the wheat market in these countries also trade in the other agro-commodities discussed in this section.

In Argentina (the largest producer in the region and one of the top 10 worldwide), 8 companies alone accounted for almost 90% of wheat exports. These are the transnationals Cargill, ADM, Bunge, Dreyfus and Toepfer International, along with Argentina’s Nidera, Oleaginosa Moreno and the Association of Argentine Cooperatives (ACA).

Much transnationalization is through acquisitions. For example, in Argentina in 2001 Bunge acquired La Plata Cereal, one of the country’s largest food companies, with operations in wheat and soybean processing, the industrial production of fertilizers, and port facilities. With this acquisition Bunge improved its position in the wheat chain and became the largest soybean processor in Argentina. Also noteworthy are the Brazilian operations of the Argentine trans-Latins Molino Cañuelas, Grupo Navilli (which purchased a maize milling plant in Rio Grande do Sul), and Grupo Macri (Socma), which purchased six milling companies (Canale do Brasil, Isabela, Pastificio Basilar, Zabet, Adria and Todeschini).

Brazil saw a wave of acquisitions between 1991 and 2004 (Benetti, 2004). Bunge acquired Pullman/Campo Grande and Van Mill Produtos Alimentícios; Cargill purchased Moinho São Valentim; Global Grain (Canada/United States) acquired Moinho Santo André and Moinho MG e Rei das Massas; Danone (France) purchased Campineira and Biscoitos Aymoré; Nestlé (Switzerland) purchased Tostines; Parmalat (Italy) purchased Petybon and General Biscuits; and Pillsbury (United States) acquired Terra Branca and Frescarini.

### Maize

Maize output in the region reached 140.6 million tons in 2010. The largest producers were Brazil (39%), the Central American countries (19%), Mexico (17%) and Argentina (16%). The top exporters were Argentina and Brazil, with 17.5 million tons and 10.8 million tons, respectively.

The main foreign investors in maize production are agrochemical companies seeking to plant genetically modified maize and companies interested in using maize to make ethanol.

In Mexico, Monsanto, DuPont and Dow requested government authorization to plant 2.5 million hectares of genetically modified maize in different parts of the country. Investment plans are being reviewed because the area involved is so large and because a number of scientists have put forth arguments stressing the risks entailed, given that Mexico is a global repository of maize genetic diversity (for more information on this deal, see point 2 of section D).

In Argentina in 2012, Monsanto announced a US\$ 329 million investment to set up two experimental genetically modified maize facilities in Córdoba and Tucumán. It is expected that operations will start in 2013 and produce enough seeds to plant 3.5 million hectares. After this investment come five other facilities to grow maize and make biofuel (ethanol), and the German agricultural equipment company CLAAS is planning to set up a factory in the area.

The nature of the investments reflects both the versatility of this crop and the growing demand for biofuel production. In Argentina there were nearly 11 projects (currently being processed) that could sharply increase the production of maize for ethanol in order to raise the ethanol content of gasoline from 4% to 10%. This increase would consume 7% of Argentina's maize output. One of the key players in this field is Bio4 (in Córdoba), a company that produces 80,000 tons of maize ethanol. Maize and sorghum ethanol output is expected to rise to 1.3 million tons by 2015.

### Sorghum

In 2010, Latin America and the Caribbean produced 20.6 million tons of sorghum. The largest producers were the Central American countries (35%), Mexico (33%) and Argentina (20%). The largest exporter was Argentina. Between 2006 and 2010 the sorghum area expanded by 10% (167,000 hectares) in Mexico, 9% (163,000 hectares) in Central America and 3% (252,000 hectares, mainly between 2009 and 2010) in the Southern Cone.

Investments in sorghum are increasingly combined with investments in other crops, especially other grains. An example is the Argentine company El Tejar S.A., which manages 140,000 hectares in Uruguay planted in crops such as wheat, barley, soybeans, maize and sorghum and harvests approximately 650,000 tons of grain each year (see [online] [www.eltejar.com](http://www.eltejar.com)). Investment in sorghum is combined with the construction of silos and fodder processing plants. Over the past three years as much as US\$ 30 million in FDI flowed into Nicaragua from Cargill for poultry projects (see [online] [www.cargill.com](http://www.cargill.com)). Another case, which was reported in the press and recorded by Land Matrix, is the Saudi conglomerate Al-Khorayef, which in 2011 signed an agreement with the government of Chaco province in Argentina for a US\$ 400 million investment in growing sorghum and other crops on 200,000 hectares. Also in 2011, the Indian- and Malaysian-owned Walbrook Group investment firm invested in close to 600,000 hectares in Argentina to be operated under a sublease arrangement (Iberoamerican Observatory of Asia-Pacific, 2011). The purpose of the investment is to meet the demand for grain in countries such as India with scarce water resources and a large population.

### Soybeans

Soybeans are one of the most dynamic and flexible crops. They are the underpinning of emerging integrated agro-industries that can produce soybeans, raw oil, refined oil, flour, pellet feed and biodiesel. For this reason, soybeans have drawn the interest of foreign and domestic investors in the region. They are part of a highly complementary crop rotation production system alongside wheat and maize, forming a production complex with a specific technical rationale. It is for this reason that the production modernization trends for soybeans are seen in the other crops in the rotation.

In 2010, Argentina had 18 million hectares planted under soybeans and produced 52.6 million tons, of which 13.6 million tons (US\$ 4.99 billion) were exported as beans. In the late 2000s there were 73,000 soybean growers (6% cent of them accounted for 54% of output); in 2008 there were 36 crushing companies with a total installed capacity of 146,527 tons per day (Adreani, 2008). Thanks to advanced crushing equipment (solvent extraction), Argentina's soybean crushing plants are large and highly automated, which makes them very competitive compared with their peers in Brazil and the United States. With the exception of Argentina, most soybeans produced in the region are exported unprocessed.<sup>9</sup>

Argentina's soybean market has been changing quickly since the 1990s, with transnational corporations gaining more of a foothold. After Brazil's Ceval bought the local company Guipeba in 1995, the family enterprise Oleaginosa Moreno was bought by the Swiss multinational Glencore in 1997. During the 2000s, the largest crushing companies continued to invest and reached approximately US\$ 450 million in 2005-2006, plus more than US\$ 900 million in complementary investments in logistics and port infrastructure. Leading this expansion was the transnational Bunge (currently the largest processor in the country, whose new facility was to have a daily processing capacity of 30,000 metric tons), followed by Cargill, local groups AGD and Molinos Río de la Plata and the European transnational Louis Dreyfus Commodities LDC). By the late 2000s, 81% of crushing capacity was concentrated in five companies (Bunge, Cargill, Molinos Río de la Plata, Vicentin and LDC), four of which are foreign-owned (see table III.4).

**Table III.4**  
**Argentina and Brazil: soybean crushing capacity indicators, by company, 2008**

Argentina					Brazil				
Company	Operating since	Country	Output (metric tons per day)	Number of plants	Company	Operating since	Country	Output (metric tons per day)	Number of plants
Bunge	1884	United States	27 500	3	Bunge Alimentos	1905	United States	23 000	10
Cargill	1947	United States	27 350	5	Cargill Agrícola	1965	United States	15 700	7
Molinos Río de la Plata	1925	United States	22 200	2	ADM	1997	United States	12 650	6
Vicentin	1925	Argentina	21 850	3	Coinbra (Louis Dreyfus)	1942	France	8 600	4
Louis Dreyfus	1851	France	20 000	2	André Maggi	1970	Brazil	6 800	3
Deheza (AGD)	1948	Argentina	13 700	3	Imcopa	1967	Brazil	6 400	4
Moreno	s.i.	Argentina	4 400	3	Granol	1965	Brazil	6 300	3
Nidera	1920	Argentina-Netherlands	4 200	2	Coamo	1970	Brazil	6 080	4
					Rodosafrá / Insol do Brasil	s.i.	Brazil	5 600	4
					Granóleo	1976	Brazil	4 300	3
					Bianchini	1975	Brazil	4 000	2
					Caramuru Alimentos	1969	Brazil	3 900	3
					Comigo (South-western Goiás Rural Producers Co-op)	1975	Brazil	3 500	1
Other, smaller companies			5 327	13	ABC Inco	s.i.	Brazil	3 500	2
					Sperafico	1957	Brazil	3 300	3
					Cocamar	1963	Brazil	2 500	1
					Brejeiro	s.i.	Brazil	1 900	2
					Pardigão	s.i.	Brazil	1 650	2
					Ovetril	s.i.	Brazil	1 600	2
					Other, smaller companies			22 235	35
Total			146 527	36	Total			143 515	101

**Source:** AgriPAC Consultores on the basis of John Baize Associates, J.J. Hinrichsen and ABIOVE. Cited by Adreani, 2008.

**Note:** n/a: No information available.

This trend could steepen over the next few years, given the growing interest of Chinese enterprises in venturing into the sector. For example, in 2011 the State-owned giant Heilongjiang Beidahuang Nongken Group Company tried to break into the direct production of grain and other food by leasing 300,000 hectares of land. To this end it entered negotiations with the province of Río Negro for a planned investment of US\$ 1.5 billion. This operation has been on hold for the past few months because of political fallout from the deal. The strategy for attracting investments seems to have been changed recently in order to focus on investing in industrial facilities and infrastructure (Nelson, 2012).

<sup>9</sup> During the 2007 season, Brazil processed just 52% of its soybean output while Argentina processed 71% as soybean flour and oil. By contrast, Uruguay processed only 5% and exported 95% as beans.

Planting pools are a unique feature of Argentina's soybean production model. Investors from other economic sectors recruit know-how, rent equipment and machinery, lease land and make intensive use of new technologies such as direct seeding and soybean double-cropping, as well as new inputs packages based on genetically engineered seeds (Roundup Ready, or RR, soybeans), partner herbicides (glyphosate) and fertilizer. Although there are no systematic data, it is estimated that significant FDI flows are being channelled through the system to Argentina's soybean sector. This model has allowed the emergence of large producers that have expanded their operations in Argentina, Brazil, Paraguay, the Plurinational State of Bolivia and Uruguay. Among the examples are Grupo Los Grobo and El Tejar S.A, a closely-held firm backed by the London-based hedge fund Altima Partners LLP and The Capital Group Companies venture capital group.

In 2010 Brazil produced 78.7 million tons of soybeans (equivalent to US\$ 11.042 billion) on 23 million hectares. Soybeans and soybean products are one of Brazil's main agricultural exports, totalling 25.8 million tons in 2010. Brazil has great potential for expanding the area planted with soybeans, which depends in part on the possibility of improving livestock grassland management because much rangeland is severely degraded. Increasing the animal load from 1 head per hectare to 1.4 head per hectare could free up 30 million hectares for soybeans. Expansion is, however, constrained by a number of logistics challenges. Producing areas are quite some distance from the ports, and inadequate roads, railways and waterways have driven the cost of freight up sharply (US\$ 150 per ton from Matto Grosso). That is why the federal government is promoting a major public works plan to improve infrastructure. Another highly sensitive matter (involving soybeans and other crops) has to do with deforestation in the Amazon region. To address this problem, environmental regulations are being tightened and government initiatives (such as the Land Registry and Agrarian Regularization Programme and the Satellite Monitoring Programme) are being launched to bolster enforcement. Other initiatives are in place, like Round Table on Responsible Soy Association (RTRS) certification, backed by the World Wide Fund for Nature; the Soy Moratorium in the Amazon Biome, supported by export companies belonging to the Brazilian Vegetable Oil Industries Association (ABIOVE) and other public and private actors; and the Soja Plus programme supported by private actors (such as ABIOVE and the Brazilian Association of Soybean Producers (APROSOJA)) and the government (the National Service for Rural Apprenticeship (SENAR)).

In Brazil there are 101 soybean processing plants with a crushing capacity of 143,515 tons per day. Five companies (Bunge, Cargill, Archer Daniels Midland (ADM), Coinbra (Louis Dreyfus) and the domestic group Maggi) own 47% of the crushing capacity. A number of foreign firms are long established in Brazil's soybean market. For example, the United States multinational Bunge, which entered business in 1905, bought Cavalcanti & Cia in 1923 and then acquired other firms to expand throughout Brazil. The French multinational Louis Dreyfus has had interests in Brazil since the early twentieth century, and in 1942 bought Comércio e Industrias Brasileiras (Coinbra). More recently, between 1995 and 2002, ADM (United States) acquired the soybean operations of the local companies Sadia, Granja Rezende and J.B. Duarte; Bunge bought Covebras, Olvebasa, Incobrasa and Ceval Alimentos; and Louis Dreyfus (Coinbra) acquired Fábrica da Comove (Benetti, 2004).

A substantial portion of Brazil's soybeans is exported in bean form, owing to two factors. First, there is a tax (ICMS) on transporting production between states for processing. Second, the importing countries, particularly China, have soybean meal and oil plants. Many of these plants are owned by the same transnationals that operate in Brazil, meaning that there is a good deal of intra-company trade. This arrangement also works against the consolidation of major Brazilian companies in the global market. Even so, Amaggi Exportação e Importação Ltda (part of the Maggi group) has been operating in Argentina since 2010, has representation offices in the Netherlands and controls the Norwegian company Denofa (which distributes non-GMO soybeans in the Scandinavian countries).

In 2010 the area planted with soybeans in the Plurinational State of Bolivia stood at 922,115 hectares; soybean output was 1.9 million tons. According to data from the National Association of Oilseed and Wheat Producers (ANAPO), there are 14,000 soybean producers in the country; 2% (300 farms) are large, 20% (2,800 farms) are medium-sized and 78% (11,000 farms) are small. Of the major producers, approximately 90% are foreign-owned, mainly by Brazilians and Argentines and, to a lesser extent, by Peruvians and by Mennonite and Japanese settlers who arrived in the 1950s.<sup>10</sup> In 2005, Shanghai Pengxin Group acquired 12,500 hectares to grow soybeans, maize and sorghum. According to data from Land Matrix, companies like El Tejar-Campos Verdes Limited and Cresud SACIFYA (Argentina) have acquired just over 20,000 hectares in recent years. It is estimated that 700,000 hectares are owned by Brazilian, Argentine, Peruvian and Colombian agro-industry firms, most of which is being used to grow genetically modified soybeans (Urioste, 2011).

<sup>10</sup> These own an estimated 40% of the land under cultivation (Pérez, 2008).

The Bolivian vegetable oil industry has an installed storage capacity of nearly 800,000 metric tons per year, plus another 200,000 metric tons per year of capacity owned by service companies and individual soybean growers. The industrial sector is export-oriented and operates through seven processing plants with a combined installed processing capacity of 1,916,000 metric tons per year. Four of them are foreign-owned: ADM-SAO S.A. (United States), Gravelat Bolivia (Colombia and United States), Industrias de Aceites S.A. (Peru and Plurinational State of Bolivia) and Cargill (United States).

During the 2010-2011 season, Paraguay's planted area stood at 2.9 million hectares, production volume was 8.6 million tons and exports totalled US \$ 2.29 billion. Of the total soybean area, 87% is concentrated in farms with more than 100 hectares. Ninety percent of Paraguay's soybeans and grain is stored and shipped by the major multinationals operating in Brazil and Argentina. In response to restrictions on exporting Paraguayan soybeans through the Rosario soybean oil complex imposed by the Government of Argentina in 2011, the international companies ADM, Bunge and Louis Dreyfus are investing US\$ 280 million in setting up large export-oriented soybean oil plants in Paraguay. These plants will push soybean processing capacity above the 4-million-ton mark and triple current export capacity to 760,000 tons of oil. Paraguay is thus seeking to produce more than the European Union and take the place of the United States as the third largest producer of soybean oil, behind Argentina and Brazil (*América Economía*, 2012).

Uruguay produced 1.8 million tons of soybeans on 863,200 hectares in 2010. Soybean growing expanded considerably over the 2000s: in the 2001/2002 season the soybean area totalled no more than 28,900 hectares. This growth has been fuelled by Argentine soybean producers, drawn by the low cost of land (between US\$ 2,000 per hectare and US\$ 5,000 per hectare of good quality land versus US\$ 10,000 per hectare in Argentina) and the lack of export taxes. Argentines make up 54% of all soybean growers in Uruguay; six companies, most of which are partially or wholly foreign-owned, work approximately 25% of the agricultural area. Uruguay does not process soybeans; exports are highly concentrated in foreign companies. In the mid-2000s, the five largest accounted for 77% of exports: the United States firms ADM (21.5%) and Cargill (18.6%); Argentina's Agronegocios del Plata (15%) and Pérez Companc (11%); and Uruagri (10.6%), which is owned by the France-based Dreyfus Group (Zibechi, 2008).

### *Palm oil*

The region's top producers of oil palm fruit are the Central American countries (36%), Colombia (26%), Ecuador (15%) and Brazil (11%). In Central America, the largest producers are Honduras (13%) and Guatemala (10%). In 2010 the leading exporters were Honduras (183,000 tons), Ecuador (146,000 tons), Guatemala (153,000 tons), Costa Rica (132,000 tons) and Colombia (90,000 tons). Between 2006 and 2010 the palm oil area expanded significantly in Mexico (44%; 9,700 hectares) and in Central America (34%; 64,715 hectares).

In Colombia and Guatemala, investment in palm oil has been led by local enterprises and, to a lesser extent, by foreign companies (see table III.5). Company profiles in Colombia show that most of the palm oil output is used for making biofuels. According to the same source, in Peru the company Pure Biofuels (based in the United States) acquired 74,000 hectares to produce biofuel palm oil.

### *Sugar cane*

In 2010 the region produced 990 million tons of sugar cane. The region's largest producer is Brazil (75% of the regional total); half of this output is for domestic production of ethanol (see figure III.12). The remaining 25% is produced in Central America (10%), Mexico (5%), Colombia (4%), Argentina (2.5%), the Caribbean (2%) and other countries such as Ecuador, Paraguay, Peru, and the Plurinational State of Bolivia. In most cases output is for domestic consumption; only the surplus is exported because the sector is still protected (MECON, 2011).

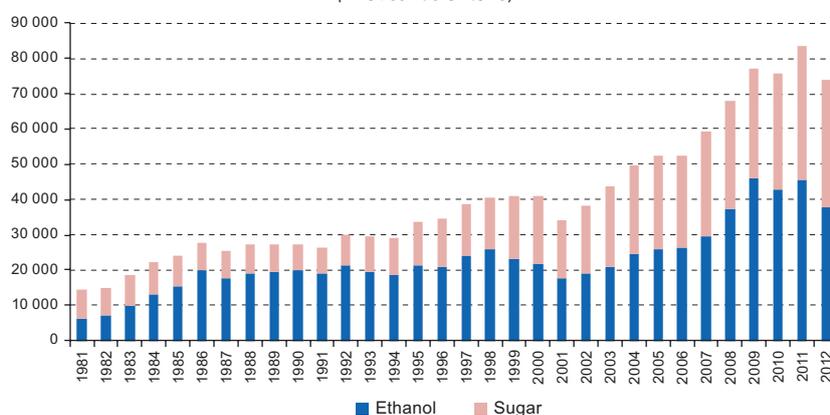
In Brazil, the main draw for FDI in sugar cane is the policy for promoting the use of ethanol that has been in place since the 1970s, although investments did not skyrocket until the mid-2000s. Since then, Brazilian companies have consolidated their position and restructured operations with the aim of capturing investment flows towards the sector. Their strategy included the sale of shares on the Brazilian stock exchange, which provided an opportunity for foreign investors to acquire majority and minority stakes. As a result, the foreign-owned sugar mills that were processing less than 1% of the sugar cane produced in Brazil were handling 12% by 2008. Including the sugar mills in which foreign shareholders have a minority holding brings the proportion up to 23%.

**Table III.5**  
**Colombia and Guatemala: acquisition of agricultural land for growing oil palm trees**

Company	Based in	Hectares
<b>Colombia</b>		
Oleoflores	Colombia	15 555
Biocombustibles Sostenibles del Caribe S.A.	Colombia	22 222
Bio D.S.A.	Colombia	22 222
Ecodiesel Colombia S.A.	Colombia	22 222
Aceites Manuelita S.A.	Colombia	22 222
Consortio El Labrador (formed by Aportes San Isidro SA and C.I. Tequendama)	Colombia	1 235
Ecopetrol	Colombia	17 000
Urapalma	Colombia	21 142
Odin Energy Santa Marta Corporation S.A.	Japan	8 000
<b>Guatemala</b>		
Agro Industrias Hame (Corporación Olmeca)	Guatemala	40 000
Inversiones de Desarrollo S.A. INDESA (Grupo Maegli)	Guatemala	5 688
Nacional AgroIndustrial S.A. (NAISA)	Guatemala	5 000
Palmas de Desarrollo S.A. (PADESA) (Grupo Maegli)	Guatemala	2 518
Tikindustrias (Grupo del Ingenio Azucarero El Pilar)	Guatemala	4 600
Agrocaribe S.A.	Guatemala	5 000
Palmas del Ixcán (subsidiary of Green Earth Fuels LLC, owned by Carlyle Group, Riverstone Holdings and Goldman Sachs)	United States	2 500

Source: Land Matrix Portal, 2012 [online] <http://landportal.info/landmatrix>.

**Figure III.12**  
**Brazil: sugar cane output, by end use, 1981-2012<sup>a</sup>**  
*(Thousands of tons)*



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of figures provided by the Brazilian Sugarcane Industry Association (UNICA), 2012.

<sup>a</sup> At a conversion factor of 1.67 kilos of sugar to make 1 litre of ethanol.

At the national level, one third of the industry is controlled by the groups Cosan, Crystalsev and Copersucar (GRAIN, 2009). Private investment funds have also come in, such as Radar Propiedades Agrícolas (managed by Cosa), Calyx (managed by Louis Dreyfus) and BrasilAgro (managed by Cresud) (GRAIN, 2009). Another sector heavyweight is Monsanto, which in 2007 partnered with CanaVialis and Allelyx to develop varieties of sugar cane that are genetically engineered to be glyphosate-tolerant. In late 2008 Monsanto purchased the two companies for US\$ 280 million and began to grow sugar cane directly. Another company that gained media attention was India's largest sugar refiner and alcohol distiller, Shree Renuka Sugars, which acquired 130,000 hectares in Brazil in 2010 (GRAIN, 2009).

Like soybeans, growing sugar cane poses major environmental challenges. To address them, a number of programmes and regulations have been implemented in Brazil. Among the most ambitious ones is the Agro-environmental Protocol of the State of São Paulo, signed in 2007 by the private sector and the government. The protocol seeks to end the practice of burning cane fields by mechanizing the harvest, as well as to protect waterside forests, control erosion and promote best practices in land use. Other goals include ensuring proper handling of agrochemical containers and reducing water consumption during processing.<sup>11</sup>

<sup>11</sup> See [online] <http://www.ambiente.sp.gov.br/etanolverde/protocolo-agroambiental/o-protocolo/>.

Argentina's sugar output has surged over the past 20 years, from an average 1.5 million tons per year in the 1990s to 2.3 million tons in 2006-2010. The leading sugar cane producing provinces are Tucumán, Salta and Jujuy. The sugar-cane growing structure varies widely from province to province. In Tucumán, most growers work less than 50 hectares (91% of the growers cover 28% of the area). In Jujuy, farms with more than 500 hectares make up 89% of the sugar cane area and are owned by 15% of the growers).

In recent years, the trend has been towards greater integration and concentration of sugar cane operations, entailing increased crop mechanization (MECON, 2011). There are 23 mills, 16 alcohol distilleries and 9 dehydration plants; 273.9 million litres of alcohol were distilled in 2010. The leading alcohol producers are Argentina's Ledesma, Tabacal Agroindustria, Atanor and Los Balcanes; together, they account for nearly 70% of total output. The five main economic groups involved in growing sugar cane produce more than 65% of the total (see table III.6). Among them, Tabacal Agroindustria has foreign investors (Seaboard Corporation, based in the United States).

**Table III.6**  
**Argentina: sugar output by leading companies, 2010**  
(Percentages)

Leading group	Percentages
Atanor	17.4
Ledesma	17.3
Azucarera Juan M. Terán	10.4
Cía. Azucarera Los Balcanes	10.0
Tabacal Agroindustria	10.0
José Minetti y Cía.	8.7
La Trinidad	5.9
Arcor	5.7
Rest	14.6
Total	100.0

**Source:** Ministry of Economic Affairs and Public Finances of Argentina, "Complejo azucarero", *Producción Regional por Complejos Productivos series*, Buenos Aires, October 2011.

Other countries with substantial FDI transactions related to sugar cane growing are Cuba and Guatemala. In Cuba, the Brazilian company Odebrecht Agroindustrial will be the first foreign company to own one of the Cuban sugar mills that were nationalized in 1959 (*La Nación*, Argentina, 10 November 2012). Odebrecht is part of Grupo Odebrecht, which specializes in large infrastructure projects and is also in charge of the US\$ 800 million Mariel port construction project. A stake in Odebrecht Agroindustrial (14.97%) is owned by the Brazilian Development Bank (BNDES) and the firm has conducted operations in Angola in addition to Cuba. Since 2011, it has been engaged in discussions with the Sudanese sugar company Kenana for building an ethanol plant as work proceeds on a port facility (ANBA, 2011).

The sugar agro-industry is one of the most dynamic in Guatemala, growing at an average annual rate of 11% over the past few years. A recent acquisition in the sector took place in June 2011, when Nicaragua's Grupo Pellas acquired an 88% shareholding in Chabil Utzaj S.A. (sugar mill and land) in Polochic Valley, Alta Verapaz. Grupo Pellas also reports having made smaller investments in Honduran sugar mills over the past two years (see [online] [www.grupopellas.com](http://www.grupopellas.com)).

The Grupo Pellas acquisition in Guatemala was controversial because of social tension and conflict as to the use of land. According to the Guatemala Human Rights Commission in Washington, D.C., the investment displaced Kekchi Maya peasants (*El Quetzal*, 2011). Grupo Pellas has been highlighting the school projects near its sugar mills throughout Central America.

## (b) Biofuels

### (i) Biofuel production and the role of Latin America and the Caribbean

Ongoing research, development and innovation efforts and policies encouraging biofuel consumption and production have turned the biofuel sector into one of global agriculture's main production chains, with output totalling 90.2 billion litres in 2009 (Brown, 2009). Ethanol from sugar-rich crops like sugar cane and maize makes up 82% of the total; 18% is biodiesel from oilseed crops like soybeans, canola (rapeseed) and palm oil. According to OECD-

FAO data (2012), global production of bioethanol and biodiesel is expected to almost double by 2021 and will be largely concentrated in Brazil, the United States and the European Union. By 2021, biofuel production is forecast to be consuming a growing proportion of global sugar cane (34%), vegetable oil (16%) and coarse grain (14%) output.

As for Latin America and the Caribbean, ethanol production in Brazil dates back to the 1930s and received a boost in 1975 with the launch of Brazil's Alcohol Fuel Programme (PROALCOOL) (BNDES-CGEE-ECLAC-FAO, 2009). In 2010, Brazil produced 27.5 billion litres of ethanol; 15% was exported and the rest went to the domestic market to cover more than 50% of the country's gasoline consumption (REN21, 2009). The second largest producer of sugar cane ethanol is Colombia. Other countries, such as Costa Rica, Guatemala, El Salvador and Trinidad and Tobago have been producing ethanol for a number of years, spurred by preferential access for their exports of hydrous ethanol to the United States (often after first importing it from Brazil in dehydrated form). Argentina, Paraguay and Uruguay are starting to produce ethanol; Mexico does not have enough production capacity to meet domestic demand despite having the technological know-how for producing sugar-cane ethanol.

Global biodiesel production surged by 33% per year between 2005 and 2010, reaching 18.6 million tons in 2010. Production is expected to continue to climb in the coming years in view of the European Union's target of replacing 10% of fuel consumption with biodiesel by 2020. In Latin America and the Caribbean, Argentina has a consolidated industry that, at 13.1% of global output in 2010, ranked second after the United States (14.3%). Brazil is in fifth place, with 9.7%. Argentina produces biodiesel primarily for the external market, although since 2010 the petroleum companies are subject to a 5% biofuel blending mandate under Law 26.093. This has boosted domestic consumption considerably.

Other than Brazil and Argentina, the other countries of Latin America and the Caribbean still play a very limited role in biofuel production (Dufey and Stange, 2011). Therefore, the paragraphs below focus on FDI flows towards ethanol and biodiesel production in Brazil and Argentina.

## **(ii) Foreign direct investment in biofuel production in Latin America and the Caribbean**

Brazil has a long history of innovation-driven technological development combined with regulatory policies to encourage the use of ethanol in the automotive sector (BNDES-CGEE-ECLAC-FAO, 2009). A key part of this policy makes a certain level (20%, rising to 25% as of May 2013) of anhydrous ethanol obligatory in gasoline and requires the design of vehicles able to use hydrous ethanol, which is used in the pure state (flex-fuel vehicles). Other part of these policies sought to deregulate the sector in the 1990s, when policies setting prices and production volume, subsidies and financial support were removed so that the sector would operate under market conditions. This objective has been fully attained, but the transition to the new situation entailed a profound restructuring of the chain. Many foreign companies took advantage of this to establish operations in Brazil by acquiring existing production plants. Among many such transactions between 1995 and 2002 were the purchase of Guarani by Béghin-Say (France and Italy); the purchase of Usina Portobello by Glencore (Switzerland); the purchase of Usina Cresciumal and Luciânia by Luis Dreyfus (Coinbra) (France); and the purchase of Univalem and seven other plants by Tate & Lyle (United States) (Benetti, 2004). This process continued in the following years, as the purchase of new enterprises and the creation of new units gathered momentum. But the global economic crisis that began in 2008 brought a slowdown and times of greater caution that persist to date (Pinto, 2011). Between 2003 and 2008, Cargill ventured into the sugar business by purchasing a 64% equity stake in the local company Cevasa, followed by the purchase of 43.7% of Usina Itapagipe Açúcar e Álcool, which was sold to Bunge in 2010. Bunge also entered the sugar sector during this period, purchasing Usina Santa Juliana together with the Triunfo group in 2007. In 2008, Bunge acquired sugar marketer Tate & Lyle and thereby became one of the country's major exporters. That same year it acquired a 60% equity interest in the Monte Verde plant and built the Pedro Afonso plant; in 2009 it purchased Moemapar, a holding company that is part of Grupo Moema, which owns a number of plants. Bunge now has eight plants in operation and one under construction. With a processing capacity of 20 million tons of sugar cane per season, it ranks fifth in the sector. In 2008, another major global operator entered the picture. The United States company ADM bought part of the assets of Grupo Cabrera, which at the time owned a plant under construction (CCEA) as well as a greenfield plant project (Jataí) that ultimately was not built. During this period there was much other movement in the sector, where other transnational corporations as well as investment funds are active (Pinto, 2011). In 2008, 23.27% of Brazil's production capacity was wholly- or partially-owned by foreign companies. The proportion increased in the following years, gauging by the large number of projects in the construction phase at that time (see table III.7).

**Table III.7**  
**Brazil: foreign ownership of sugar and ethanol plants, 2007-2008**

Investor	Plant	Shareholding (percentage)	Status in 2007-2008	Output (tons)
Abengoa (Spain)	São Luiz	100.00	Operating	2 996 198
	São João da Boa Vista	100.00	Operating	2 672 918
Adecoagro (United States/Argentina)	Monte Alegre	100.00	Operating	891 147
	Angélica	100.00	2008-2009	-
Bunge (United States)	Santa Juliana	100.00	Operating	864 994
	Pedro Afonso	100.00	Greenfield	-
	Monteverde	60.00	Greenfield	-
Cargill (United States)	Cevasa	100.00	Operating	1 267 374
	Itapagipe	43.75	Operating	1 404 577
Infinity Bio Energy (Great Britain and others)	Usinaví	99.00	Operating	2 210 099
	DISA	97.00	Operating	1 053 309
	Cridasa	57.00	Operating	723 995
	Alcana	100.00	Operating	904 386
	Paraíso	100.00	2008-2009	-
	Ibirácool	100.00	Greenfield	-
	Laranjaí	100.00	Greenfield	-
Louis Dreyfus (France)	São Carlos	100.00	Operating	1 948 448
	Cresciumal	100.00	Operating	1 804 234
	Luciânia	100.00	Operating	1 311 110
	Santa Helena	100.00	Operating	1 906 447
	Maracajú	100.00	Operating	1 708 280
	Estivas	100.00	Operating	1 705 001
	Giasa	100.00	Operating	1 129 467
	Rio Brillhante	100.00	2008-2009	-
Noble (Hong Kong (China))	Petribu Paulista	100.00	Operating	1 790 308
	Meridiano	100.00	Greenfield	-
Tereos (France)	Guarani	62.40	Operating	2 508 131
	Cruz Alta	62.40	Operating	4 168 067
	Guarani Tanabi	62.40	Operating	422 949
	Andrade	62.40	Operating	3 018 926
	Cia. Energética São José	62.40	Operating	2 015 606
	Cardoso	62.40	Greenfield	-
Clean Energy (Great Britain)	Usaciga	49.00	Operating	1 701 665
	Alcoolvale	33.00	Operating	1 477 579
Sojitz Corporation (Japan)	Alcídia	33.00	Operating	1 153 024
	Eldorado	33.00	Operating	1 956 163
	Conquista do Pontal	33.00	Greenfield	-
	Euclides da Cunha	33.00	Greenfield	-
	Presidente Epitácio	33.00	Greenfield	-
	Rio Claro 1	33.00	Greenfield	-
	Itarumã	33.00	Greenfield	-
	Rio Claro 2	33.00	Greenfield	-
	Santa Luzia 1	33.00	Greenfield	-
Santa Luzia 2	33.00	Greenfield	-	
Sucden (France)	Cosan	1.80	Operating	39 973 062
	Guaraní	5.02	Operating	12 133 679
Kuok (China)	Cosan	5.90		39 973 062
British Petroleum (Great Britain)	Tropical Bioenergia	50.00	Greenfield	-
UMOE (Norway)	Dest. Paranapanema	95.00	Operating	88 000
Brazil Ethanol (United States)	Usina Leão	100.00	Operating	1 377 267
Mitsubishi Corporation (Japan)	Boa Vista (São Martinho)	10.00	2008-2009	-
Global Foods/Carlyle/Riverstone/Goldman Sachs/Discovery Capital (United States)	CNAA – Ituiutaba	72.00	2008-2009	-
	CNAA – Itumbiara	72.00	2008-2009	-
	CNAA – Campina Verde	72.00	Greenfield	-
	CNAA – Platina	72.00	Greenfield	-
ADM (United States)	Limeira do Oeste	50.00	Greenfield	-
	Jataí	50.00	Greenfield	-
Goldman Sachs (United States)	SantelisaVale	15.00	Operating	16 715 872
Mitsui (Japan)	Itarumã	20.00	Greenfield	-
Free Float <sup>a</sup>	Cosan	24.18	Operating	39 973 062
	São Martinho	23.08	Operating	9 484 042
	Guarani	19.18	Operating	12 133 679
Total output, foreign-owned companies				114 352 645
Total output, Brazilian-owned crushing plants				491 370 000
Percentage of output, foreign-owned companies				23.27

Source: Association of Agroenergy Industries of Minas Gerais (SIAMIG), "Capital Estrangeiro No Setor Sucroalcooleiro Brasileiro," *Relatório Econômico*, No. 007, 2009.

<sup>a</sup> Estimate.

According to industry analysts, this process is likely to speed up considerably. Projections provided by representatives of the Brazilian Sugarcane Industry Association (UNICA) indicate that within the next five years, 40% of Brazilian production will be in foreign hands, with the major global petroleum companies accounting for more mergers and acquisitions than agricultural groups. Indeed, at the World Ethanol Conference held in Geneva in 2010, companies such as Shell, BP and Petrobras announced millions of dollars in investment in the sector, as they believe that biofuels are the “most realistic” option for complementing petroleum over the next 30 years.

According to the same sources, these investments could reach US\$ 20 billion over the next few years. Petrobras announced that it would partner with foreign groups to invest US\$ 3.5 billion in the ethanol sector in order to expand production by 193% and exports by 135% in the coming years. Petrobras has already signed an agreement with the French multinational Tereos to turn Guaraní, controlled by the latter, into a sector leader by investing US\$ 2.4 billion before year-end 2013. Shell has plans to invest US\$ 12 billion in a joint venture with Cosan to create the first multinational in the sector (Chade, 2010). This operation was authorized by Brazil’s antitrust regulators in December 2012 and led to the creation of Raizen, which will produce and sell more than 2 billion litres per year of ethanol made from Brazilian sugar cane. In addition, Raizen will distribute more than 20 billion litres per year of other industrial and transport fuels through a network of some 4,500 Shell service stations and thus become the third largest fuel company in Brazil. The goal is to turn Raizen into a major ethanol exporter. Along the same lines, the British oil company BP acquired 100% of Brazil’s Tropical Bioenergia in 2011 and announced, in December 2012, its intention to invest US\$ 350 million in expanding production capacity.

Other investments have already been made. In December 2010 Noble Group Limited, an energy and mining commodities company based in Hong Kong Special Administrative Region of China, announced the US\$ 950 million purchase of two plants in São Paulo from Brazil’s Cerradinho Açúcar, Etanol e Energia S.A. The plants are Catanduva and Potirendaba, with a capacity of 4.6 million tons and 3.4 million tons per year, respectively. (Catanduva also has a refinery for producing coarse sanding sugar and refined white sugar.) The purpose of the operation is to increase sugar cane processing volume (both ethanol and sugar) from 740,000 tons to 1.34 million tons. In another recent high-profile operation, Brazil’s Copersucar and Eco-Energy of the United States were to merge their international ethanol trading operations to achieve a 12% share of the global market (Fedebiocombustibles, 2012).

Biodiesel production in Argentina leverages the country’s competitive advantages for growing soybeans, and, to a lesser extent, other oilseed crops like sunflowers, maize, sorghum, canola (rapeseed), safflowers and castor beans. This set of crops produced 49 million tons in 2011. According to official data, biodiesel exports reached a record 1.7 million tons in 2011, with an approximate value of US\$ 1.5 billion (Hilbert, Sbarra and López Amorós, 2012). Most industrial facilities were built after 2007, making this an industry in the development phase. Like the vegetable oil industry, the biodiesel industry is based on a very small number of companies, many of them with modern technologies, a high degree of innovation and a large processing capacity (Adreani, 2008).

Unlike Brazil, Argentina has just recently rolled out a strategy for promoting biofuels by means of a law encouraging production and use (Law 26.093, enacted in 2006) and a sliding-scale withholding tariff on proceeds from soybean complex exports. The current rate is 35% on soybeans, 32% for raw oil, 32% for flour and pellets and 19.11% for biodiesel (from September 2012).

The sliding-scale withholding system encouraged exports, as did a US\$ 300 per ton export rebate in the United States.<sup>12</sup> In 2009, when the subsidy for products aimed at the external market was eliminated, the United States stopped purchasing Argentine biodiesel. Production was therefore redirected towards European Union countries (MECON, 2011).

Agricultural production research programmes (direct seeding, genetics, agrochemical management, mechanization) developed by the National Institute for Agricultural Technology (INTA) and international seed companies have also contributed to the emergence of this industry. Other factors have been an established vegetable oil industry and a developed infrastructure (ports and roads) network. All of this paved the way for multinational biofuel companies to make a rapid entry, putting the sector in an ideal position for further development.

<sup>12</sup> United States companies imported biodiesel from Argentina, modified it minimally, re-exported it to the European Union and collected the rebate.

Table III.8 shows that, as in Brazil, transnational corporations like Louis Dreyfus, Bunge and Cargill coexist with national enterprises such as AGD, Vicentin and Molinos Río de la Plata. In addition to these large companies there are small and medium-sized enterprises initially started up by the Government of Argentina. The sector can therefore be split into three levels according to production capacity (MECON, 2011): (a) high (more than 200,000 tons/year), comprising 22% of the companies (vegetable oil companies and large independents) and accounting for more than 60% of total biodiesel output; (b) intermediate (between 50,000 tons/year and 200,000 tons/year), comprising 26% of the enterprises (large independents) and accounting for 26% of output; and (c) low (less than 50,000 tons/year), made up of the remaining firms (small independents) and accounting for 13% of total output.

**Table III.8**  
**Argentina: biofuel producers, 2012**

Company	Production capacity (thousands of tons)	Foreign-owned
<b>Small</b>		
Biocombustibles Tres Arroyos S.A.	6 600	No
BH Biocombustibles S.R.L.	10 800	No
Héctor Bolzán y Cía. S.R.L.	10 800	No
SoyEnergy S.A.	18 100	No
Pitey S.A.	18 000	No
Pilar BsAs	18 100	No
Colalao del Valle S.A.	18 000	No
Prochem Bio S.A.	20 000	No
ERA S.R.L.	22 000	No
Subtotal	142 400	No
<b>Medium-sized</b>		
Rosario Bioenergy S.A.	49 900	No
Advanced Organic Materials S.A.	48 000	No
Biomadero S.A.	48 000	No
Aripar Cereales S.A.	50 000	No
ENRESA	50 000	No
Agrup. de Colaboración San Antonio	50 000	No
Cremer y Asociados S.A.	50 000	No
Subtotal	345 900	
<b>Large</b>		
Maikop S.A.	72 000	No
Diaser S.A.	96 000	No
Molinos Río de la Plata S.A.	120 000	No
Explora S.A.	120 000	Grupo Meck (Chile)
Vicentin S.A.	158 400	No
Viluco S.A.	200 000	No
Unitec Bio S.A.	230 000	No
Cargill S.A.C.I.	240 000	United States
Bunge	240 000	United States
Patagonia Bionergía S.A.	250 000	No
L.D.C. Argentina S.A.	305 000	Dreyfus-Francia
Renova S.A.	481 000	Grupo Pérez Companc (Argentina); Glencore (Switzerland); Grupo Vicentin (Argentina)
T6 Industrial S.A.	480 000	Grupo AGD (Argentina); Bunge Limited (United States)
Subtotal	2 992 400	
<b>Total</b>	<b>3 480 700</b>	

Source: Argentine Biofuels Chamber; Chamber of Energy and Biofuel SMEs.

There are some questions as to the future of FDI in Argentina's biodiesel chain. Agro-environmental impacts on natural resources and human health (toxicity, carcinogenic and reproductive effects, mutagenic impact and food contamination are some of the issues discussed in the academic literature on the prolonged use of glyphosate), together with positive effects such as the widespread use of direct soybean seeding, which reduces erosion and improves soil management. Another concern is the socioeconomic impact of the soybean expansion model in Argentina, which is based entirely on genetically modified seeds (Roundup-Ready) that are tolerant to the glyphosate used for weed control. In addition, soybean expansion leads to mono-cropping, displacement of beef and dairy livestock farming to marginal, lower-yield land and the depopulation of rural areas. These trends have sparked initiatives to design mechanisms for ensuring the sustainability of biodiesel soybean production, such as Round Table on Responsible Soy (RTRS) certification in Argentina and Brazil.

Argentina has begun to develop an ethanol industry based on maize and sorghum, drafting legislation (Law 26.334) seeking to bring the ethanol content of petrol up from the current 4% to 10% by 2014 as new industrial plants are authorized over the next few years and the local automotive industry makes the requisite technical changes.

Developing Colombia's biofuel industry is part of a State policy geared towards producing bioethanol for domestic consumption while generating benefits for rural areas and providing alternatives to growing illegal crops.

Ethanol production in Colombia has been driven by the major sugar mills located in the south-west of the country (Proexport Colombia, 2012) with an installed capacity of more than 1 million litres per day from 40,742 hectares planted in sugar cane. Ethanol projects under development by foreign companies are expected to start operating in the next few years, increasing daily capacity by 1.5 million litres. Among these companies, Israel's Merhav is to invest an estimated US\$ 300 million and expects to produce 376,000 litres of ethanol per day. Bioenergy (United States) and Alcol Río Suárez (a Colombian company owned by Bio-Fuel Company and Alcol Tech) plan to invest a similar amount in the departments of Meta and Santander, respectively.

Biodiesel production in Colombia is based entirely on palm oil. According to Fedepalma, there are 54 crude palm oil extraction plants in Colombia with an installed production capacity of 1.8 million litres per day. There are also seven biodiesel refineries in the country, of which two are owned by foreign companies: Odin Energy Santa Marta Corporation (Japan) and Clean Energy (Great Britain), which together make up 14% of daily installed capacity.

Maple Energy plc is an energy project development company that is listed on the Lima and London stock exchanges and has assets and operations in Peru. In July 2012 it launched an automotive ethanol project (Maple Ethanol) developed with an investment of more than US\$ 275 million. The project includes one of the most modern biofuel plants in the world, with the capacity to process up to 5,000 tons of sugar cane per day and produce 35 million gallons of ethanol per year. To supply the plant, the company owns 13,500 hectares in Piura Region, which are gradually being changed over from uncultivated land to a highly productive sugar cane plantation with drip irrigation and mechanical harvesting. The company has pledged to provide technical and credit support for planting sugar cane on 1,250 hectares of land owned by neighbouring farmers who want to voluntarily switch over from growing rice, and to buy the sugar cane produced on 1,000 hectares owned by growers in the area surrounding the complex (Proinversión Perú, 2012). The Maple Ethanol project is an example of the trend that is leading energy sector companies to venture into ethanol production.

As for Guatemala, in 2007, Spain's CIE Automotive, through its subsidiary Bionor Transformación, acquired a 51% equity stake in Biocombustibles de Guatemala, which is engaged in jatropha research and development<sup>13</sup> and in making biodiesel from jatropha seed oil and used vegetable oil. The firm also bought, for US\$ 3 million, the San Francisco-La Canoa farm in Chiquimula Department, which has 473 hectares under cultivation.

In 2009 the United States company Sirona Fuels invested US\$ 103.7 million in Haiti to launch a jatropha production programme that would mean 1,367 jobs for small growers who will retain ownership of their land while receiving technical assistance and support from the company for the purchase of inputs. The jatropha is for making biodiesel. The investment has a high social impact: the company partnered with the non-profit 3C Missions to coordinate a support centre for nearly 1,000 orphaned children.

The Sirona Fuels investment in Haiti is an example of the potential for agricultural investments to contribute to job creation in rural areas and support vulnerable groups. Besides helping improve the socioeconomic conditions of this group of growers in Haiti, the company has enhanced its socially responsible image in the market.

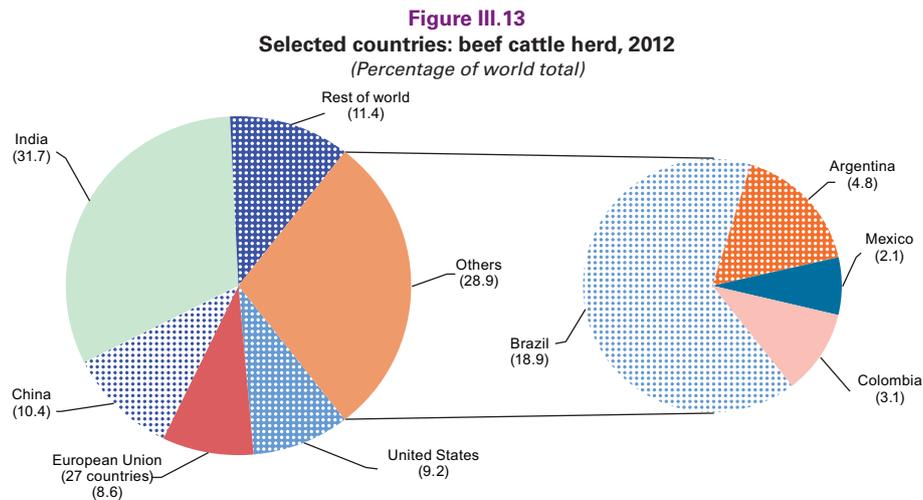
<sup>13</sup> Jatropha (*Jatropha sp.*) is a seed oil plant that grows in most tropical countries. It is cultivated in Central America, South America, South-East Asia, India and Africa.

## (c) Meat chains

### (i) Meat production and the role of Latin America and the Caribbean

Large-scale industrial production of meat has significantly increased supply, with large intensive livestock operations (feedlots) using concentrate feeds (with soybeans and maize as the main raw material) and technological innovations, such as genetic improvements and balanced feed regimes. These innovations increased beef production by some 15% over the past decade, to nearly 65 million tons in 2011 (ECLAC-FAO-IICA, 2012). Population growth and changing consumption patterns in emerging countries, especially those where income has been on the rise, have contributed substantially to this growth.

A few countries dominate the production of beef cattle, sheep and poultry: 75% of the global cattle herd is concentrated in India (324.4 million head), Brazil (197.5 million head), China (104 million head), United States (91.4 million head) and the European Union (85.7 million head) (USDA, 2012). Four Latin American countries (Argentina, Brazil, Colombia and Mexico) have cattle herds equal to 28.8% of the world total (see figure III.13). Both production and consumption are concentrated in these countries, although they do maintain trade flows in international markets because of the variety of cuts required for different markets.



**Source:** United States Department of Agriculture (USDA), "International Food Consumption Patterns," Economic Research Service, 2012 [online] <http://www.ers.usda.gov/data-products/international-food-consumption-patterns.aspx#26207>.

Latin America and the Caribbean is among the largest producers of other species as well. Brazil is the fourth largest producer of pigs worldwide (behind China, the European Union and the United States), with 3.2% per cent of global output. The region's pork exports surged 358% between 2000 and 2011, with the largest increases posted by Brazil (387%), and Argentina (180%) (ECLAC-FAO-IICA, 2012).

Brazil is the world's third largest producer of poultry meat (after the United States and China), with an output of 12.8 million tons in 2011. Combined, Brazil, Mexico and Argentina account for 21.9% of the world total. Brazil is the leading exporter (34.4%), together with the United States (33.9%). The main importers of poultry meat are Japan and Saudi Arabia, with almost 20% of the worldwide total.

### (ii) Leading companies in the meat chain

The position of the United States as the leading producer of beef and pork rests on four major multinational corporations (Tyson Foods, Cargill Meat, JBS USA and National Beef). Together, these firms account for 67% of the beef cattle slaughter volume and more than 50% of the swine slaughter volume worldwide.<sup>14</sup> JBS USA and Smithfield Foods are the United States affiliates of the Brazilian group JBS-Friboi, which is the largest transnational meatpacker in the world. JBS USA is the top meat exporter in the United States and a major player in the United States market as well, where has a 22% share.

<sup>14</sup> In 2008 the Brazilian transnational JBS acquired the subsidiary Smithfield Beef (now renamed JBS Packerland) for US\$ 565 million. With this purchase, JBS sought to enhance its position in the United States market, build synergies and cut costs.

These large transnational groups produce and market almost all the traditional animal species (beef cattle, swine, sheep and poultry). Their production strategies are geared towards vertical integration of the meat chain, seeking not only greater production efficiency but also, above all, consistent quality standards in keeping with animal safety regulations and environmental requirements that are increasingly stringent and uniform across countries.

There is a direct link between the production of agro-commodities for fodder and the production of animal protein. For example, soybeans and maize, which are the basis for poultry feed, make up 50% of the cost of production (Fava and others, 2012).

### (iii) Foreign direct investment in Brazil's meat chain

Because of its large scale, Brazil's meat industry is a source of FDI that shapes the regional context, with investments concentrated in the Southern Cone in addition to much of the rest of the world. The major recipients of FDI in the region's meat chains are Argentina and Uruguay, and to a lesser extent, Mexico, Paraguay, Colombia and Chile.

Meat chains (beef, pork and poultry) can generally be broken into four major phases: technical support and services for the primary producers; breeding, grow-out and finishing; processing; and trading (see box III.3). Identifying the main market actors in each phase shows the role that trans-Latin companies play in FDI in the meat chain in Brazil and other countries of the region.

Brazil became a major exporter of beef after the mad cow disease (bovine spongiform encephalopathy (BSE)) crisis in Europe in the early 1990s. Since then has been pursuing an aggressive internationalization strategy (Capozoli, 2012). Brazil's meat market is now dominated by four agro-industry groups: JBS-Friboi, Marfrig, BRF and Minerva, whose origins, strategies and investment flows are discussed below.

JBS-Friboi is the world's largest meat producer. With approximately 135,000 employees, it has production and distribution facilities in Argentina, Australia, Brazil, Mexico, Paraguay, the United States and Uruguay,<sup>15</sup> in addition to trade offices across all continents. In 2011 the firm's 286 production units had a daily slaughter capacity of 149,800 head (beef cattle, swine and sheep), plus 7.2 million birds in the United States alone. Twenty-four per cent of the slaughter volume is for export; 64% of the net profit is from the beef business. According to the group's 2011 annual report, 24% of net profits are generated in South America, 73% in Australia and the United States, and the remaining 3% in other regions of the world.

JBS-Friboi began operations in 1953, with a small facility with a slaughter capacity of five head daily. Between 1981 and 2002 the company began to expand aggressively through acquisitions and greenfield investments that boosted its capacity to 5,000 head per day. Growth has soared since 2004, thanks to the purchase of a 50% stake in BF Brasil, the creation of JBS S.A. and the acquisition of Swift Armour S.A. (Argentina's largest producer and exporter of beef). Years later it expanded operations in Argentina through the acquisition of two refrigeration companies (Venado Tuerto and Pontevedra) and two additional units (Berazategui and Caroya). It also purchased the United States giant Swift Food Company, Australia's Tasman and a 64% stake in the chicken processor Pilgrim's Pride Corporation. Together with Australia's VION Food Group, JBS-Friboi purchased the lamb processor Tatiara Meat Company, and it entered a partnership agreement with Brazil's leading dairy product company, the Bertin group.<sup>16</sup>

With these acquisitions, JBS-Friboi consolidated its international platform across all segments of the meat chain. The company operates through its divisions JBS Mercosul, JBS S.A. Bovines (including its operations in Australia), JBS USA Pork and Pilgrim's Pride.

Acquisitions since 2005 total US\$ 3.7 billion. Along the way, US\$ 80 million in financial support from Brazil's National Bank for Economic and Social Development (BNDES) was key to enabling JBS-Friboi to start globalizing its operations by buying Argentina's Swift Armour for US\$ 200 million. In 2007, in JBS-Friboi's largest acquisition to date, US\$1 billion of the US\$ 1.4 billion purchase price of Swift Food Company of the United States were from a BNDES loan and contributions from State-owned Brazilian pension funds like Petros (of the State-owned Petrobras) and Fundação dos Economistas Federais (FUNCEF). This funding enabled BNDES to acquire a 31% stake in JBS-Friboi through the former's investment management arm BNDESPAR.

<sup>15</sup> In Argentina, JBS-Friboi has a slaughter capacity of 3,750 head per day (Bisang and others, 2008).

<sup>16</sup> This merger was not completed until 2011 and involved the takeover of Italy's Rigamonti and the acquisition of the refrigeration company Canelones.

**Box III.3****Brazil: stages of the meat production chain****System of technical support and services for livestock growers**

At this stage, companies providing genetic, feed and veterinary services play the leading role. Companies in related fields (suppliers of fertilizers, seeds and mineral salts) are equally important. The volume of business in Brazil's animal husbandry sector stood at some US \$ 1.46 billion annually in 2008. Of this total, supplying foot-and-mouth disease vaccines alone accounted for nearly 16% per cent, with sales of US\$ 234 million (324 million doses) in 2008. Another 30% of vaccine output is absorbed by the swine and poultry industry, with antiparasitics, antimicrobials, biological supplements and other products making up the rest. As is the case with other components of the meat industry chain, the sector is highly concentrated. The five largest companies account for nearly 66% of total sales (Consoli and others, 2009).

In terms of production volume and revenue, supplying grain for producing concentrate feed is without doubt the most important economic activity in this stage of the chain. In 2008, grain production for animal feed in Brazil reached 59 million tons, representing 8% of global output. About 80% goes to the poultry and swine industry (55.7% and 25.9%, respectively). Only 12.5% is for beef cattle, which are raised on Brazil's vast pasturelands. Only a very small proportion is feedlot-raised, although this type of production has been growing strongly in recent years.

**Breeding, grow-out and finishing (formation of raw materials)**

Breeding and finishing operations prior to slaughter involve small and medium-sized "independent" producers who primarily target the domestic market, as well as integrated or contract farmers who work under an agreement with the processor. It is estimated that 68% of the entire swine herd is integrated with the industry under some kind of contract, while the remaining 32% is essentially subsistence pig farming. As in the pig industry, the poultry and beef cattle industry is extensive, although productivity varies among the producing areas in the country. Beef production is spread over the southern states of Mato Grosso and Mato Grosso do Sul, the state of Goiás in the central region and the state of Pará in the north. Brazil's vast natural pasturelands make extensive livestock farming less costly and therefore more widely practiced in these areas. However, intensive livestock operations in feedlots have been growing despite the higher cost (soybean and maize prices have been rising in recent years) because little land is needed and the risk of changing seasons is minimized, especially when the pasturage is not good. In addition, operations of this kind are more production technology-intensive, which makes for higher per-area yields.

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of M.A. Consoli and others, "Mapping and Quantification of the Meat Chain in Brazil," paper presented at the VII International Conference of Programa de Estudos del Sistema Agroalimentario (PENSA), São Paulo, 26-28 November 2009.

The Brazilian livestock sector is facing major environmental challenges because it has traditionally operated in agricultural frontier areas where there are many informal producers. A recent National Institute for Space Research (INPE) study noted that this activity takes up 62.2% of the deforested areas in the Legal Amazon (Dias de Aguiar, 2012). This is on top of pressure from crops like soybeans and sugar cane in regard to the use of grasslands for agriculture. This, plus consumer demand for sustainable meat and concern among NGOs and government agencies over deforestation and the invasion of indigenous lands, is behind a drive to rearrange this chain. The private sector has established a working group on sustainable livestock farming under The Global Roundtable for Sustainable Beef, in order to develop new protocols and environmental standards. This is a major undertaking, because in addition to commitment by companies, it requires addressing the lack of information on property lines and the problems arising from legal insecurity of land tenure. The State must be involved in dealing with these issues (Sampaio, s.f.).

**Processing**

Beyond the differences between the poultry, swine and beef cattle production systems, the industrial processing of meat essentially comes down to two steps. The first involves the chilling plant where the animals are slaughtered; the second is the facility where fresh and frozen cuts are prepared for commercial distribution, both at the domestic level and for export. This stage of the industry is highly concentrated in no more than four companies that dominate the Brazilian market—particularly, the holding company JBS-Friboi, Marfrig and BRF. These oligopolies control the entire chain, with backwards linkages under a number of contract farming models (if they have no agricultural assets) and forward linkages through partnerships with wholesale chains or direct points of sale.

**Marketing**

At the end of the chain is a complex network of supermarkets, fast-food chains, food service companies, butcher's shops and exporters seeking to deliver a quality product to the end consumer. This concern as to meeting consumer demand for high quality, healthier and environmentally friendly products has led large meat industry operators to venture into the marketing stage of the chain as well, particularly by establishing production partnerships with marketing chains. For example, as Grupo Marfrig entered the United States market it acquired Keystone Foods to ensure that its products were placed in the fast-food chains McDonald's and Subway, among other companies belonging to Keystone Foods.

The Brazil Foods group (BRF) dates back to 1934 and the Perdigão marketing firm, which was acquired by eight pension funds in 1990. The entry of these pension funds entailed a drastic change in company management and paved the way for its consolidation as a transnational. Just five of the eight original funds retain a stake in the company, holding 27.5%. In May 2009, a partnership agreement between Perdigão and the food producer Sadia led to the birth of Brazil Foods. The merger made the group the tenth largest company in the region, with annual revenue of nearly US\$ 10 billion and some 130,000 employees. For the US\$ 722 million operation to be cleared by Brazil's anti-trust Administrative Council for Economic Defense (CADE), BRF had to sell off 10 plants, 4 slaughterhouses and 8 distribution centres, among other facilities.

**Table III.9**  
**Brazil: main acquisitions by trans-Latins in the meat chain sector**  
*(Millions of dollars)*

Acquiree	Home country	Amount	Year
<b>JBS-Friboi, since 2005</b>			
Swift Armour	Argentina	200.0	2005
Swift Food Company	United States	1 458.0	2007
Smithfield	United States	565.0	2008
Pilgrim's Pride	United States	800.0	2009
Tasman	Australia	150.0	2011
Tatiara Meat	Australia	27.0	2011
<b>BRF Foods group, in 2011</b>			
Avex S.A (acquisition of 69%)	Argentina	55.3	2011
Grupo Dánica (through Avex S.A.)	Argentina	94.7	2011
<b>Grupo Marfrig, since 2006</b>			
Argentine Breeders & Packers (AB&P)	Argentina	n.d.	2006
Quinto Cuarto S.A. y Frigorífico Patagonia S.A	Chile	8.5	2006
Frigorífico Tacuarembó	Uruguay	3.0	2006
Quickfood S.A., Establecimientos Colonia S.A.	United States	267.0	2007
CDB Meats	United Kingdom	12.0	2008
OSI	United States	680.0	2008
Doux-Frangosul	French affiliate in Peru	33.5	2009
Grupo Zenda	Uruguay	49.5	2009
Moy Park – Seara	United States	900.0	2010
Keystone Foods	United States	1 260.0	2010
Keystone-Chinwhiz Poultry (joint venture)	China	125.0	2010
<b>Grupo Minerva</b>			
Frigorífico PULSA S.A.	Uruguay	65.0	2011

Source: Thomson One, mergers and acquisitions deals, 2012.

In 2011 BRF expanded its operations in Argentina by acquiring a 69% stake in the poultry company Avex S.A. through its subsidiary Sadia Alimentos S.A. for US\$ 55.3 million. Through Avex it also bought the Grupo Dánica food company for US \$94.7 million (Thomson One, 2012). BRF has plans to invest in building a processing plant in the United Arab Emirates and set up a joint venture with China's Dah Chong Hong Holdings Limited to market its products in China (BRF, 2011).

Marfrig is Brazil's third largest industrial food group, after BRF. It dates back to 1986, with the opening of a frozen meat, vegetables and fish distribution centre in the state of São Paulo. Between 2000 and 2006 the group used leases and then acquisitions to take control of beef processing plants, mainly in the states of Mato Grosso and São Paulo. In 2006 the group launched its globalization strategy by purchasing Argentine Breeders & Packers (AB&P),<sup>17</sup> a 50% stake in Quinto Cuarto S.A. (Chile's largest meat importer), and the Tacuarembó processing plant in Uruguay. Expansion speeded up the following year with the purchase of three additional refrigeration companies in São Paulo (Promissão II, Kilo Certo and Pampeano) and the takeover of refrigeration companies La Caballada and Colonia S.A. in Uruguay. These latter two acquisitions turned Marfrig Group into the largest meat exporter in Uruguay. Between 2006 and 2007 the group took full control of Quinto Cuarto and acquired Chile's Frigorífico Patagonia S.A., which processes and markets lamb. In Argentina, the group acquired Mirab S.A., which, through its subsidiary Mirab USA, is the main processor and distributor of beef jerky in the United States, and it purchased Quickfood S.A., specializing in the production of meat for hamburgers. In Brazil, Marfrig began its pork production operations by acquiring the processor Mabella.

In 2008 Marfrig Group entered the poultry meat market by purchasing the Brazilian company Moinhos Cruzeiro do Sul and expanded its presence in the pork segment by acquiring Carroll's Foods. That same year it bought the

<sup>17</sup> By 2008 Marfrig Group controlled five slaughter facilities in Argentina with a capacity of 2,760 head per day (Bisang and others, 2008).

United Kingdom-based meat importer and distributor CBD Meats. In a similar operation, Marfrig acquired the United States group OSI (for US \$ 680 million), which includes Braslo (poultry and beef cattle), Pena Sul (poultry and swine), Agrofrango (poultry) and Moy Park. In 2009, it acquired the Peruvian affiliate of France's Doux-Frangosul (turkey division) and SEARA Alimentos, a Brazilian subsidiary of the United States-based Cargill (12 industrial plants in the poultry and swine segment and a port terminal). That same year, Marfrig took a 51% stake in Grupo Zenda, headquartered in Uruguay, which produces leather for the automobile and aviation industries. In 2010, the Marfrig Group consolidated its position as a world-class food producer by acquiring the United States company Keystone Foods (a food service provider to major restaurant chains), with a presence in 13 countries and 54 production units. Through this subsidiary, in 2011 Marfrig set up a joint venture with State-owned COFCO in China, with the aim of meeting the growing demand for food in that country.

Thanks to these acquisitions, Marfrig has become the world's fourth largest meatpacker (and third largest producer of beef) with 106 meatpacking units, 14 tanneries and 30 distribution centres and more than 90,000 employees across all continents.

As with Grupo JBS, support from BNDES has been key for transforming Marfrig into a world-class Brazilian transnational. To this end, BNDESPAR pledged to acquire a US\$ 1.4 billion share offering, the proceeds of which would be used to fund the purchase of Keystone Foods and Ireland's O'Kane Poultry (BNDES, 2010). Currently, BNDESPAR has a 13.9% stake in Marfrig (Marfrig Group, 2010).

The Minerva Foods story began in 1957, but it was not until 1992 that the São Paulo-based company was incorporated under the name Indústria e Comércio de Carnes Minerva Ltda. The company grew rapidly in 2006-2007, extending its operations throughout Brazil by leasing or buying slaughter units. In 2008 it entered a joint venture with Ireland's Dawn Farms Foods that enabled the company to build the Minerva Dawn Farms processing plant at a cost of US\$ 44 million. The first cross-border operation took place in 2011, with the acquisition of Uruguay's Frigorífico PUL and Carnes Ana Paula (production capacity: 1,400 head per day).

#### **(iv) The meat chain in Argentina**

Argentina's meat industry has undergone extensive reorganization since 2005, when foreign competitors (mainly from Brazil) started to buy major Argentine beef slaughter facilities. JBS acquired Swift Armour in 2005, CEPA in 2006, Consignaciones Rurales in 2007 and Col-Car in 2008. Marfrig acquired Argentine Breeders & Packers S.A. in 2006 and Estancias del Sur S.A., Quickfood S.A. and BestBeef in 2007. Tyson Foods acquired a 52% stake in Exportaciones Agroindustriales Argentinas S.A.; Cargill purchased FINEXCOR in 2004. These acquisitions gave the foreign companies more than industrial facilities: a country image, a gene pool, preferential access quotas for external markets (like the Hilton Quota in the European Union), distribution chains and established trademarks in the domestic market.

These acquisitions took place during a period when output and exports were expected to surge while domestic consumption held steady. The scenario changed when the government set domestic reference prices and started to require export permits. This period also saw a decline in exports, which was exacerbated by the drought and sustained expansion of the soybean area that moved many farms into marginal areas. Industry uncertainty led some actors to sell their assets. Cargill sold FINEXCOR to a local group in 2010; Tyson sold its shareholding to CRESUD that same year. Other relevant stakeholders have put their plans on hold, given the importance of the domestic market and the production potential of Argentina's livestock sector. These are still FDI pull factors and point to a possible trend reversal in the coming years. In fact, improving domestic prices in 2010 led to the holdback of cows to rebuild the cattle herd.

For white meat (both poultry and pork), the situation is very different because in both cases there are emerging, high-potential industries that are still largely Argentine-owned. For the poultry industry, which is more concentrated, coordination and integration are easier, feed (concentrate) is cheap, and technology, genetics, health, internal and external markets and government support have enabled it to start growing exports: from 16,600 tons in 2000 to 250,000 tons in 2011 (USDA, 2012). The pork industry is growing and has a high production potential based on good health standards and high technology. Argentina's domestic supply of pork still falls short of demand, forcing it to import about 50,000 tons in 2010 (Ministry of Agriculture, 2010), which indicates that expansion in the coming years will be geared towards import substitution.

## 2. The agricultural inputs sector

According to Pavitt (1984), innovation in agriculture is essentially determined by suppliers of inputs, material and equipment. In other words, technological change is product-driven (embedded technology). For this reason, it is important to examine how FDI is impacting the supply of agricultural inputs.

By contrast, in recent decades public institutions have not been as active in promoting new agricultural technologies as this role is increasingly filled by a few (but very large) transnational seed and agrochemical companies. In 2007, just 10 companies accounted for almost 90% of agrochemical market sales of fertilizers, pesticides, herbicides and other products (see table III.10).

**Table III.10**  
**World's principal agrochemical companies, 2007**  
(Millions of dollars and percentages)

Company	Country	Sales (millions of dollars)	Market share (percentage)
Bayer	Germany	7 458	19
Syngenta	Switzerland	7 285	19
BASF	Germany	4 297	11
Dow AgroSciences	United States	3 779	10
Monsanto	United States	3 599	9
DuPont	United States	2 369	6
Makhteshim Agan	Israel	1 895	5
Nufarm	Australia	1 470	4
Sumitomo Chemical	Japan	1 209	3
Arysta LifeScience	Japan	1 035	3

Source: AgrowWorld Crop Protection News, August 2008.

### (a) Seeds

#### (i) Production and consumption in Latin America and the Caribbean

The use of improved seeds is a long-standing practice followed by farmers in the region (mass selection). But a substantive change took place with the introduction of hybrid maize in Mexico, when the Mexican Government opened the Office of Experiment Stations in 1940 to replicate the progress that researchers in the United States had been making in this area since the late nineteenth century (Matchett, 2005).

In the first few decades of the twentieth century, the world's genetic improvement programmes were run by national and international public entities that, because of their nature, did not have intellectual property strategies to protect their investments. The scenario has changed considerably in recent years, with a shift to programmes developed by private companies that market their seeds under the protection of intellectual property and trademark use laws.

Plant varieties are protected under the 1961 International Convention for the Protection of New Varieties of Plants, which established the International Union for the Protection of New Varieties of Plants (UPOV) to which most of the countries of the region belong. This institutional framework has been key for attracting domestic and foreign private investments to the sector because gene development has long lead times (10 years or more) and funding hinges on legal formulas for effective ownership of outcomes.

This institutional and legal framework led to a significant rearrangement of the global seed industry. In the late 1960s, the market was dominated by large companies such as Pioneer, DEKALB, Agrow, SESVanderHave, Vilmorin, Tezier, Royal Sluis, Funk, and Sluis & Groot, many of them still family-owned. Upjohn's purchase of Agrow in 1968 set off a wave of consolidations from which a handful of major international corporations emerged. Some of them are from the chemical industry (Monsanto, Dow, BASF and DuPont) and others from the pharmaceutical industry (Syngenta, Bayer), but all of them specialize in producing genetically modified seeds and supplying complementary inputs, particularly herbicides and pesticides.

Worldwide, the seed market grew from US\$ 13.23 billion in 1979 to US\$ 36.53 billion in 2007 (Le Buanec, 2008). The region benefited from this growth thanks to areas specializing in the production of hybrids and to the development of counter-season production, which began to surge in the 1980s (Le Buanec, 2008). Argentina's seed market went from US\$ 210 million in 1979 to US\$ 950 million in 2007; Brazil went from US\$ 570 million to US\$ 2 billion and Mexico from US\$ 150 million to US\$ 350 million.

## **(ii) Foreign direct investment in the seed sector**

International seed companies have followed two strategies in the region. One has been to set up operations or partner with local actors to conduct crop improvement programmes. The other has been to operate as seed suppliers.

The highest-profile case is Monsanto, which shifted from producing agrochemicals to producing genetically modified seeds. Either directly or indirectly through licensing arrangements, it supplies genetically modified soybean seeds to growers in the region, especially in the Southern Cone countries. The starting point was the market release of genetically modified RR seed in Argentina in 1996, followed by Uruguay (1998), Brazil (2002-2004),<sup>18</sup> the Plurinational State of Bolivia (2003-2005) and Paraguay (2004). The technology package associated with this seed is based on direct seeding and the use of the weedkiller glyphosate. Both the RR seed and glyphosate are Monsanto products, but in Argentina, for example, the seeds are distributed by its licensee Asgrow, which in turn was acquired by Argentina's Nidera.

Monsanto has thus managed to control an embedded technology that has stirred up more than a little controversy (Motta, 2013). Beyond the apprehension caused by genetically modified organisms *per se vis-à-vis* their impact on human health and the environment, the company has come in for criticism for making local growers newly dependent by exerting pressure to block them from using leftover seed, requiring them to pay royalties when they do and barring them from reproducing seed even for their own use. This strategy has also been criticized as over-specialized and leading to levels of mono-cropping that have displaced other crops and alternative activities (such as cattle-raising) and caused depopulation of rural areas, biodiversity loss and other environmental impacts and risks, including for human health.

Monsanto has interests in Mexico, too, where it invested some US\$ 20 million to expand a seed plant in Sinaloa. The company reports that it plans outlays of up to US\$ 10.5 million in the area. Most of the investment is for producing genetically modified maize seeds for planting 2 million hectares (the project is still pending as it is being reviewed by the Government of Mexico). Another country of interest to Monsanto is Guatemala, where it has invested heavily in the seed market (United Nations, 2011). In 2008 it purchased Marmot S.A. for a reported US\$ 135 million. In addition to its core business of producing and supplying seeds, Monsanto is developing hybrid vegetables and fruit in Guatemala in the framework of the SHIELD programme designed by Seminis.

Dow AgroSciences is developing its maize seed business in Brazil after acquiring Agromen Tecnologia Ltda. in 2007. The transaction included the Brazilian company's entire marketing, production and research platform, which had at the time been operating for 35 years and had a solid background in hybrid seed development.

## **(b) Fertilizers**

### **(i) Production and consumption in Latin America and the Caribbean**

The fertilizer market is based on three primary nutrients. Nitrogen is the most important one (60% of total consumption). It is obtained through chemical processes that make ammonia from natural gas. The most heavily traded nitrogen fertilizer worldwide is urea; the main exporters are the Russian Federation, Ukraine and Qatar. Brazil, India and the European Union are the largest importers. China is the world's largest consumer and is self-sufficient. The other two main nutrients are potassium and phosphorus; they are obtained from phosphate or potash rock deposits found in just a handful of countries in the world, such as Canada, the Russian Federation and some European countries.

The use of chemical fertilizers in agriculture in the region spread slowly starting in 1950, when technicians involved in the Green Revolution and the agrarian reform began to promote it. Consumption went from 500,000 tons

<sup>18</sup> Millions of hectares of Roundup Ready soybean seeds were planted in Brazil in 2002-2004 despite a moratorium.

in 1950 to 16.7 million tons in 2004. By 2008, total global consumption stood at 165 million tons, with China as the largest consumer (29.8% of the total), followed by India (14.5%), the United States (12.1%) and Brazil (5.7%). The use of fertilizers in the region is shaped by three major food-producing countries: Brazil, Argentina and Mexico.

Fertilizer consumption in Argentina has grown by 900% over the past 20 years and ranges between 2.5 million tons and 3.8 million tons. Most of the soil in Argentina still has a good supply of soil potassium, but this is not the case with nitrogen or phosphorous. Argentina does not have many natural gas fields at a price that would enable it to compete with other countries in producing nitrogen fertilizers, although its huge shale gas reserves could change the situation. Argentina does not have commercially exploitable phosphate rock deposits, although it has potassium in its soil as well as mineable potassium salt fields for producing a large volume of base raw material for export (CIAFA, 2010).

Consumption in 2008 reached 24.1 million tons. Of the 8.9 million tons produced domestically, 6.7 million tons were phosphate fertilizers because Brazil has phosphate rock deposits, especially in the state of Minas Gerais. Nitrogen fertilizer output has been declining along with the volume of urea produced by Petrobras (which owns two of the country's three plants). Nor does Brazil produce a significant volume of potassium fertilizer. The single potassium chloride plant in Brazil accounts for 100% of production, although new fields are being explored that could change this situation.

Brazil has phosphate mines that would enable it to become self-sufficient in 5 to 10 years, but these operations need to be optimized. Potential potash mines have been discovered in the Amazon area, although their viability depends on environmental requirements that are difficult to meet. Petrobras controls natural gas operations; availability could climb with the new shale gas deposits in south-eastern Brazil and thus provide the State with a guaranteed supply of raw material for producing nitrogen fertilizers. The availability of raw materials, together with prospects for developing Brazilian agriculture, could attract investment to the sector.

Mexico's fertilizer market has not grown significantly over the past few years, although the mix of fertilizers has changed. Phosphorus and potassium consumption has increased; nitrogen consumption has declined. Sales in 2005 totaled 4.3 million tons, of which 1.3 million tons were urea, which is not produced domestically. Mexico has always imported all of the potash fertilizers it uses, but importing nitrogen fertilizers is a relatively recent development. The high cost of natural gas resulted in the closure of urea and diammonium phosphate plants between 1999 and 2001. Since then, Mexico has imported 100% of its supply of both products (Martínez, 2006).

## **(ii) Foreign direct investment in the fertilizer sector**

The market is dominated by five large transnational companies, which in 2007 accounted for 33% of global production. Table III.11 provides a snapshot of these companies. Other relevant companies are Eurochem and Acron (both based in the Russian Federation), Stirol (Ukraine), Sinochem (China), IFCCO (India), SABIC (Saudi Arabia), Fosfertil (Brazil) and EFIC (Egypt). In the United States, PotashCorp and The Mosaic Company are the only survivors of the Phosphate Chemicals Export Association export cartel. Under a law enacted in the early twentieth century to promote United States exports, the companies are authorized to sell their products abroad as a single entity and to define prices in consultation with the other party. Canada has its own cartel (Canpotex), as does the Russian Federation (Belarus Potash Company).

Privatization of Brazil's State-owned fertilizer industry between 1992 and 1994 involved the transfer of ownership of five companies that had been managed by the State since the 1940s: Indag, Arafertil, Fosfertil, Goaisfertil and Ultrafertil. These sell-offs laid the groundwork of the market as it is today, where Brazilian companies and foreign ones coexist and the latter predominate. IAP acquired a 35% stake in Indag and was subsequently sold to Bunge, which also acquired Arafertil. This privatization involved creating the holding company Fertifós (formed by Brazilian fertilizer companies). Fertifós acquired Fosfertil (1992), Ultrafertil (1993) and Goaisfertil (1995). Since 2004 these companies have had a single corporate identity, Fosfertil, which in 2007 had a 13.6% share of sales in the domestic market. Between 1997 and 2000 Bunge acquired some of the firms that set up Fertifós; because Fosfertil shares have been traded on the stock exchange, Bunge currently holds a 12% equity stake in Fosfertil. Fertifós, after a series of mergers and acquisitions, has also become majority foreign-owned: Bunge has a 52% stake; Yara Mosaic holds 33% and Yara owns 13% (Fernandes and others, 2009).

**Table III.11**  
**Leading fertilizer producers worldwide**

Company	Description	Foreign direct investment in Latin America and the Caribbean
Yara (Norway)	Yara is the largest fertilizer company in terms of revenue and the leader in the European market. It has a physical presence in 50 countries and sales in 120 countries. Yara is the global leader in nitrogen fertilizers, with a production capacity of 5.9 million tons of ammonia, 4.8 million tons of nitrates (ceric ammonium nitrate and ammonium nitrate) and 4.1 million tons of NPK. Yara has a one-third share of the global ammonia trade.  Yara has facilities in Trinidad and Tobago and Qatar.	Yara Trinidad manages and operates a three-plant ammonia production facility in Savonetta. Most of the 1.3 million tons it produces annually is exported, making Trinidad and Tobago the world's leading exporter of ammonia.
The Mosaic Company (United States)	This company was formed in 2004 when IMC Global Inc. merged with the crop nutrition division of Cargill, Incorporated. It is the world's largest producer of phosphates, with an annual capacity of nearly 9.4 million tons—more than the following three producers combined. At some 10.4 million tons per year, Mosaic ranks second worldwide in potash production capacity. The company's annual nitrogen fertilizer production capacity is 1.2 million tons.  Mosaic operates five phosphate mines in Florida and four potash mines in Saskatchewan, Canada (including the world's largest potash mine) and a potash mine in New Mexico. Approximately one third of its output is shipped within North America, with the remainder exported around the world to some 45 countries. Mosaic's offshore interests form a production and distribution network in key markets around the world. They include a 35% equity stake in a granular DAP facility in China.	Mosaic has a 20% stake in Fosfertil S.A. in Brazil and a 35% ownership interest in a GSSP fertilizer plant in Argentina. Profertil plans to invest US\$ 60 million in a fertilizer plant in Argentina.
Agrium Inc. (Canada)	Agrium has an annual production capacity of 6.5 million tons of nitrogen fertilizer, 2.1 million tons of potash and 1.3 million tons of phosphate. It has two nitrogen fertilizer plants that target international markets, one in Argentina and the other in Alaska. Its primary markets are the Republic of Korea, Mexico and Taiwan Province of China. The key potash export markets are China, Brazil and India.  As part of its efforts to diversify internationally, Agrium is investing in Egypt and expanding into China by purchasing a stake in the fertilizer company Hanfeng Evergreen.	Agrium is a major retail supplier of agricultural products and services in North America and South America. In Argentina it operates through Agroservicios Pampeanos S.A. (ASP), a decentralized business made up of 15 units called agrocentres located throughout the country.
PotashCorp (Canada)	This firm accounts for 22% of the world's potash production capacity. In response to global demand, PotashCorp has announced projects for boosting its annual production capacity from 10.8 million tons in 2007 to 17.2 million tons in 2015.  PotashCorp has strategic investments in four offshore potash businesses: a 28% stake in Arab Potash Company Ltd. (APC) in Jordan; a 10% holding in Israel Chemicals Ltd. (ICL) in Israel; 32% of Química y Minería de Chile, S.A. (Soquimich) in Chile; and a 20% share of Sinofert Holdings Limited (Sinofert) in China.	Soquimich produces natural nitrates from the lithium and boron fields it works. Among its main products are potassium nitrate and potassium chloride. In 2007, Soquimich produced 1,212,774 tons of fertilizer (nitrates, potassium chloride, potassium sulphate, boric acid and boron), of which 227,973 tons (18.8%) were for the domestic market.
Kali & Salz Group (K+S) (Germany)	The group extracts potash and crude magnesium salts at six mines in Germany, with a total output of 8 million tons. At 12% of worldwide potash output, it is the fourth largest producer in the world and the leading supplier in Europe. K+S is also the global leader in potassium sulphate and magnesium. Its company Fertiva is a major European supplier, with a particularly strong position in nitrogen fertilizers containing sulphur. The firm's focus is on the European market but it exports about 40 % of production overseas, mainly to Latin America. The K+S Group has become more international with the acquisition of Chilean salt producer Sociedad Punta de Lobos (SPL).	In 2006 the K+S Group acquired Chile's Sociedad Punta de Lobos (SPL), the country's main producer of salt. SPL operates one of the largest open-pit sodium chloride mines, the Tarapacá salt flat (which measures 45 kilometres by 5 kilometres and ranges between 12 metres and 60 metres in depth).

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of K. Arovuori K. y H. Karikallio, "Consumption patterns and competition in the world fertilizer markets," paper presented at the 19th Symposium of the International Food and Agribusiness Management Association, June 2009.

Bunge Fertilizantes began to operate in Brazil in 1938, through the company Serrana. Bunge bought IAP in 1997; in 1998 it added Elekeiroz's fertilizer unit and took a partial equity stake in Takenaka, owner of the Ouro Verde trademark. Bunge Fertilizantes was born in August 2000 when Fertilizantes Serrana became part of Manah, which had itself been acquired by Bunge in April of that same year. By 2007, the company had a 31.1% share of the domestic market; it is now the largest fertilizer company in South America. Mosaic took over the structure of Cargill Fertilizantes when the latter merged with IMC Global worldwide in 2004. Cargill had been operating in Brazil since 1994 and had a liquid fertilizer plant in Monte Alto along with a blending facility in Candeias that it added in 1998. The company acquired a controlling shareholding in Solorrco in 2000 and in Fertiza in 2000, both of which were traditional companies in the sector. In 2007 Mosaic's market share was 14.7% (Fernandes and others, 2009; Fernández, 2004).

Heringer Group, created in 1968, has eight manufacturing units. It is Brazilian in origin but sold a 20.6% stake to American International Group (AIG) in 2004. In 2007 it had a market share of 12.7%. Yara arrived in Brazil in 1974, first acquiring just the domestic company Trevo and, subsequently, Fertibras in 2006. By 2007 Yara's market share stood at 12%. There are other groups in addition to these companies. Among them are Copebrás (4.5% of the market), owned by AngloAmerican and Brazilian-owned Fertipar (4.5% market share). As this background information shows, the sector is going through a profound restructuring and transnational corporations are making inroads. Bunge, Mosaic and Yara dominate domestic production and are reproducing, on a local scale, their fierce competition in the global market (Fernandes and others, 2009).

The pattern is the same in Mexico. Fertimex (a State monopoly established in 1977 that controlled all operations in the local market and sought to promote consumption through a subsidized pricing policy) was privatized in 1992. The company's industrial units were acquired by groups of domestic and foreign investors that are currently operating in a free market where each company makes its own decisions. In 2005 there were five ammonium sulphate plants (Univex, Agrogen, Fertirrey, Fegusa and Fesur), as well as two superphosphate plants (Rhodia and Agrogen).

The situation in Argentina is similar. The largest company in the market is Profertil, which is controlled by the transnational Agrium alongside YPF. It makes nitrogen fertilizers. Bunge is another important actor; in 2009 it acquired the Campana (formerly, Pasa) nitrogen fertilizer plant from Petrobras, which had purchased the plant from Pecom Energía (Pérez Compañc) in 2003. Like the other actors in the market, Bunge imports other types of fertilizers, particularly phosphate fertilizers. Cargill has a nitrogen fertilizer plant in Ramallo and supplements this operation by importing phosphate fertilizers. This picture could be changed by the Río Colorado potash deposit that Brazil's transnational mining company Vale do Rio Doce owns and plans to develop. This megaproject involves a US\$ 4.5 billion investment. Although press sources report that it might be postponed because of the current global economic situation (*La Mañana de Neuquén*, 2012) it could, once built, turn Argentina in a major producer of this type of fertilizer.

## D. Conclusions, challenges and outlook

### 1. FDI strategies in the agricultural and agro-industry sector, and kinds of companies

#### (a) Investments in land

Studies and databases on agricultural land purchase and lease operations in the region disagree as to their scale and extent. A FAO study (2011) concludes that Brazil and Argentina are the only countries with widespread land grabbing. Other authors contend that it is taking place in other countries of Latin America and the Caribbean as well, if the investor profile is expanded to include other types of private and local actors (Borras and others, 2012). However, the sources examined do agree that the land market is growing quickly and that trans-Latin companies are playing a leading role (FAO, 2011; Borras and others, 2012; Land Matrix, 2012).

Trans-Latin companies (which are the result of mergers between two or more regional firms, or of cross-border operations by firms headquartered in one Latin American country) conduct negotiations through their contacts in the host country. According to Borras and others (2012) this is what keeps many transactions from being detected, because they are conducted in the name of companies or corporations that are registered in the country in question. In the Land Matrix database, most of the investors identified in the region are from Latin America (48%), followed by investors from North America (21%). A smaller percentage of the transactions involve investors from East Asia (14%), Europe (10%) and the Middle East (7%). According to a FAO study (2011), trans-Latin firms (chiefly, ones based in Brazil or Argentina) have a substantial presence and operations in countries such as Chile, Paraguay, the Plurinational State of Bolivia and Uruguay. In Central America, companies based in Mexico and other countries of the region have the larger footprint. Available sources also agree that most investment in land is for growing flex-crops, seeking to meet the rising regional and global demand for food, fodder and biofuels.

The governments of the countries of the region have responded to this interest in acquiring agricultural land. A clear example is Argentina, where Law 26.737 limits land ownership rights of foreigners (or companies that are majority-owned by foreigners) to 15% in rural areas. In Brazil, Law 5.709 regulates land purchases by foreign nationals and has been amended several times in the past few years. This issue is regulated, particularly, by ruling GQ-181 AGU of 17 December 1998, which is currently under review in response to the recent land rush, much of it illegal and on which there is little information (Hackbart, 2008). Other countries, such as Colombia, the Plurinational State

of Bolivia and Uruguay, are also discussing similar bills aimed at curbing foreign ownership of agricultural land. International agencies such as FAO have put forth a set of voluntary guidelines to encourage investments in land that are environmentally responsible and promote social inclusion and the socioeconomic development of rural populations. This issue should be made an explicit part of bilateral agendas between countries, as the governments of Australia and China (DFAT, 2012) have recently done by establishing consultation mechanisms and integrated information systems in order to make foreign investments in agriculture more transparent and legitimate. These mechanisms are very useful benchmarks for the region, in view of the agricultural cooperation proposal announced by the Chinese Premier during his visit to ECLAC in June 2012, which called for, among other things, creating a forum of ministers of agriculture of China and Latin America and the Caribbean.

One example of FDI in agriculture are planting pools (also discussed in the FAO study), which have expanded out from Argentina to the other Southern Cone countries except for Chile. The ephemeral nature of these operations (leasing land and machinery, recruiting technical personnel for short periods) makes it difficult to quantify the FDI mobilized, although the figures point to a sweeping trend that could change the face of agriculture in the region. This could bring benefits in terms of profitability, professionalism and high technology, but, on the downside, could favour an extractive, short-term approach that could have negative social and environmental impacts (for example, approaching agriculture as mining).

## **(b) Mergers and acquisitions**

This chapter shows that companies specializing in the production of agricultural commodities map their strategies in order to integrate all of their operations along the value chain and optimize global raw materials exports. This requires meshing agricultural production, logistics, the maritime freight business and industrial processing in order to reduce costs and produce competitively. This approach is being followed by the world's four major grain processing corporations (ADM, Bunge, Cargill and Louis Dreyfus) together with a wide range of other key but smaller transnationals (Glencore, Tereos, Mitsui Mitsubishi and Goldman Sachs) and emerging transnational corporations like the China-based Noble Group Limited.

These companies' operations are also increasingly global in scale, in response to geographic, strategic, geopolitical, financial and regulatory factors. Burgeoning international trade in food products requires diversifying sources of supply and working in different geographical markets. On the other hand, competition between companies calls for strategies that involve breaking up supply chains into a network of firms and industrial plants. Among the noteworthy geopolitical and financial factors are political decisions by governments, which play a key role in guiding FDI. The most paradigmatic cases are Brazil's fuel alcohol programme PROALCOOL created by the ethanol industry with the participation of major foreign companies, and funding from public banks (BNDES), which facilitated the expansion of Brazilian trans-Latins in meat chains.

The pattern across countries and agro-industry chains is to acquire domestic enterprises (via mergers and acquisitions) and, to a lesser extent, enter into joint ventures with local companies and set up subsidiaries. This trend is a reflection of the longstanding presence of the major transnationals in the region, which has made them familiar with local markets. These mergers and acquisitions are driven by an interest in expanding operations or quickly gaining a foothold in the local market without having to go through all of the stages involved in creating a new company and starting from scratch. In addition to providing ownership of a business that already has a market share, this decreases the number of competitors. In these cases the foreign firm determines the most efficient mechanism for absorbing local knowledge so that the staff recruited can use that know-how in keeping with the company's strategic objectives. When this knowledge cannot be hired directly because it is too costly, shared ownership can be a more efficient solution than setting up an affiliate. Such is the case with some transnational corporations with a longer track record in the region that have opted for partnering with local groups so as to expand their organizational boundaries, gain access to local knowledge and thus reduce their exposure.

In the area of agricultural inputs, corporate dissemination strategies are crucial in creating a market for the technology packages that growers use, although logistics infrastructure and industrial capacities also play a leading role. In the seed industry, major transnational corporations dominate the regional scene (including Bayer, Syngenta, BASF, Dow AgroSciences and Monsanto). All of them have robust research and development operations. The situation is different in the case of the fertilizer industry because it is essentially an extractive industry where the possession of mineral deposits

plays a key role. That is why that the main actors are transnational corporations specializing in the production of fertilizers (plus Cargill and Bunge, which entered the sector to optimize their grain production operations).

Agricultural FDI from Asia, especially China, is of particular note. Although there are no exact figures, it has so far been limited to a handful of companies setting up operations in the region, such as Noble and Kuok in the ethanol sector. On the other hand, some Brazilian companies in the meat sector (Marfrig and BRF) seeking to venture into the Chinese market have partnered with Chinese enterprises (COFCO, Chinwiz and Dah Chong Hong Holdings Limited). That said, FDI flows from China could surge in the coming years, as seen in State-owned Heilongjiang Beidahuang Nongken Group Company's plans to lease 300,000 hectares of land in Argentina's Río Negro province. This limited but growing trend can also be inferred from official Chinese government figures, which show that Chinese agricultural FDI worldwide increased from US\$ 834 million in 2008 to a cumulative US\$ 2.61 billion in 2010. This figure contrasts with the cumulative US\$ 44.66 billion in FDI in the mining sector as of 2010 (Ministry of Commerce of China, 2011).

In short, FDI plays a major role not only for major international corporations that process grain and supply agricultural inputs, but also for trans-Latins that are relevant links in meat, wheat and ethanol production chains.

### **(c) Trans-Latins and FDI in the agricultural and agro-industry sector in Latin America and the Caribbean**

Trans-Latin companies have partnered with firms based in other countries for distributing their products and have even set up production facilities there. The expansion of these firms has been guided by offensive strategies (seeking economies of scale, regional market knowledge and access to new distribution channels) and defensive strategies (occupying key positions before competitors, avoiding being absorbed by transnational corporations). There is also some sectoral specialization based on existing comparative and competitive advantages. Examples are the Argentine grain millers expanding into Brazil, and Brazilian meatpackers investing in Argentina, Uruguay and elsewhere in the region.

Agro-food trans-Latins follow expansion strategies that range from specializing in regional and niche markets to buying and selling shares in order to become part of transnational corporate global networks. The greatest agro-food sector success story is the Brazilian trans-Latins in the meat industry chain. They have become global leaders, as can be seen in their acquisitions in Southern Cone countries and in the United States and Australia. In addition to the inherent advantages of these chains over their competitors, their push to globalize is supported by BNDES national development policy that, among other instruments, provides loans for stock purchases and funding that enables Brazilian companies to buy competing ones abroad, acquire local companies with subsidiaries abroad or establish joint ventures with competing firms.

### **(d) Companies and business models**

The major agro-industry corporations (agro-food and agricultural input companies in particular) are opting for vertical integration and globalization strategies aimed at gaining control over the entire production process and ensuring consistent-quality supply for different markets. This makes it possible for them to meet the requirements of the new global food paradigm while expanding their markets. In this business model, integrating the entire process from farm to final delivery to the consumer, combined with insourcing, helps yield high profits (transforming food from a commodity into a service generates more value added), economies of scale (as markets expand and become integrated) and consistent output quality (as phytosanitary and environmental regulations are standardized).

The vertically integrated, internationalized business model is not within the reach of all companies because not all are at the same level or have the same implementation capacity. The specific characteristics of the different subsectors (such as those examined in this chapter) have an impact on the degree of vertical integration at each point. The major actors in the sectors examined in this chapter therefore fall into four general groups: (i) transnational corporations with market positioning advantages; (ii) foreign companies with limited market presence; (iii) trans-Latins; and (iv) domestic enterprises.

### **(i) Transnational corporations with market positioning advantages**

As described in this chapter, four major grain sector transnationals dominate much of the global market; these are ADM, Bunge, Cargill, and Louis Dreyfus —the ABCD traders. The agricultural input market is oligopolistic in that a handful of companies account for more than 70% of worldwide sales. Because of their track record and early arrival in the industry (many of these companies are more than a hundred years old), these companies are at an advantage when it comes to creating value, owning the value created along the chain and influencing the operations of correlated businesses (Teece, 1986; Jacobides, 2006).

With the passage of time, these companies have consolidated their position of power in the markets on the strength of their high degree of integration and globalization. This gives them considerable influence over all their transactions, such as contracts with direct and indirect suppliers (growers and shippers) and buyers (distributors and end consumers). Their position allows them to innovate and create more value as they build relationships of dependence with customers and suppliers. The grain ABCDs and major agrochemical companies are not only very vertically integrated (towards the consumer) but also have substantial horizontal influence in that they control a significant portion of the markets correlated with grains and agriculture.

In the medium to long term, the major petroleum companies (such as Shell and BP) are expected to surge into the biofuels sector. While they have not followed the same path as the ABCD traders or major agrochemical corporations, their size and resources could put them in a strong position. Nevertheless, for the time being the smaller foreign companies are the ones that are gaining ground in the region's ethanol and biodiesel markets.

### **(ii) Foreign companies with limited market presence**

Together with the major transnationals, other foreign companies with smaller market shares operate in the region's agro-industry sector. These firms often stand out for their know-how or innovativeness. Examples in the biofuels sector include Sirona Fuels, Clean Energy, Abengoa, Sojitz Corporation, Tereos and Explora. Companies that have entered agreements with local governments to gain access to agro-commodities (such as the Saudi conglomerate Al-Khorayef with 200,000 hectares of sorghum and other crops in Argentina) or tap into new markets on the strength of their economies of scale (like Noble Group Limited's investment in sugar and ethanol in Brazil). These are all major companies, but they do not have the advantages that enable the large transnationals to influence the organizational structure of their sector, influence competitors' strategies or leverage their position in the chain.

### **(iii) Trans-Latins**

Brazil's trans-Latin companies in the meat chain exemplify successful strategies for vertical integration and insourcing. The four major Brazilian meat sector companies (JBS-Friboi, BRF, Marfrig and Minerva) have been able to position themselves as regional leaders with a large global footprint. Their growth is due in part to policies providing support from public entities, coupled with the country's obvious competitive advantages. Other examples in the region, albeit on a smaller scale, are Argentina's oilseed mills, which have been making inroads into regional markets, and Brazil's grain company Amaggi Exportação e Importação Ltda., which operates in Argentina and Europe. While there are key players with market positioning advantages (like the ABCDs and other meat industry heavyweights such as Tyson Foods), there is an emerging trend in the region, driven by trans-Latins following the new global food paradigm and its vertically integrated and internationalized business model. The Brazilian trans-Latins in the meat industry are the clearest expression of this trend.

While different in nature, planting pools are another part of this trend, which is spreading throughout the Southern Cone. Grupo Los Grobo is a prime example. Beyond the ephemeral nature of these endeavours, planting pools are transnational in scope and are having a significant impact on agriculture in some countries because their business model adjusts in keeping with locally available resources. The same is true of spontaneous cross-border movements by growers setting up operations in neighbouring countries in search of access to new land. Although both trends involve little or no vertical integration, they are wide-reaching in geopolitical, economic, social and environmental terms.

#### (iv) Domestic enterprises

Because of the cultural nature of food products, small and medium-sized domestic enterprises subsist alongside major international and trans-Latin corporations as well as other foreign companies operating in the domestic market. They exist because their broad knowledge of the domestic market enables them to meet that market's specific needs. Agricultural producers (except for planting pools) tend to operate in the local market, as do slaughterhouses and meatpackers, wheat flour mills and biodiesel plants. These companies, which are always smaller and not internationalized, are being forced to innovate and comply with new quality standards to be able to compete with foreign companies and thus maintain their market position.

Table III.12 summarizes the different types of companies discussed in this chapter.

**Table III.12**  
**Types of agro-commodity and agricultural input companies**

Type of company	Definition	Main products	Vertical integration	Internationalization
Transnationals with market positioning advantages	Large multinational companies with a long history in the industry. This enables them to influence the organizational structure of the sector and have an impact on the strategies of competing companies. They benefit from a dominant position in the chain.	Agro-commodities, especially grains (wheat, soybeans and others) and ethanol.  Agrochemicals, including seeds and fertilizers. For the former, their advantage lies in research and development capabilities. For the latter, their advantage comes from possessing gas, phosphate and potash deposits.	Agricultural commodities: High (forward). In addition to large industrial facilities for processing raw materials, such operations have ports, infrastructure and distribution channels.  Agrochemicals: High (backward and forward). Integrated all the way from research and development to sale of embedded technology to the farmer.	High. Present in multiple markets, with operations on a global scale.
Foreign companies with limited market presence	Businesses with technology and innovation capacity, but with limited influence in their chain.	Biofuels	Mixed (vertical integration can be stepped up as larger, international companies come in).	Medium. Present in just a few markets.
Trans-Latins	Latin American enterprises investing in countries in the region.	Meat chains	High, especially forward, because they possess distribution channels and trademarks.  Only the pork and poultry chains are integrated backwards, because many firms operate on the basis of contract farming.	High. Operations on a global scale.
Domestic enterprises	Growers of all sizes, and agribusinesses that operate only in the domestic market.	Production of agricultural commodities. Local slaughterhouses, small biofuel enterprises, sugar mills, distributors of national inputs.	Low	Low

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC).

## 2. Public policies for attracting, regulating and enhancing the positive externalities of FDI in the agricultural and agro-industry sector

FDI has the potential to impact economic growth endogenously if it generates production returns through externalities and technological and organizational spillovers. The public policy regime and the institutional framework in general play a decisive role in promoting FDI, absorbing its positive domestic economic impact and building the knowledge base that economies need in order to achieve this end (Cimoli and others, 2009; Mello Jr., 2007; ECLAC, 1998; ECLAC, 2002). The information set out herein indicates that biofuel and meat industry FDI is driven not only by new market trends but also by the government incentives and regulations that have shaped foreign investor and trans-Latin company decision-making.

The factors that draw transnational firms are generally well-known: advantageous location, defence of a strategic position, access to strategic local resources, and a dynamic market that makes it possible to produce at the lowest cost and sell on a large scale. This means that foreign investors weigh the income level of the target country's population, the degree of urbanization, trade agreements, comparative advantages, economic incentives and the quality of institutions. The factors that discourage investment include fragile public institutions, an uncertain legal framework and the concomitant political risks, as well as small market size and export constraints. For those tasked with designing policies to attract and regulate FDI, the question is how to encourage investments that are not only profitable but also have an endogenous impact on socioeconomic growth in their countries.

### **(a) Institutional instruments for attracting and regulating FDI in the agricultural and agro-industry sector**

As in other economic sectors, appropriate macroeconomic policies (inflation, exchange rate, interest rate and labour legislation, among others) and trade agreements (such as economic complementarity and free trade agreements) are factors that play a critical role in the dynamics of FDI in the agricultural and agro-industry sector in Latin America and the Caribbean. This is in addition to the legal instruments and technical standards that allow FDI to flow in consistently and transparently. Some countries have foreign investment regimes in place to ensure legal stability and generate tax incentives for foreign investors; legislative decree 600 in Chile and legislative decree 662 and Law 27.360 in Peru are examples of this. For other countries, schemes that are domestic- and foreign-investor neutral, like Uruguay's investment promotion and protection law (Law 16.906), are essential for creating a favourable climate and drawing investment into the country. Another institutional aspect that stimulates FDI is the guarantee of free convertibility of profits into foreign currency and the absence of barriers to the movement of capital.

These general factors run along with others that are directly associated with the energy and food sector. Biofuel legislation has greatly influenced the development of this industry in Argentina, Brazil and Colombia. The meat industry depends directly on health regulations and the existence of health and trade agreements with other countries and blocs, which are essential for exporting. Domestic price policies can encourage or discourage FDI. Grower development and technological support programmes are essential for making improvements in the early stages of production. Investment project banks that help identify new FDI opportunities are also useful in a sector that is complex, heterogeneous and geographically dispersed.

To ensure that FDI will generate benefits for the receiving countries, government action (particularly in low-income economies) is crucial for attracting and regulating FDI that will bring socioeconomically inclusive and environmentally sustainable technological innovation and spillovers. This is relevant above all for the new types of investors who have different levels of bargaining power and are venturing into the sector to ensure access to scarce natural resources such as water and land. The pitfall is that the lower-income countries are precisely the ones that most lack the technical and managerial capacities needed for crafting policies and regulations that would attract quality FDI.

### **(b) Innovation and FDI in the agricultural and agro-industry sector**

The impact of FDI in the agricultural and agro-industry sector in terms of innovation is another area for consideration. Transnational corporations have tended to keep their research and development operations in their home countries (or in other developed countries where there are centres of excellence and research), with their foreign affiliates limited to planning for innovation adoption (Rama and Martínez, 2012). The case of ethanol in Brazil is an exception: the entire technological development effort is entrusted to teams of Brazilian scientists. The recent arrival of transnationals in this sector could have a positive impact on the development of second-generation (biomass) ethanol because the technology is not available and research is being conducted through partnerships between domestic and foreign firms.

Often, merely setting up new industrial plants in a given country can have a potential spillover effect. FDI has three types of spillovers for domestic enterprise productivity and innovativeness: horizontal, backward and forward (the latter two are usually referred to as vertical spillover).

Horizontal spillover shows up in three ways (Havranek and Irsova, 2012).

- i) There is a competition effect when domestic firms respond to FDI flows by improving their procedures and end products for the consumer. This entails boosting production. The competition effect can also have negative

consequences if the entry of foreign investors makes it harder to take advantage of economies of scale or if severe restrictions are imposed on the mobility of know-how and skilled labour (see demonstration effect and labour market effect).

- ii) There is a demonstration effect when new foreign actors introduce new technology or new applications that drive the domestic actors to imitate them and improve their own production processes.
- iii) There is a labour market effect when foreign firms need to train workers in the receiving economy and this starts a learning process that can, over time, radiate out to the rest of the domestic economy.

Backward spillover (one of the best documented in the academic literature) depends on the relationship between the foreign investor and its local suppliers, which must meet new standards in order to adapt to investor requirements. The idea is that domestic suppliers can thereby improve their quality standards, and this spreads out to the benefit of other clients and associated activities. There are fewer empirical studies on forward spillover, but the idea is the same as for backward spillover: the components of the foreign investor's supply chain gain in productivity and innovativeness.

Such is the case with the vegetable oil and biodiesel industry, which operates on the basis of benchmarks and whose technological innovation leaped forward (horizontal spillover effect) when Glencore set up a 250,000-ton capacity plant in Argentina, using European technology and opening a new phase that changed the scale of production. The spillover effect became evident when this process was subsequently replicated by the Terminal 6 group and others in the sector. The same thing happened with the meat industry in all of the Southern Cone countries, whose export-oriented facilities are technologically far superior to slaughter facilities oriented towards the domestic market. In addition to technology dissemination at the industry level, export-oriented facilities have a systemic effect because they operate under stringent health and safety regulations that impact the production process along the entire chain, including the primary link (vertical spillover). The development of meat industry trans-Latins had a demonstration effect, because operating in more developed markets (such as the United States and others) has provided these companies with new technologies (like spray chilling, also known as Clor-Chil, in the North American market) that have subsequently been taken back to Brazil and have even resulted in changes to local standards and regulations. But innovation in production does not just come from stiffer market competition and the need to meet higher standards. Innovation is also driven by public policies, as is the case of ethanol in Brazil: both research and the implementation of new technologies for making biofuels have been fuelled by public resources.

Another form of innovation has to do with biotechnology research, both for producing genetically modified organisms and for developing agrochemicals. The impact of these activities all along the supply chain is more controversial, particularly because most of the research, development and innovation is being funded by major transnationals. According to Pingali (2007), this new structure for agricultural research will increase transaction costs for growers in developing countries that wish to use improved seeds or embedded agro-technologies. This is primarily due to the widespread use of royalties and the need to apply these products on an ongoing basis because weeds and pests become resistant to these agrochemicals. Another related cost concerns preserving the environment and human health; this calls for a preventive health and environmental system to assess the risk of prolonged use of these products and set limits for chemical residues in the environment (especially in bodies of water) and in food.

The level of innovation depends on the nature of each factor because production needs vary between, for example, processing biodiesel and exporting raw materials (soybean meal). Even so, and despite the constraints, research and development and organizational innovation that encompass national producers can be spurred by public policies aimed at reducing transaction costs for small and medium-sized enterprises. This can be achieved by supporting growers and manufacturers associations, investing in capacity building and in research and extension services, improving rural infrastructure and expanding access to information and communication technologies in remote or isolated areas, among other measures.

### **(c) Information systems for FDI in agriculture and agro-industry in Latin America and the Caribbean**

To conclude, information (qualitative and quantitative) is crucial. Reliable data are a must for designing these policies and for businesses to make appropriate decisions. This study showed that there is little research on FDI in the agricultural and agro-industry sector in Latin America and the Caribbean and that there is a shortage of statistics and case studies from which lessons can be drawn. For example, micro-investing in farms is supposed to be growing,

but there is virtually no information because the official figures do not include such deals. This is due in part to the fact that the amounts involved are smaller than in other economic sectors (such as mining, energy and transport). Nevertheless, these flows do have a greater direct impact on rural economies in the countries and figure heavily in poverty reduction strategies.

Beyond basic official figures on investment flows, there is a need for useful information on investment opportunities, how to take advantage of them and the regulatory frameworks (environment, soil and water management, health and biosafety, food safety, taxes, labour legislation, among others) to be complied with if FDI is to be an effective force for job creation, social inclusion, sustainability, innovation and economic growth. Ongoing e-government initiatives in the region provide an appropriate forum for addressing this demand for information.

### 3. The new role of transnational and national corporations in agriculture and agro-industry

This study clearly shows how extensively involved transnational corporations are in agriculture in Latin America and the Caribbean. FDI accounts for 23% of ethanol output in Brazil; the figures are similar for soybeans in Argentina and the seed and fertilizer industry.

This level of penetration calls for a look at how accountable these companies are to their host countries. Agriculture depends on fragile environmental balances, and many supply chains generate negative externalities that must be controlled. The most obvious case is soybean mono-cropping in Argentina, but the sugar sector in Brazil and meat production throughout the Southern Cone also face formidable environmental challenges that require new responses by transnational corporations (and national ones as well).

The same can be said of the social challenges. It is estimated that there are about 15 million family farms in the region. They control approximately 400 million hectares, of which 10 million hectares are defined as subsistence farms (IFAD, 2011a, 2011b). This means that FDI in the agro-food and agro-energy sector necessarily has a direct connection with rural areas with a high concentration of lower-income households, greater vulnerability in terms of food insecurity and less access to education and to information and communication technologies (Rodríguez and Meneses, 2011; Rodrigues and Rodríguez, 2013). A clear example is soybeans in Argentina. Now that easy expansion in the humid pampas is over, expansion is turning to regional economies where smallholdings predominate. This machinery- and herbicide-intensive crop does not create jobs. The dairy industry employs approximately 22 workers per 1,000 hectares; grain agriculture employs 10. Soybean agriculture employs two to five workers per 1,000 hectares; only forestry creates fewer jobs than soybeans (Zibechi, 2008).

This leads to rethinking production and calls for companies to work with new environmental sustainability standards while building successful relationships all around (a win-win situation) (FAO, 2011) and build new production chain linkages with small growers and surrounding communities. Two clear examples of the social impact of FDI flows in agriculture were Sirona Fuels in Haiti and Grupo Pellas in Guatemala. These two examples show that social inclusion in agricultural investment depends not only on the framework defined by governments, but also on how important social responsibility is for the company in question and how committed it is to the rural population. This commitment can be encouraged by government policies aimed at rewarding investment strategies that are inclusive vis-à-vis rural communities and vulnerable segments of the population.

Agricultural and agro-industry FDI can open substantial development opportunities, not only for the main traditional players (transnational corporations) but also for small and medium-sized producers if the investments foster integration in production systems, environmental stewardship, government regulation and compliance with international standards such as the Santiago Principles: Generally Accepted Principles and Practices for Sovereign Wealth Funds<sup>19</sup> (advocated by the IMF), FAO guidelines for land governance<sup>20</sup> and the investment policies recently published in the UNCTAD World Investment Report (2012). These principles promote mergers and acquisitions that improve production efficiency and/or bring small and medium-sized producers into the supply chain. They also seek

<sup>19</sup> See [online] <http://blog-pfm.imf.org/pfmblog/2008/11/the-santiago-pr.html>.

<sup>20</sup> Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (see [online] [http://www.fao.org/fileadmin/templates/cfs/Docs/1112/VG/VG\\_Final\\_EN\\_May\\_2012.pdf](http://www.fao.org/fileadmin/templates/cfs/Docs/1112/VG/VG_Final_EN_May_2012.pdf)).

spillovers from investments in research, development and innovation in the face of a growing research investment gap on the part of public agencies and domestic private producers. With regard to investment in land, voluntary guidelines put forth by FAO and signed by 126 countries call for such projects to generate positive impacts for local communities by developing infrastructure (irrigation, roads, processing plants), promoting rural employment and working with local producers. In this regard, corporate social responsibility initiatives promoted by the Global Compact<sup>21</sup> are also relevant.

In the region's rural economies there are still very few domestic producers who have contact with foreign companies; this is because the vast majority are small growers and many are subsistence operations. It is therefore a challenge for governments to attract FDI that will also go to these areas, where there are many producers on the sidelines of the sector's rapid growth. Greater social inclusion in agriculture would also create new economic activities in rural economies. By creating vertical and horizontal production linkages, it could help to build virtuous circles of economic growth that would contribute to the stability of the region's agricultural sector and further the well-being of the rural population. To this end, companies (transnational and national alike) must realize that they are working with the common property of humankind (air, water, land, climate, the genome, local knowledge and cultures) that in essence belongs to everyone and must be preserved for future generations. As a number of case studies show—for example, the RTRS standard, followed for growing soybeans in Argentina and Brazil, and the Agro-environmental Protocol of the State of São Paulo for the sugar cane sector—this process is already under way. But it must take root and grow. This means shouldering new commitments in the face of major global challenges and joining networks and coalitions of multiple actors (public and private) that can generate new synergies in order to successfully address these challenges and help build a new global governance grounded in solidarity, responsibility and democracy.

## Bibliography

- Adlas, J. and L. Achoth (2006), "Is the green revolution vanishing? Empirical evidence from TFP analysis for rice", paper presented at the International Association of Agricultural Economics Conference (IAAE), Gold Coast, Australia, 12-19 August.
- Adreani, P. (2008), "Mercado del complejo soja y análisis de la competitividad de los países exportadores", Buenos Aires, Argentine Rural Society (SRA).
- Agrow (Agrow World Crop Protection) (2008), "News", August. Albuquerque, R. and others (2005), "Debates sobre el método del maíz híbrido en Estados Unidos y su traducción en México", *Ciencias agrícolas y cultura científica en América Latina*, A. Arellano and others (comps.), Buenos Aires, Prometeo Libros.
- América Economía* (2012), "Paraguay busca triplicar sus exportaciones de aceite de soja", February.
- \_\_\_ (2011), "Ranking de las 500 mayores empresas en América Latina", December.
- AMI (American Meat Institute) (2010), "Meat and Poultry Facts", Washington, D.C. [online] <http://www.meatami.com/ht/d/ArticleDetails/i/64856>.
- ANBA (2011), "Kenana to invest US\$ 2 bn in five years", Brazil-Arab News Agency.
- Arovuori, K. and H. Karikallio (2009), "Consumption patterns and competition in the world fertilizer markets", paper presented at the nineteenth Symposium of the International Food and Agribusiness Management Association, June.
- Ayadi, N., J.L. Rastoin and S. Tozanli (2006), "Les opérations de restructuration des firmes agroalimentaires multinationales entre 1987 et 2003", UMR MOISA, *Working Paper*, No. 8.
- Barrera, A. (2010), "El contexto mundial de la nueva revolución alimentaria", *La agricultura chilena en la nueva revolución alimentaria*, A. Barrera and O. Sotomayor (eds.), Santiago, Chile, Editorial Universitaria.
- Barling, D., T. Lang and G. Rayner, (2009), "Current trends in food retailing and consumption and key choices facing society", *European Food System in a Changing World*, R. Rabbinge and A. Linnemann (eds.), Strasbourg.
- Benetti, M.D. (2004), "A internacionalização real do agronegócio brasileiro. 1990-03", *Indicadores Econômicos FEE*, vol. 32, No. 2, Porto Alegre, August.

<sup>21</sup> See [online] <http://www.unglobalcompact.org/>.

- Bernárdez, F. (2004), *Estudio de mercado del sector de los fertilizantes en Brasil*, Galicia, Galician Institute for Economic Promotion (IGAPE).
- Bisang, R. and others (2008), "Estructura de la oferta de carnes bovinas en la Argentina. Actualidad y evolución reciente", *Cuadernillo Técnico*, No. 6, Argentine Beef Promotion Board (IPCVA)/ECLAC office in Buenos Aires, November.
- BNDES (National Bank for Economic and Social Development) (2010), *Annual Report 2010*.
- Borras, S. and others (2012), "Land grabbing in Latin America and the Caribbean", *Journal of Peasant Studies*, vol. 39, No. 3-4.
- BRF Foods (Brasil Foods) (2011), *Annual and Sustainability Report 2011*.
- Capozoli, R. (2012), "O avanço das multinacionais brasileiras", *Valor Setorial Carne Bovina*, May.
- Chade, J. (2010), "Grupos estrangeiros terão 40% da produção brasileira de etanol até 2015", *Economia e Negócios*, São Paulo.
- CIAGA (Cámara de la Industria Argentina de Fertilizantes y Agroquímicos) (2010), "Fertilizantes a partir de nitrógeno, fósforo y potasio. Posibilidades de producción en nuestro país", Buenos Aires.
- Cimoli, M., G. Dosi and J. Stiglitz (2009), *Industrial Policy and Development, The Political Economy of Capabilities Accumulation*, New York, Oxford University Press.
- Consoli, M. A. and others (2009), "Mapping and Quantification of the Meat Chain in Brazil", paper presented at the VII International Conference of the Programa de Estudios del Sistema Agroalimentario (PENSA), 26 - 28 November, São Paulo.
- David, J. (1986), "Profiting from technological innovation: Implications for integration, collaboration licensing and public policy", *Research Policy*, No.15.
- DFAT (Department of Foreign Affairs and Trade) (2012), *Feeding the Future: a joint Australia-China Report on strengthening investment and technological cooperation in agriculture to enhance food security*, Canberra.
- Dias de Aguiar, I. (2012), "Inovação pode reduzir pressão sobre a floresta", *Valor Setorial Carne Bovina*, May.
- Dirven, M. (2002), "Las prácticas de herencia de tierras agrícolas: ¿una razón más para el éxodo de la juventud?", *Desarrollo Productivo series*, No. 135, (LC/L.1837-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).
- ECLAC Economic Commission for Latin America and the Caribbean (2002), *Globalization and Development* (LC/G.2176(SES.29/17)), Santiago, Chile.
- (1998), *Foreign Investment in Latin America and the Caribbean* (LC/G.2042-P), Santiago, Chile.
- ECLAC/FAO/IICA (Economic Commission for Latin America and the Caribbean/Food and Agriculture Organization of the United Nations/InterAmerican Institute for Cooperation on Agriculture) (2012), *The Outlook for Agriculture and Rural Development in the Americas: A Perspective on Latin America and the Caribbean 2012-2013*, San José.
- El Quetzal (2011), "Polochic: su pasado, presente y futuro", No. 10, Guatemala Human Rights Commission/USA (GHRC), June/September [online] [www.ghrc-sa.org/Publications/El\\_Quetzal/Numero10.pdf](http://www.ghrc-sa.org/Publications/El_Quetzal/Numero10.pdf).
- Estudillo, J.P. and K. Otsuka (2006), "Lessons from Three Decades of Green Revolution in the Philippines", Foundation for Advanced Studies on International Development (FASID), unpublished.
- FAO (Food and Agriculture Organization of the United Nations) (2011), *Dinámicas del mercado de la tierra en América Latina y el Caribe: concentración y extranjerización*, Fernando Soto Barquero and Sergio Gómez (eds.).
- (2009), *The State of Agricultural Commodity Markets 2009*, Rome.
- (1997), "Part III: The agroprocessing industry in economic development", *The State of Food and Agriculture 1997* [online] <http://www.fao.org/docrep/w5800e/w5800e12.htm#E12E3>.
- FAOSTAT (Corporate Database for Substantive Statistical Data) (2012), "Production and Trade Statistics" [online] <http://faostat.fao.org/>.
- Fava, M., F. Tavares Canto Guina and M.S. Melo Saab (2012), "Competitiveness of Brazilian Beef Chain", paper presented at the International Symposium of the International Food and Agribusiness Management Association (IFAMA).
- Fedebiocombustibles (National Biofuels Federation of Colombia) (2012), "Empresas de Brasil y EU se unen en la venta de etanol" [online] <http://www.fedebiocombustibles.com/v2/nota-web-id-1295.htm>.
- Fernandes, E., B. de Almeida Guimarães and R. Ramalho Matheus (2009), "Principais empresas e grupos brasileiros do setor de fertilizantes", *BNDES Setorial*, No. 29, Rio de Janeiro, March.
- Filippaios, F. and R. Rama (2008), "Globalisation or regionalism? The strategies of the world's largest food and beverages MNEs", *European Management Journal*, vol. 26, No. 1.
- GAEZ (Global Agro-Ecological Zones) (2013), "Zonas Agro-Ecológicas Mundiales", *Mapa: Relación del rendimiento real y potencial de los principales cultivos* [online] <http://gaez.fao.org/Main.html#>.

- Galeano, L. (1997), *Las migraciones rurales: una alerta para el MERCOSUR. Agricultura en el MERCOSUR y Chile*, Inter-American Institute for Cooperation on Agriculture (IICA), Centro Regional Sur (CRS), Montevideo.
- Gibbon, P. (2009), "Agro-commodity Chains: An Introduction", *Boletín*, No. 32, Institute of Development Studies (IDS).
- Gómez y Paloma, S., S. Acs and S. Saravia-Matus (2012), "Smallholders & Food Security in Sierra Leone", *Technical Report*, European Commission, Joint research Centre (JRC).
- GRAIN (2009), "The New Farm Owners" [online] <http://www.grain.org>.
- Hackbart, R. (2008), "Aquisição de Imóveis Rurais por Estrangeiros", presentation, unpublished.
- Hallam, D. (2011), "International investment in developing country agriculture. Issues and challenges".
- Havranke, T. and Z. Irsova (2012), "Survey article: Publication bias in the literature of foreign direct investment spillovers", *The Journal of Development Studies*, vol. 48, No. 10.
- Hilbert, J.A., R. Sbarra and M. López Amorós (2012), *Producción de biodiesel a partir de soja: Contexto y evolución reciente*, Buenos Aires, National Institute for Agricultural Technology (INTA), Ministry of Agriculture, Livestock and Fisheries of Argentina.
- Hodges, R.J., J.C. Buzby and B. Bennett (2011), "Postharvest Losses and Waste in Developed and Less Developed Countries: Opportunities to Improve Resource Use", *Journal of Agricultural Science*, vol. 149.
- IFAD (International Fund for Agricultural Development) (2011a), *Rural Poverty Report*, Rome.
- (2011b), *Latin America: The State of Smallholders in Agriculture*, Rome.
- ITC (International Trade Center) (2012), "Statistics" [online] <http://www.intracen.org/>.
- Jacobides, M.G., T. Knudsen and M. Augier (2006), *Benefiting from Innovation: Value Creation, Value Appropriation and the Role of Industry Architectures*, London.
- La Mañana de Neuquén* (2012), "Vale habría postergado la obra Potasio Río Colorado", September.
- Land Matrix (2012), Land Matrix Portal [online] <http://landportal.info/landmatrix>.
- Lawrence, F. (2011), "The global food crisis: ABCD of food – how the multinationals dominate trade", *The Guardian* [online] <http://www.guardian.co.uk/global-development/poverty-matters/2011/jun/02/abcd-food-giants-dominate-trade>.
- Le Buanec, B. (2008), "Evolution of the seed industry during the past 40 years", paper presented at the opening session of the World Congress of the International Seed Federation (ISF), Prague.
- MAPA (Ministry of Agriculture, Livestock and Supply of Brazil) (2012), "Relação das unidades produtoras cadastradas no Departamento da Cana-de-açúcar e Agroenergia" [online] [www.agricultura.gov.br/arq\\_editor/file/Desenvolvimento\\_Sustentavel/Agroenergia/Orientaco](http://www.agricultura.gov.br/arq_editor/file/Desenvolvimento_Sustentavel/Agroenergia/Orientaco).
- (2011), *Anuário Estatístico da Agroenergia – 2010*, Brasília.
- Marfrig Group (2010), *Relatório Anual 2010*.
- Martínez, J.M. (2006), "Mercado mexicano de fertilizantes: perspectivas", Asociación Nacional de Comercializadores de Fertilizantes, A.C (ANACOFER).
- MECON (Ministry of Economic Affairs and Public Finances of Argentina) (2011), "Complejo azucarero", *Producción Regional por Complejos Productivos series*, Buenos Aires, October.
- Mello Jr, L.R. (2007), "Foreign direct investment in developing countries and growth: A selective survey", *Journal of Development Studies*, vol. 34.
- Ministry of Agriculture, Livestock and Fisheries of Argentina (2010), "Sector porcino", *Ganados y carnes*, Subsecretaría de Ganadería.
- Ministry of Commerce of People's Republic of China (2011), "2010 Statistical Bulletin of China's Outward Foreign Direct Investment".
- Motta Campos, R. (2013), "The public debate about agrobiotechnology in Latin American countries: a comparative study of Argentina, Brazil and Mexico", *Desarrollo Productivo series*, No. 193 (LC/L.3591), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).
- MWR (Ministry of Water Resources of China) (2008), *Annual Report 2007-2008*.
- Nelson, D. (2012), "Situation and Outlook, Grain Industry", presentation for the National Oilseed Processors Association, Washington, D.C., 6 February.
- Observatorio Iberoamericano de Asia-Pacífico (2011), "China e India buscan tierras y alimentos en Latam", *Boletín Electrónico*, No. 29 [online] [http://www.iberiasia.org/pdf/boletin\\_29\\_print.pdf](http://www.iberiasia.org/pdf/boletin_29_print.pdf).
- OECD/FAO (Organisation for Economic Cooperation and Development / Food and Agriculture Organization of the United Nations) (2012), "Perspectivas Agrícolas 2012-2021" [online] <http://www.oecd.org/site/oecd-faoagriculturaloutlook/SpanishsummaryOCDEFAOPerspectivasgr%C3%ADcolas2012.pdf>.

- Pavitt, K. (1984), "Sectoral patterns of technical change: towards a taxonomy and a theory", *Política de Búsqueda*, No. 13, North-Holland, Elsevier Science Publishers.
- Pingali, P. (2007), "Will the Gene Revolution Reach the Poor? – Lessons from the Green Revolution", paper presented at the VII Manshold Conference, Wageningen, January.
- Pinto, M. J. (2011), "Investimentos diretos estrangeiros no setor sucroenergético", Sao Paulo University (USP).
- Proexport Colombia (2012), "Sector de biocombustibles en Colombia" [online] [www.proexport.com.co](http://www.proexport.com.co).
- Proinversión Perú (2012), "Ficha etanol – Maple. Gobierno de Perú" [online] <http://www.proinversion.gob.pe/0/0/modulos/JER/PlantillaFichaHijo.aspx?ARE=0&PFL=0&JER=258>.
- Rama, R. and C. Martínez (2012), "The changing structure of the global agribusiness sector", *Handbook of Economic Geography and Industry Studies*, P. McCann (ed.).
- Revista PIB (2009), "Aventura no Nilo: produtor rural de Mato Grosso leva tecnologia agrícola brasileira ao Sudão para cultivar algodão, soja, milho e feijão às margens do grande rio", Brazil.
- Roudart, L. (2010), "Terres cultivables non cultivées: des disponibilités suffisantes pour la sécurité alimentaire durable de l'humanité", *Centre d'Etudes et de Perspective*, No. 18.
- Sampaio, F. (n/d), « Sistema Agroindustrial da Carne Bovina. Desafios e Perspectivas », presentation, unpublished.
- Saravia-Matus, S., S. Gómez y Paloma and S. Mary (2012), "Economics of food security: selected issues", *Bio-Based and Applied Economics*, vol. 1, No. 1.
- SIAMIG (Associação das Indústrias Sucroenergéticas de Minas Gerais) (2009), "Capital Estrangeiro No Setor Sucroalcooleiro Brasileiro", *Relatório Econômico*, No. 007.
- Sotomayor, O., A. Rodríguez and M. Rodrigues (2011), *Competitividad, sostenibilidad e inclusión social en la agricultura: nuevas direcciones en el diseño de políticas en América Latina y el Caribe*, Libros de la CEPAL, No. 113 (LC/G.2503-P), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).
- Thomson One (2012), Diario de fusiones y adquisiciones.
- UNCTAD (United Nations Conference on Trade and Development) (2012), *World Investment Report (UNCTAD/WIR/2012)*, Geneva.
- (2009), *World Investment Report (UNCTAD/WIR/2009)*, Geneva.
- UNICA (Brazilian Sugar Cane Industry Association) (2012), União da Indústria de Cana-de-Açúcar [online] <http://www.unica.com.br/>.
- United Nations (2011), "Análisis de la política de inversión, Guatemala", United Nations Conference on Trade and Development (UNCTAD).
- Urioste, M. (2011), *Extranjerización de la tierra boliviana*, La Paz, Fundación Tierra.
- USDA (United States Department of Agriculture) (2012), "International Food Consumption Patters", Economic Research Service [online] <http://www.ers.usda.gov/data-products/international-food-consumption-patterns.aspx#26207>.
- VOA (Voz da América) (2011), "Agricultores brasileiros vão para Moçambique", Brazil.
- WFP (World Food Programme) (2007), "WFP Strategic Plan (2008-2011)", *WFP Tools and Approaches to Hunger*, Rome.
- World Bank (2012), World Development Indicators (WDI), Washington, D.C.
- (2010), *Rising Global Interest in Farmland: Can it Yield Sustainable Equitable Benefits?*, Klaus Deininger and others (eds.), Washington, D.C.
- Zibechi, R. (2008), "La soya en Uruguay: La creación de un nuevo bloque de poder", *Programa de las Américas*.