



# **Analysis of the economic relations of Latin America and the Caribbean with the Association of Southeast Asian Nations (ASEAN)**

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LATIN AMERICAN  
AND CARIBBEAN  
ECONOMIC SYSTEM

A faint, light blue world map is visible in the background of the page, centered behind the main title.

# **Analysis of the economic relations of Latin America and the Caribbean with the Association of Southeast Asian Nations (ASEAN)**

## **Extra-Regional Relations**

*Permanent Secretariat of SELA  
Caracas, Venezuela  
October 2015  
SP/Di No. 12-15*

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**F O R E W O R D**

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*This document has been drafted in compliance with Activity III.1.3 of the Work Program of SELA for 2015, "Analysis of the Economic Relations of Latin America and the Caribbean".*

*The document consists of an Executive Summary, and two chapters, and conclusions. Chapter I describes the economic performance of ASEAN, as well as the integration mechanisms of Latin America and the Caribbean, highlighting the behaviour of the main macroeconomic indicators. In Chapter II, economic relations between Latin America and the Caribbean with the ASEAN are studied. This theme is divided into two action axes. Firstly, trade relations are analyzed, classifying them according to their technological intensity. Secondly, Foreign Direct Investment flows between the two regions are assessed. Finally, conclusions are presented as a series of final reflections.*

*The Permanent Secretariat of SELA thanks Adriana Paredes, Dylan Castillo, and Javier Rodríguez, officials from the Direction of Studies and Proposals, for their dedication in drafting this document.*



## **EXECUTIVE SUMMARY**

The economic relations between Latin America and the Caribbean and the Association of Southeast Nations (ASEAN) have not been significant compared to the economic relations with other regions. In 1995, only 1.7% of exports from Latin America and the Caribbean were directed to ASEAN countries. However, in 2013 this figure increased to 3%.

This paper studies the economic relations between the ASEAN and the integration mechanisms of Latin America and the Caribbean, specifically: the Pacific Alliance (PA), the Common Market of the South (MERCOSUR), the Central American Integration System (SICA), the Andean Community (CAN) and the Caribbean Community (CARICOM).

The period under study goes from 1990 to 2013, taking into account data availability. The integration mechanisms analyzed include, during the whole period of study, member countries up to 2013. This does not include the year of entry, nor the date of the conformation of the mechanism. Venezuela is an exception, since it left the CAN in 2011 and formally entered MERCOSUR in 2012.

This document is divided into two chapters and the conclusions. The first one describes the economic performance of the ASEAN and the integration mechanisms of Latin America and the Caribbean, highlighting the behaviour of the main macroeconomic indicators. The second chapter deals with the economic relations between Latin America and the Caribbean and the ASEAN, dividing the issue into two action axes. Firstly, trade relations are analyzed, classifying them according to their technological intensity. Secondly, Foreign Investment Direct flows between the two regions are assessed. Finally, the conclusions show the main findings of the study.

The first chapter describes the participation of the ASEAN and the mechanisms of integration of Latin America and the Caribbean within the world economy. In order to do so, the size of the economy is studied, as well as the size of trade flow within the mechanisms, and also the behaviour of the investments. In order to achieve this, the investment in machinery and equipment is analyzed, as well as domestic savings, and Foreign Direct Investment flows (FDI) in each mechanism. Lastly, complexity and technological sophistication in trade flows within integration mechanisms are studied.

When studying the evolution of Gross Domestic Product (GDP) measured in terms of purchasing power parity, a rapid and sustained growth in the ASEAN economies is observed. This has allowed an increase in their participation in world economy. On the other hand, Latin America and the Caribbean has reported lower growth rates, which has led to a decrease in their participation in the world economy. The favourable growth reported by the ASEAN has been possible due to a strategy oriented to international trade.

Regarding inflation rates, the 1990s were an inflationary period for both regions. From 2001 on, Latin America and the Caribbean and the ASEAN managed to reduce this index. However, the decrease recorded in the ASEAN was lower than that of Latin America and the Caribbean.

The evolution of FDI in the ASEAN and the integration mechanisms in Latin America and the Caribbean has reported a similar behaviour, which was favoured during the increase on the price of raw materials (2003-2008). When observing the sectoral composition of FDI in Latin America and the Caribbean in 2013, 38% goes to service sector (particularly in Central America and the Caribbean), 36% to the manufacture sector, and 26% to the primary sector (ECLAC, 2013). On the other hand, ASEAN reported, in the same year, 33% of their FDI flow for the manufacture sector,

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55% to the service sector, 9% to the primary sector, and 3% to other sectors (ASEAN Secretariat, 2014).

Regarding gross national savings as a proportion of the GDP, ASEAN has sustained higher levels than Latin America and the Caribbean. This result has allowed ASEAN to push forward its investments, utilizing more resources of its own. Meanwhile, Latin America and the Caribbean has been more dependent on external financing. That is why obtaining of resources through domestic savings is still a challenge for the region.

Regarding economic complexity, Hausmann and Hidalgo (2009) point out that it is determined by non-tradable capacities, whose diversity is the basis for the productivity of countries. Thus, economic complexity becomes a better predictor for economic growth, overcoming variables like education, quality of the institutions, or competitiveness. When studying the Economic Complexity Index (ECI), it reveals that 97% of countries in Latin America and the Caribbean and 70% of ASEAN countries have low to medium levels of complexity (between -1 and 0.5). This means scarce accumulation of productive capacities and lower per capita income levels than those countries with higher levels of complexity.

In another section of this research, a study on the technological composition of the exports and imports of the mechanisms is conducted. The study was carried out based on the methodology developed by the UNCTAD to classify products according to their technological intensity. This methodology classifies goods into six types: high technological intensity goods, medium technological intensity goods, low technological intensity goods, natural-resource intensive manufacture, mineral fuels, and non-fuel primary goods.

The results show that Latin America and the Caribbean has focused on exports of raw materials, specially foodstuff and oil. On the other hand, ASEAN has made efforts to modify its exports structure from low and medium intensity goods to high technological sophistication goods, thus obtaining satisfactory results for the mechanism. In spite of that, integration mechanisms in Latin America and the Caribbean, such as SICA and PA, show some changes in their exports structure. In the case of SICA, it has established centres for the production of high technology goods. On the other hand, the Pacific Alliance economies show a more open process for attracting FDI.

Chapter II contains a study on the existing economic relations between the integration mechanisms of both regions, detailing the institutional framework in effect in those countries. After that, trade flows are analysed, considering the magnitude and technological sophistication of exports and imports. Lastly, an analysis is made of FDI flows from the ASEAN to Latin America and the Caribbean, in order to know their size and identify existent links.

In examining the current status of economic relations between the regions, it can be seen that there only Free Trade Agreements (FTAs) between countries; of the 33 Latin American and Caribbean countries, only four (Chile, Costa Rica, Panama, and Peru) have signed trade agreements with ASEAN countries (specifically with Brunei, Malaysia, Singapore, Thailand, and Vietnam).

When analysing trade flows between the regions, one can note that the progress has been slow. For Latin American and the Caribbean, trade with the ASEAN in 2012 accounts for almost 3% of their exports, and around 3.5% of their total imports. When studying trade from the ASEAN point of view, there are similar proportions respect to total: 2.8% of imports, and 3.2% of exports.

According to disaggregated data for integration mechanisms, MERCOSUR exports the largest volume of goods to the ASEAN, despite that there are currently no FTA between these

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mechanisms. Meanwhile, CARICOM reported a significant increase in exports to the ASEAN in 2007. The reason for that was the increase in exports of mineral fuels. Regarding imports, the Pacific Alliance is the main recipient of goods from the ASEAN. Meanwhile, SICA increased significantly its imports from the ASEAN from 2009 on.

The endowment of productive factors of Latin America and the Caribbean highlights the comparative advantages of the region in primary activities. That is why, in 2012, primary goods (fuels and non-fuels) represented 75% of exports from this region to the ASEAN.

In turn, imports in Latin America and the Caribbean from the ASEAN were mainly composed of high and medium technology goods. As a whole, these goods represented 71% of what was imported in 2012.

FDI flows from the ASEAN to Latin America and the Caribbean have not been significant compared to those destined to other regions. From the total FDI carried out by the ASEAN in 2009, only 0.6% was destined to Latin America. That figure increased to 1% in 2013. It can be seen that Singapore is the ASEAN country with the greatest FDI flows to Latin America and the Caribbean, representing around 69% of the total for 2013, followed by Thailand with 17%. On the other hand, Mexico and Brazil have been the greatest recipients of FDI from the ASEAN, with 40% and 44% of the total, respectively.

Lastly, the conclusions show the main findings of the investigation, identifying the possible complementary areas that could allow for deepening and strengthening the economic relations between Latin America and the Caribbean and the ASEAN.

The analysis shows opportunities that should be used to strengthen the economic relations between both regions. One of the areas of action in which there are pending tasks is expanding, deepening and speeding up the signing of agreements, in order to provide a strong institutional framework to make strides towards greater coordination and complementarity.

Reinforcing cooperation, trade links and investment might contribute to improve the economic performance of both regions.

In the area of infrastructure and logistics, the ASEAN has had successful experiences that could be a model for Latin America and the Caribbean, given the fact that some countries of the region are lagging behind in this regard.

Moreover, while the ASEAN has made progress in generating productive chains, both regions show potential to increase their participation in global value chains, and in the development of intra-industrial trade. This process could make technology transfer easier, and also promote the necessary investments in order to reach a successful productive transformation.



## **INTRODUCTION**

The economic relations between Latin America and the Caribbean and the Association of Southeast Asian Nations (ASEAN) have not been significant compared to the economic relations with other regions. In 1995, only 1.7% of exports from Latin America and the Caribbean were directed to ASEAN countries. This figure increased to 3% in 2013.

The ASEAN has been characterized by a favourable economic performance. It has been possible through a growth strategy oriented towards international trade. This has resulted in an average annual expansion of 6% in its GDP since 2001, measured in terms of Purchasing Power Parity (PPP), and a share of 6% in the world GDP (measured in PPP) by 2013. On their part, Latin America and the Caribbean represented 9% of world GDP and showed an average annual growth of 4% during the period 1990-2013.

Regarding trade flows, ASEAN and Latin America and the Caribbean show similar participation rates in the global trade. However, the composition of their export baskets show great differences; in the case of the ASEAN, high-tech goods are the highlight. On the other hand, Latin America and the Caribbean has been known for its exports of primary goods.

In view of such scenario, this study deals with the structural characteristics of both regions. The purpose is to identify similarities and differences in order to pinpoint potentials for trade and biregional cooperation. In order to do so, a group of macroeconomic variables are analyzed, making emphasis on the dynamics of investments and the technological composition of imports and exports.

The study focuses the analysis on the following integration mechanisms: the Pacific Alliance (PA), the Common Market of the South (MERCOSUR), the Central American Integration System (SICA), the Andean Community (CAN), the Caribbean Community (CARICOM), and the Association of Southeast Nations (ASEAN). This vision aims at generating an analytical framework intended to identify the potentials for greater cooperation between those integration mechanisms.

The period of study goes from 1990 to 2013, due to data availability. The studied integration mechanisms include, during the whole period, member countries up to 2013. This does not include the year of entry, nor the date of the conformation of the mechanism. Venezuela is an exception, since it left the CAN in 2011 and formally entered MERCOSUR in 2012.

This document is divided into two chapters and the conclusions. The first chapter describes the economic performance of the ASEAN and the integration mechanisms in Latin America and the Caribbean, highlighting the performance of the main macroeconomic indicators. The second chapter deals with the economic relations between Latin America and the Caribbean and the ASEAN, dividing the issue into two action axes. Firstly, trade relations are analyzed, classifying them according to their technological intensity. Secondly, foreign direct investment flows between the two regions are assessed. Finally, the conclusions show the main findings of the investigation.

The first chapter describes the participation of the ASEAN and the integration mechanisms of Latin America and the Caribbean within the world economy. In order to do so, the size of the economy is studied, as well as the size of trade flows within the mechanisms, and also the evolution of their macroeconomic performance. Subsequently, the behaviour of investment is studied. To achieve this, the investment in machinery and equipment is analyzed, as well as domestic savings and

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Foreign Direct Investment flows (FDI) in each mechanism. Lastly, the complexity and the technological sophistication in trade flows within integration mechanisms are studied.

Chapter II contemplates the study of existing economic relations between the integration mechanisms of both regions, as well as the institutions in effect in those countries. After that, trade flows are studied, considering the magnitude and technological sophistication of exports and imports. Lastly, FDI flows from the ASEAN to Latin America and the Caribbean are analyzed, in order to know their size and identify existing bonds.

Finally, conclusions show the main findings of the investigation, identifying the possible complementary areas that could allow for deepening and strengthening the economic relations between Latin America and the Caribbean and the ASEAN.



## METHODOLOGICAL ASPECTS

This document analyzes economic relations between the ASEAN and Latin America and the Caribbean. Two fundamental aspects are considered: trade and investment. The period under study is 1990-2013, being the data of annual frequency and taking into account the availability of data to all countries in the regions.

The study focuses the analysis on the following integration mechanisms: the Pacific Alliance (PA), the Common Market of the South (MERCOSUR), the Central American Integration System (SICA), the Andean Community (CAN), the Caribbean Community (CARICOM), and the Association of Southeast Asian Nations (ASEAN). This vision aims at generating an analytical framework intended to identify the potentials for greater cooperation between the integration mechanisms.

The studied integration mechanisms include, during the whole period of study, member countries up to 2013. This does not include the year of entry, nor the date of conformation of the mechanism. Venezuela is an exception, since it left the CAN in 2011 and formally entered MERCOSUR in 2012.

Thus, the member countries of the mechanisms are:

- PA: Chile, Colombia, Mexico and Peru.
- ASEAN: Brunei, Cambodia, Philippines, Indonesia, Laos, Malaysia, Myanmar, Singapore, Thailand and Vietnam.
- CAN: Bolivia, Colombia, Ecuador, Peru and Venezuela (1990-2011)
- CARICOM: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago.
- MERCOSUR: Argentina, Brazil, Paraguay, Uruguay and Venezuela (since 2012)
- SICA: Belize, Costa Rica, Cuba,<sup>1</sup> El Salvador, Guatemala, Honduras, Nicaragua, Panama and Dominican Republic.

The values representing the performance of the mechanisms were constructed by using statistical techniques of assessed averages. That is to say, a criterion such as the economic size of each member country is taken. The data about imports and exports of goods were extracted from Hausmann et al. "The Atlas of Economic Complexity" (2011) through the Web site <https://atlas.media.mit.edu/es/>, consulted on 2 July 2015. Data are classified according to the Harmonized System (HS), with a four-digit disaggregation. HS is a standardized international system of names and numbers for classifying traded products.

The division according to technological degree of imports and exports corresponds to a categorization of goods conducted by the United Nations Conference on Trade and Development (UNCTAD). This new classification system divides the products by technological capacity and contents, thus creating equivalences with the four-digit HS classification. Said classification was consulted on UNCTAD's Web site on 3 July 2015. The paper by Sudip Ranjan Basu entitled "Restructuring trade policy in developing countries: Does technological intensity of exports affect per capita GDP?" describes this new classification system of UNCTAD, and it is about to be published by this agency.

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<sup>1</sup> When indicated, SICA will include Cuba. This is due to data availability and the need to analyze all SELA member countries.

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Based on the methodology developed by the UNCTAD to classify products according to their technological intensity, six divisions were used: high technological intensity goods, medium technological intensity goods, low technological intensity goods, natural-resource intensive manufactures, mineral fuels, and non-fuel primary goods. That is to say, the division “non-classified goods” is not taken into account, due to the fact that they are not considered to be relevant for the study, and also its percentage contribution is not significant.

It is noteworthy that in those charts considering Latin America and the Caribbean through their mechanisms, Belize, Colombia, and Peru are counted twice, due to the fact that these countries participate in two mechanisms at the same time. Belize is part of both SICA and CARICOM, and Colombia and Peru are members of both the CAN and the PA.

## **I. ECONOMIC DESCRIPTION OF INTEGRATION MECHANISMS**

This chapter describes the economic performance in terms of size of the economy and magnitude of trade flows, both in the ASEAN and the Latin American and Caribbean integration mechanisms. Also, the changes in the macroeconomic context of those mechanisms are studied. This review is carried out in order to provide a reference framework for understanding economic relations between the regions under study.

Firstly, a group of selected macroeconomic aspects are studied. Starting with the evolution of the participation of the integration mechanisms in the world GDP and the differences between growth rates of per capita GDP in those mechanisms. This allows for understanding the economic dimension of the regions and their performance in comparative terms. After that, there is an analysis of inflation, public debt, and the participation of the integration mechanisms in world trade flows.

Secondly, the behaviour of investments in the ASEAN is studied, as well as in the integration mechanisms of Latin America and the Caribbean, through three indicators: investments in machinery and equipment, as a sign of investment in the increase of productive capacities; FDI flows for knowing their magnitude and dynamics; and gross national savings, in order to determine the capacity of integration mechanisms for financing their own investments.

Finally, the correlation between economic complexity (according to Hausmann and Hidalgo [2009]) and the per capita income is presented. This is done in order to relate this to the technological composition of exports and imports of Latin America and the Caribbean and the ASEAN, according to the UNCTAD classification.

Understanding the complexity implied in the study of economic relations, it is pertinent to analyze the behaviour of the main macroeconomic indicators, due to the fact that countries and integration mechanisms are affected by different external circumstances, and also have economic characteristics that cannot be ignored during the analysis. Likewise, the study of the macroeconomic context tries to simplify all the elements that compose the economic analysis. This makes it easier to explain the behaviour of different variables.

The study of the dynamics of investments is an element that contributes to the comprehension of economic bonds among the countries. In the same way, investments represents a dynamic factor that strengthens production and brings along socioeconomic benefits such as growth in income level, knowledge dissemination, among others (Romer, 1986; Lucas, 1988; Solow, 1956). The incidence of economic policies and investment rates in economic growth have been widely studied. The work of Romer (1986), Lucas (1988), and Barro (1989) laid the foundations for the analysis of the mechanism through which economic policies and investments, in human and physical capital, can affect national product and growth rate.

In the last 20 years, there have been divergent visions regarding the importance of the exports structure for the economic development (Lall, 2000b; Hausmann & Hidalgo, 2009). According to Hausmann and Hidalgo (2009), the productivity of country lies in the diversity of its non-tradable capacities, and also in the economic complexity of those capacities. Additionally, since a country will only be able to produce goods it has the productive capacities for, a review of its technological composition allows for inferring said capacities. The development of the productive capacities of a country is a slow and increasingly learning process, which provides the exporting structure of a nation with certain inflexibility. This turns out to be decisive for its economic complexity.

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### 1. Macroeconomic environment for the economic relations between Latin America and the Caribbean and the ASEAN

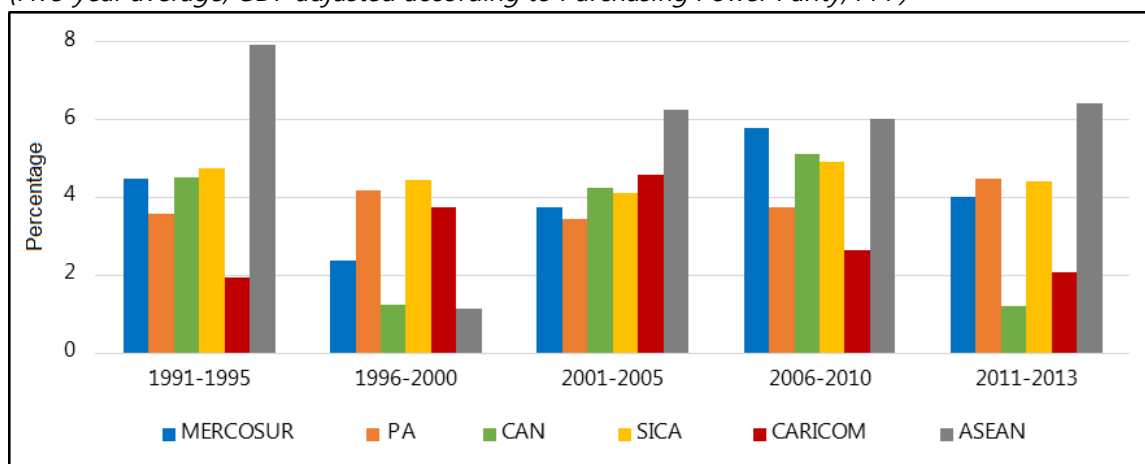
This section studies the economic growth for identifying differences in the rates of growth among mechanisms, and also the existing gaps between them. Later on, the participation of integration mechanisms in world economy is analyzed. This is done through the contribution of their GDP in the world economy.

After that, the participation in world trade flows is compared to inflation dispersion and public debt of the integration mechanisms in the study. This section gives evidence of the relevance of each integration mechanism in the world economy, and its performance based on a group of selected macroeconomic variables from 1990 to 2013. Additionally, in the indicators, trends, turning points, and impact on world economy are identified.

#### CHART 1

##### Per capita GDP growth rate by mechanism, 1990-2013

(Five-year average, GDP adjusted according to Purchasing Power Parity, PPP)



Source: Prepared by the authors, based on data from the International Monetary Fund, IMF.

When observing the average five-year variation rates of per capita GDP, it can be noted that the ASEAN is the integration mechanism with the greatest economic growth during the period under study, except during the period 1996-2000. That decrease was the result of the Asian crisis of 1998. That average decline represented 15.8%. Malaysia, Indonesia, and Thailand were the most affected countries during the crisis, since they had the largest economic growth. However, from 2001 on, the ASEAN retook the path of economic growth, maintaining average five-year rates of around 6%.

In general terms, between 2006 and 2010, Latin America and the Caribbean experienced the greatest economic growth per capita, with an average of 4.7% in spite of the contraction of 2009 because of the world financial crisis. Such growth was the result of the rise in the prices of raw materials, which started in 2003. MERCOSUR was the integration mechanism in Latin America and the Caribbean with the greatest growth per capita during this five-year period, with an average of 5.8%; it was followed by CAN (5.1%) and SICA (5.1%). The PA showed a moderate growth of 3.7%, while CARICOM was the only integration mechanism with deceleration in per capita economic growth compared to the previous five years, with 2.6%.

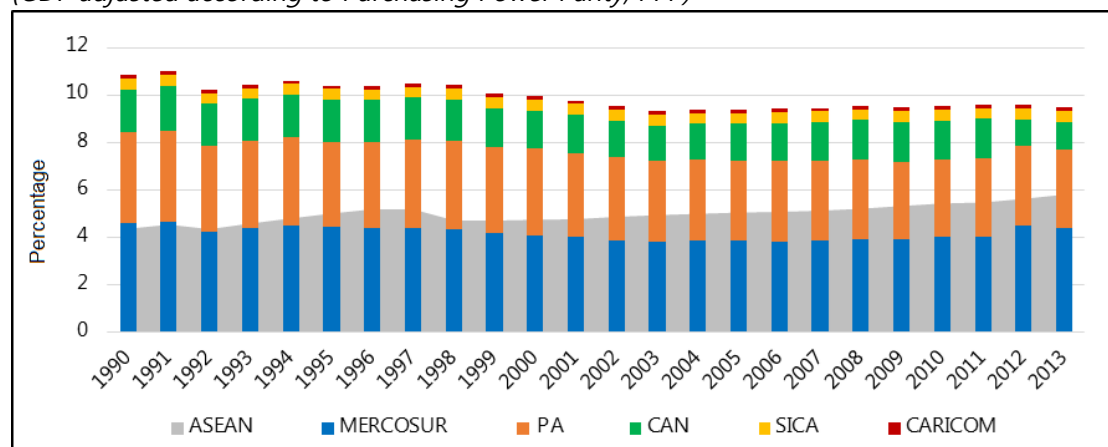
However, during the 2011-2013 period, the region decelerated the growth rate per capita, with 3.9% as a consequence of the fall in raw materials prices. This shows the vulnerability of Latin America and the Caribbean to fluctuations in raw material prices. This happens because of the predominance of raw materials in the region's productive structure. However, PA was the only integration mechanism that achieved an increase in its economic growth rate during that period.

If we consider per capita GDP as an approximate measure of life quality of residents in a determined country or region, it can be said that, from 2001 on, the ASEAN has been more successful in average than Latin America and the Caribbean in constantly improving living standards of its inhabitants.

**CHART 2**

**Share of mechanisms in the world economy, 1990-2013**

*(GDP adjusted according to Purchasing Power Parity, PPP)*



Source: Prepared by the authors, based on data from the International Monetary Fund, IMF.

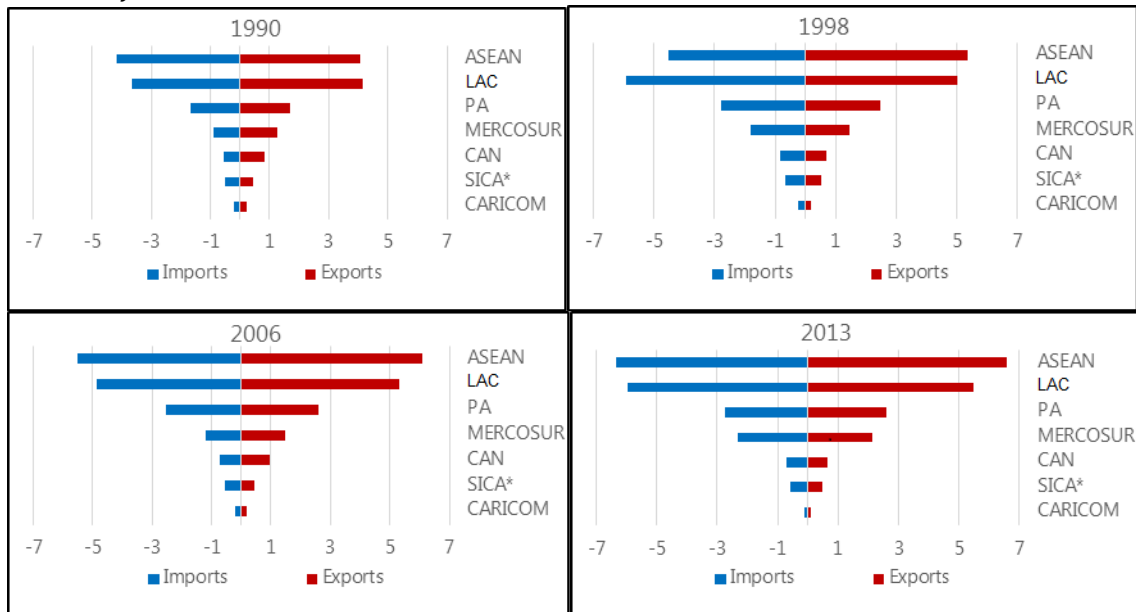
Chart 2 shows that the ASEAN has increased its share in world GDP, in spite of the decrease of 1998. However, from 2001 on, the ASEAN continues to grow constantly, until it accounted for approximately 6% of world production in 2013.

Meanwhile, the participation of Latin America and the Caribbean in the world economy decreased from 1998 on. It managed to stabilize in 2003, with 8.5%. It is noteworthy that during the rise in the prices of raw materials between 2003 and 2008, the participation of Latin America and the Caribbean in the world economy held steady, which contradicted expectations, given the productive structure focused on primary goods. That shows, on the one hand, the difficulties of the region in improving its position in the world economy, and on the other hand, that high income during that period did not mean an increase in the production of goods and services.

When observing the integration mechanisms in Latin America and the Caribbean, it is evident that, apart from the CAN, the mechanism that experienced the greatest reduction in its share in world GDP was CARICOM, with a decrease of 31% (from 0.17 to 0.12%). On the other hand, SICA was the only mechanism in the region that increased its participation, from 0.44 to 0.48% (which represents a 10% increase).

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**CHART 3**  
**Share of mechanisms in world trade flows**  
*(Selected years)*



Source: Prepared by the authors, based on data from the United Nations Conference on Trade and Development, UNCTAD. (\*) Cuba is included in SICA.

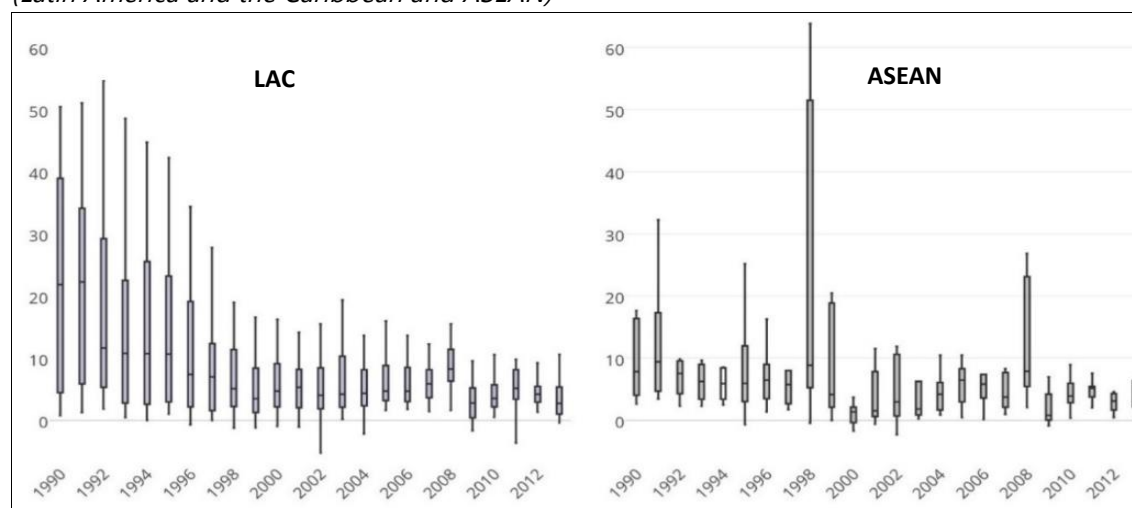
Regarding the participation of integration mechanisms in world trade flows, it can be seen that in 1990 the magnitude of international trade of the ASEAN and Latin America and the Caribbean were alike. However, in the following years, ASEAN participation surpassed that of Latin America and the Caribbean. This does not include 1998 and 1999, maybe because of the Asian crisis and its impact on external trade in the ASEAN.

During the period of study, both regions increased its share in world trade. While imports increased similarly, the growth of exports in the ASEAN was stronger than that of Latin America and the Caribbean. The behaviour of the share of Latin America and the Caribbean in world trade is due to the persistence of commercial barriers and the differences in productivity, given the fact that the region keeps exporting primary products, mainly. In turn, the growth of the participation of exports from the ASEAN has been determined by the high dynamism of manufacture exports, thus achieving improvements in productivity, which allowed them for configuring value chains, strengthening intra-industrial trade (RED, 2005).

Among integration mechanisms, the PA and MERCOSUR are highlights. These organizations have the greatest participation in world trade among Latin American and Caribbean mechanisms. In the long run, they gathered an average of 77% of imports and exports of goods and services of the region. On the other hand, CARICOM was the only mechanism whose share in world trade flows decreased consistently during the period under study.

It is noteworthy that Mexico and Brazil – which belong to the PA and MERCOSUR, respectively – are the countries with greater relative economic size. They add up an average of 50% of trade in Latin America and the Caribbean. In ASEAN, the countries with the largest share of trade are Singapore, Thailand and Malaysia, with an average 75% during the period under study.

**CHART 4**  
**Median and dispersion of inflation, 1990-2013**  
*(Latin America and the Caribbean and ASEAN)*



*Source: Prepared by the authors, based on data from the United Nations Conference on Trade and Development, UNCTAD.*

The adoption of inflationary goals during the last two decades is considered the most significant revolution within the framework of currency policy after the collapse of the Bretton Woods system (Amato and Gerlach, 2002). In Latin America and the Caribbean, those countries with inflationary goals were able to systematically reduce inflation rates and maintain low dispersion (Calderón and Schmidt-Hebbel, 2003). This is evident from 1998 on, when the most significant decrease in inflation (in terms of the median) and its dispersion was registered in Latin American and Caribbean countries.

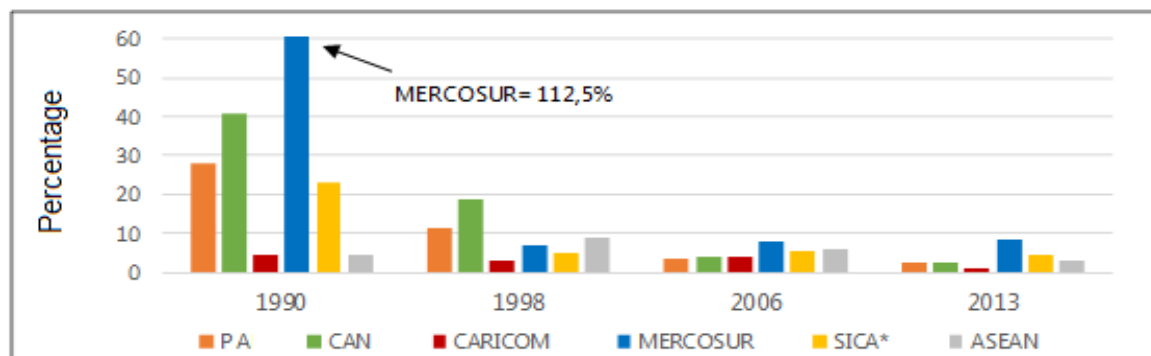
For Latin America and the Caribbean, the first half of the 1990s represented the stage with the greatest inflation during the period. From that point on, it has converged to low levels of inflation. During that period, Peru and Brazil were characterised for having a significantly higher inflation than the rest of the region. Peru had a variation of 7,482% in the level of prices in 1990, and Brazil reached 2,075% in 1994. On the other hand, during the 1990s, ASEAN did not show different behaviours in the inflation rates of its countries. Even the atypical greatest magnitude (Laos) reached 92% inflation in 1998. This was significantly lower than the atypical values in some countries in Latin America and the Caribbean during the same period.

Within the ASEAN, only Indonesia, the Philippines and Thailand have adopted inflationary goals into their currency policy (Poon and Lee, 2014). However, from 2001 on, the region managed to reduce the median of inflation, even though said reduction was lower than that experienced by Latin America and the Caribbean. The only years when inflation showed a significantly greater dispersion were 1998 and 2008, which coincided with the Asian finance crisis and the world financial crisis, respectively.

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## CHART 5 Median of inflation by mechanisms

(Selected years)



Source: Prepared by the authors, based on data from the United Nations Conference on Trade and Development, UNCTAD. (\*) Cuba is included in SICA.

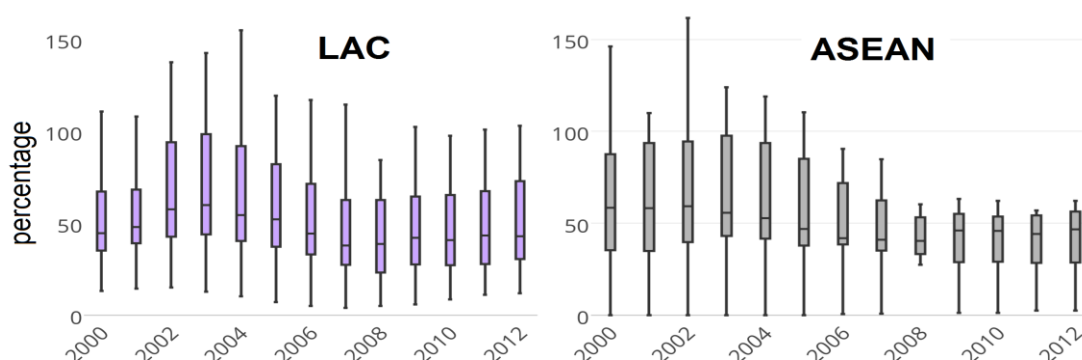
The disaggregated data by integration mechanisms confirms some conclusions drawn from the previous chart. On the one hand, the inclusion of inflationary goals within the monetary policy in Latin America and the Caribbean had positive results because it reduced the median of inflation in the mechanisms and also the dispersion among countries. Meanwhile, in the ASEAN the inflation median has decreased more slowly than in Latin America and the Caribbean.

In general terms, the 1990s was the decade with the highest inflation for Latin America than for the Caribbean, which has maintained almost the same level of prices with slight variations. Indeed, CARICOM manages to keep the lowest inflationary level among all studied mechanisms (including ASEAN). Meanwhile, MERCOSUR shows a higher inflation than the rest of mechanism (except for 1998), and it is responsible for a higher median of inflation in Latin America and the Caribbean during most of the period under study. Those divergences in the behaviour of integration mechanisms in Latin America and the Caribbean show the heterogeneity in the economic dynamics in the countries of the region.

Regarding the dispersion of the inflation level within mechanisms, the CAN presents the greatest differences among its countries, followed by the PA and MERCOSUR. Brazil and Peru show the most atypical values (see Annex N° 1).

## CHART 6 Public debt, 2000-2012

(Current dollars as percentage of GDP)



Source: Prepared by the authors, based on data from the International Monetary Fund, IMF.



Latin America has experienced significant changes in its the debt composition, reducing its external debt rate and extending payment maturity. Between 2003 and 2008, the region showed fiscal sustainability, thus decreasing Public Debt/GDP ratio from 60% to 40%. In Brazil, Chile, Mexico, Paraguay, Peru and Uruguay the decrease of that ratio was propelled by the contributions of primary surpluses and an accelerated growth in real GDP.

The rest of Latin America achieved the same result from a GDP growth higher than the long-term potential (with the exception of Bolivia) and the presence of real negative interest rates (Adler and Sosa, 2013). In 2009, after the world financial crisis, there was a slight increase in the Public Debt/GDP ratio in Latin America, stabilizing between 2010 and 2012. The decrease of external debt stopped as a consequence of the slowdown in real currency appreciation and the weakening of checking account balances (Adler and Sosa, 2013).

In turn, the Caribbean has faced structural fiscal problems that led to an important accumulation of debt in some of the countries between 1997 and 2004. Even though countries exporting raw materials had a decrease in their debt rate over GDP, from 77 to 62%, between 2003 and 2008, the rest of the countries registered slight changes or lower positions (Acevedo, Cebotari, and Turner-Jones, 2013). In 2012, public debt represented an average 71% of GDP for those countries, which is a significantly higher figure than that of the whole of Latin America (36%) and the ASEAN (46%) during the same period.

After the Asian financial crisis of 1998, ASEAN countries have shown a moderate fiscal consolidation, decreasing its Public Debt/GDP ratio from 58.3% to 40.3% between 2000 and 2008. However, from 2008-2010 on, an increase in this indicator has been seen, reaching 46% in 2012.

## **2. Investments in the subregional integration mechanisms**

This section studies the behaviour of investments in the ASEAN and in the Latin American and Caribbean integration mechanisms through three indicators: 1) Investments in machinery and equipment, which shows investments aimed at increasing productive capacities; 2) Foreign Direct Investment, which shows its magnitude and dynamics; 3) Gross savings, which show the capacity of integration mechanisms to finance their own investments.

The study of the dynamics of investments is an element that contributes to understanding the economic links among the countries. Similarly, investments represent a dynamic factor that strengthens production and brings along socioeconomic benefits, such as growth in income level and dissemination of knowledge, among others (Romer, 1986; Lucas, 1988; Solow, 1956).

Investments are financed through domestic savings and foreign savings, which enter as FDI or portfolio investments. Empirical studies about the relation between FDI and economic growth have produced mixed conclusions. However, in a stable economic context with investment policies that promote and direct investment flows towards those industries that generate greater added value, FDI unchains a technological spillover, favours the formation of human capital, and also creates a more competitive environment in businesses, spurring the development of enterprises (OECD, 2002; Lund, 2010). Likewise, empirical evidence shows the existing positive and solid relation between domestic savings rate and economic growth (Levine and Renelt, 1992; Mankiw, Romer, and Weil, 1992).

From the previous aspects, it is evident that larger investments flows mean more economic growth. However, global trends are moving towards policy frameworks that are more sophisticated. In

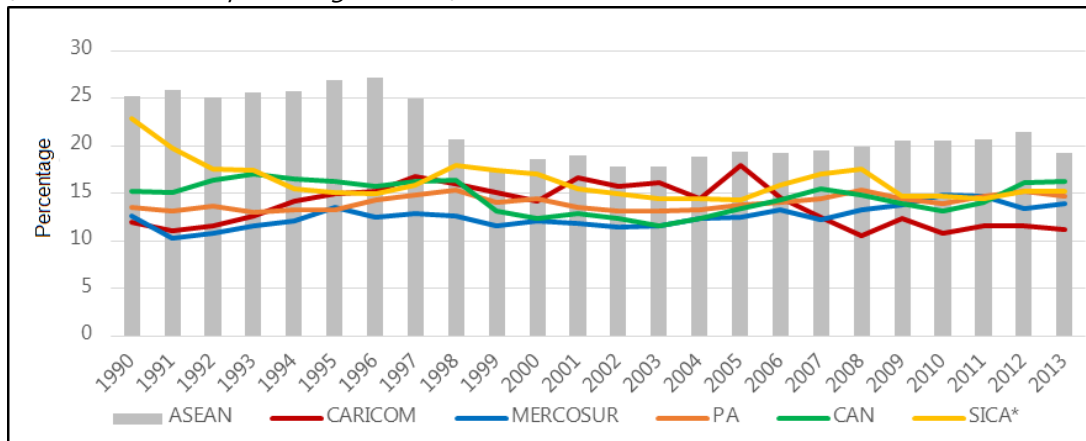
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those frameworks, the amount of flows is no longer so relevant, but also the type of investment, which means “quality” investments that contribute and are consistent with the economic development goals (UNCTAD, 2004, 2005), based on active and well-focused policies that could facilitate the appropriation and consolidation of benefits from investments.

### CHART 7

#### Investment in machinery and equipment, 1990-2013

(Current dollars as percentage of GDP)



Source: Prepared by the authors, based on data from the United Nations Conference on Trade and Development, UNCTAD. Note: The investment in machinery and equipment results from the subtraction of the component of construction of GDP from the gross fixed capital formation. (\*) Cuba is included in SICA.

The component machinery and equipment of the Gross Fixed Capital Formation (GFCF) has been constantly higher in the ASEAN, compared to that of the Latin American and Caribbean integration mechanisms. It is noteworthy that there is a similar behaviour among the Latin American and Caribbean integration mechanisms. However, CARICOM and SICA posted a significant fall in their levels of investment in machinery and equipment, from 2005 and 2008 on, respectively. Such drops are partially explained by the consequences of the international financial crisis in the United States, the main destination market of exports from these mechanisms (ECLAC, 2012).

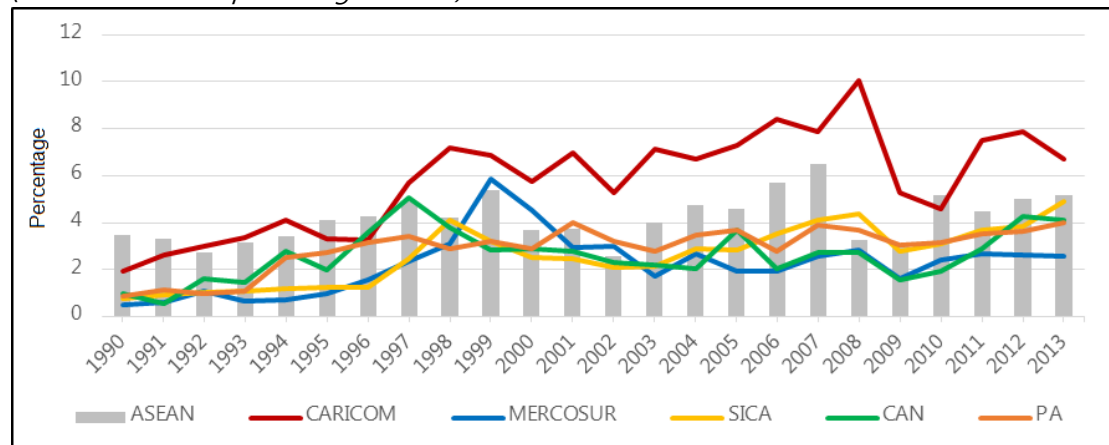
Variable levels of investment in Latin America and the Caribbean coincide with critical global and regional episodes, which indicates that the investment in machinery and equipment is sensitive to the internal and external financial conditions and also to the effectiveness in government actions to reduce the impact of external shock and take advantage of economic booms.

Between 2003 and 2008, an increase in investment levels in the region was registered, partly because of the increase in raw material prices, the expansion of internal consumption and local currencies appreciation. These factors cheapened prices in local currency of imported goods. All this leaves machinery and equipment as the most important component of domestic investment in 2010 in Latin America and the Caribbean; with a share of 55%, ahead of construction with 45% (Manuelito and Jiménez, 2014).

In turn, ASEAN has increased stability in machinery and equipment investments as GDP since 2003, with an average 20% between 2000 and 2013. However, it is a challenge for that region to reach levels of investments in machinery and equipment of the 1990s.

It is important to highlight that the information at hand does not allow for drawing conclusions about the quality of the investment in the studied integration mechanisms. Therefore, it is impossible to determine the impact of said investment on their growth or productivity.

**CHART 8**  
**Foreign Direct Investment flows received, 1990-2013**  
*(Current dollars as percentage of GDP)*



Source: Prepared by the authors, based on data from the United Nations Conference on Trade and Development, UNCTAD.

In general terms, the behaviour of FDI in the ASEAN and the integration mechanisms of Latin America and the Caribbean have had a similar trend, showing growth between 1990-1998, during the increase in raw material prices (2003-2008), and after the finance crisis of 2008. FDI flows in Latin America and the Caribbean represented 4.4% of GDP in 2013, while in the ASEAN they accounted for 5.2% during the same year.

Among the studied integration mechanisms, CARICOM is noteworthy with the greatest FDI rate in relation to GDP since 1997, only surpassed by the ASEAN in 2010. The capacity of CARICOM to attract significant FDI amounts is the result from a series of policies aimed at facilitating the mobilization of capitals to that region. According to ECLAC, "there are four types of policies: Active promotion of investments; improvement of the business environment; reduction of obstacles for foreign investors, and establishment of financial incentives" (ECLAC, 2015, page 13).

After the financial crisis of 2008, integration mechanisms in Latin America and the Caribbean recovered the previous FDI levels, some more quickly than others. This was due to the fact that 97% of the region's economies had adopted regulatory reforms that could improve conditions to do business and also made capital mobilization easier (Doing Business, 2014). An example of this was the creation of agencies in charge of promoting investments, or equivalent institutions.

In spite of the above, achievements regarding investment attraction are still insufficient for the region. Most of the investment promotion agencies have experienced changes in their institutional frameworks, or are currently under revision (Gligo, 2007). Therefore, it is a challenge for Latin America and the Caribbean to improve policies for the promotion of FDI in order to attract the presence of foreign companies, favour an adequate environment for business and promote innovation and improvement of productive capacities.

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The region could move forward to sophisticated FDI promotion policies, which focus their attention on the type of investments; that is to say, “quality” investments that contribute and are also consistent with the economic development goals of the countries (UNCTAD, 2005). Those new trends are oriented towards limiting offshoring processes for strategic activities that favour the capacity for innovation and creation of better quality jobs; for example, the manufacture of advanced materials, biotechnology and nanotechnology (Pisano and Shih, 2013).

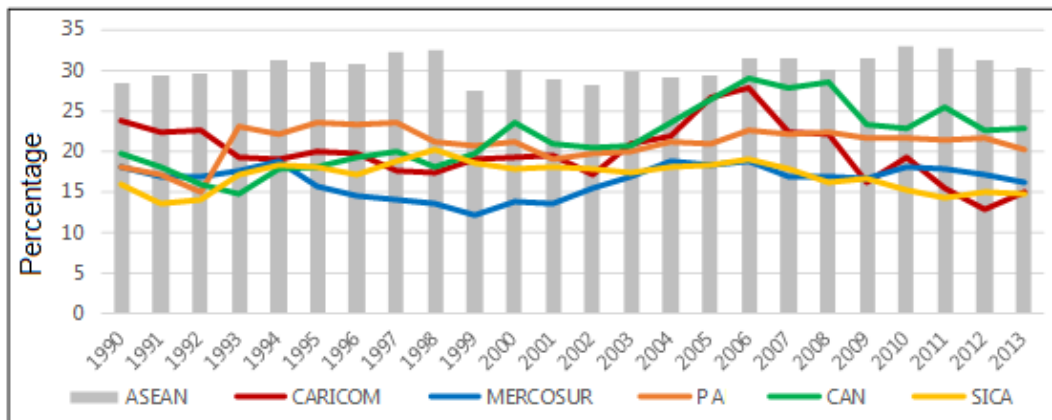
Countries promote technological innovation, particularly research and development, as part of their strategies for development. However, these policies have a direct impact on the countries’ capacity to attract investments; that is why it is advisable for them to be coordinated with investment attraction policies (Gligo, 2007).

In 2013, the sectoral composition of FDI in Latin America and the Caribbean was as follows: 38% services, mainly for Central America and the Caribbean; 36% manufacture, and 26% primary sector, especially South America (ECLAC, 2013). On the other hand, during the same year, ASEAN led 33% of its FDI flows to the manufacturing sector, 55% to services, 9% to the primary sector, and 3% to other sectors (ASEAN Secretariat, 2014). Similarities and differences in the composition of the sectoral sector of FDI between the ASEAN and Latin America and the Caribbean are a consequence of the productive structure and specialization of each one of the regions. These aspects will be considered in the next sections of this document.

### CHART 9

#### Gross national savings, 1990-2013

(Current dollars as percentage of GDP)



Source: Prepared by the authors, based on data from the International Monetary Fund, IMF.

Gross national savings represent the amount of available resources in the economy for conducting investments in the country or the rest of the world. Feldstein and Bacchetta (1991) pose that an increase in national savings has a significant effect at the level of internal investments. Likewise, empirical evidence has proved the existence of a positive and significant relation between savings rates and economic growth (Levine and Renelt, 1992; Mankiw, Romer, and Weil, 1992).

During the period under study, gross national savings as a proportion of GDP in the ASEAN has been consistently higher than those of Latin American and Caribbean integration mechanisms, standing at around 30%. The contrast between the national savings rate and the FDI received by the ASEAN indicates that the region promotes investments largely by using national savings. This is the result of “various measures taken since the Asian crisis in order to improve regional financial

cooperation, and also trade opening, which have contributed to increasing the importance of financial markets" (Kim, Kim, and Choi, 2014, page 10).

On average, Latin America and the Caribbean has been inefficient in maintaining the national savings levels reached during 2003 to 2008, which were the result from the increases in raw material prices and in income from remittances to emigrants, mainly to Central America and the Caribbean, which generated profits from the improved terms of trade. The drop in the levels of savings makes financing of investments vulnerable, in view of the conditions to obtain external resources, which depends on the possibilities of countries to enter international markets (Manuelito and Jiménez, 2014).

From 2008 on, there has been a sharp decline in the level of savings of CARICOM and the CAN. CARICOM reached proportions lower than those presented in the 1990s; and the CAN went from 29% in 2008 to 23% in 2013. For their part, the rest of the integration mechanisms in Latin America and the Caribbean showed a stagnation from 2009 on.

### **3. Technological complexity and degree of trade in the integration mechanisms**

Over the last 20 years, there have been divergent visions regarding the importance of exports structure for the economic development (Lall, 2000b; Hausmann & Hidalgo, 2009). According to Hausmann and Hidalgo (2009), the productivity of a country lies in the diversity of its non-tradable capacities, and the economic complexity is determined by said capacities. This makes economic complexity a better predictor of economic growth than variables such as education, institutional quality or competitiveness. Additionally, since a country can only produce goods it has the required productive capacities for, a revision of the exports structure will allow for inferring said capacities.

The development of the productive capacities of a country is a slow and increasingly learning process, which provides for certain inflexibility of the exporting structure of a nation. This turns out to be decisive for its economic complexity. The following sections show the correlation between the economic complexity (according to Hausmann and Hidalgo [2009]) and the level of per capita income.

Next, the technological composition of exports and imports in Latin America and the Caribbean and the ASEAN is shown. This goes according to the classification developed by the UNCTAD. The technological composition extends to integration mechanisms in Latin America and the Caribbean. The analysis of that information will be useful for determining the correspondence between what was seen in terms of economic complexity and the technological sophistication of trade flows.

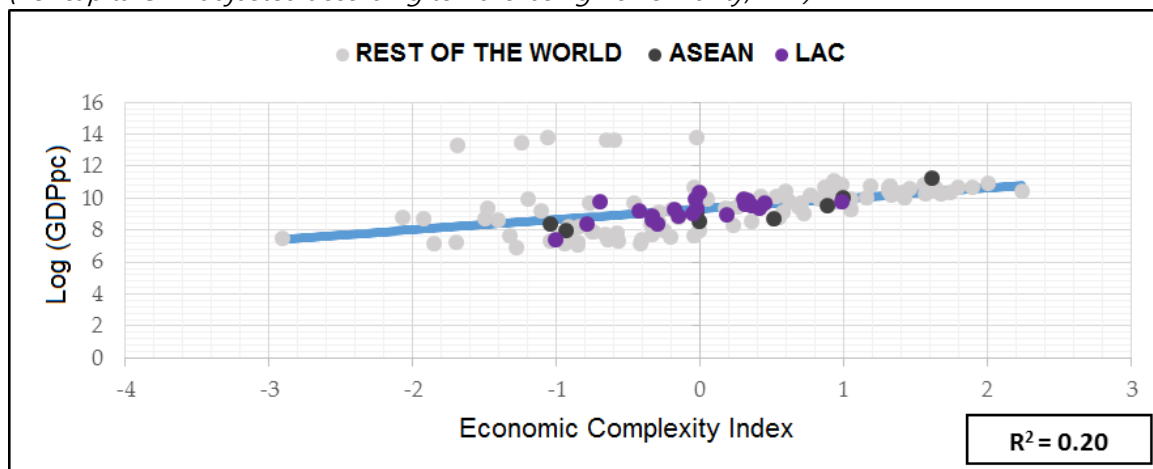
Based on the UNCTAD methodology for classifying products according to technological intensity, six categories were used: High technological intensity goods, medium technological intensity goods, low technological intensity goods, natural-resource intensive manufacture, mineral fuels, and non-fuel primary goods.

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### CHART 10

#### Correlation between the Economic Complexity Index and the per capita GDP

(Per capita GDP adjusted according to Purchasing Power Parity, PPP)



Source: Prepared by the authors, based on data from R. Hausmann, C.A. Hidalgo, S. Bustos, M. Coscia, S. Chung, J. Jimenez, A. Simoes, M. Yildirim. *The Atlas of Economic Complexity*. Puritan Press. Cambridge MA. (2011).

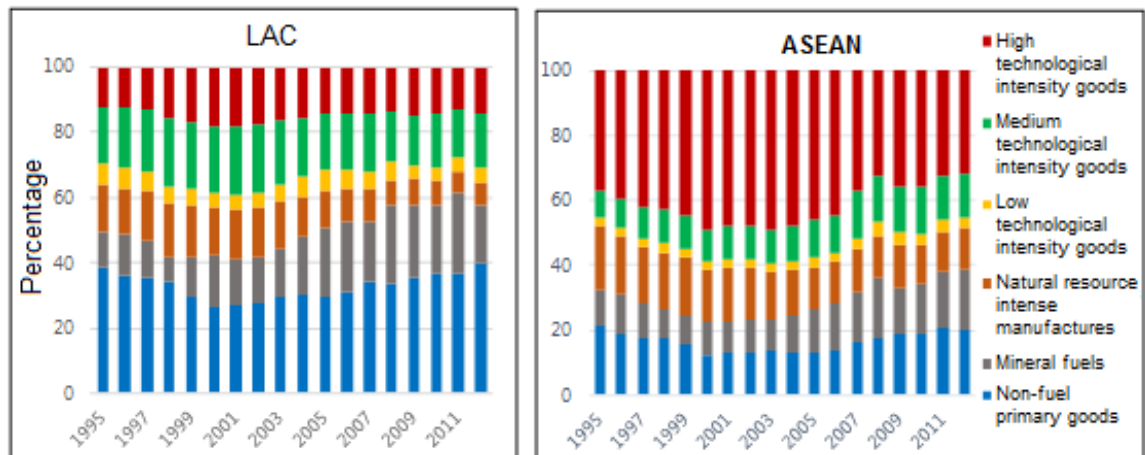
The Economic Complexity Index (ECI) represents the amount of knowledge present in the productive structure of a country, and it is a better predictor of economic growth than other variables such as education and quality of institutions (Hidalgo and Hausmann, 2009). According to these authors, the productivity of a country lies in the diversity of its non-tradable capabilities, and economic complexity is a reflection of the accumulation of said capacities. The gap between income levels of the country can be explained by the differences in their economic complexity. For that reason, from the obtained data, the ECI has a positive and significant relation to the per capita GDP.

Confirming the previous statement, and using the available information for 141 countries in 2012, the correlation between the ECI and per capita GDP is presented herein. Generally, it can be inferred that there is a positive relation between the ECI and the per capita magnitude for that year. Likewise, the ratio of variation of per capita GDP, which can be explained by the ECI variations, represents 20%.

Chart 10 reveals that 97% of countries in Latin America and the Caribbean and 70% in the ASEAN have low or medium complexity levels (between -1 and 0.5). This means a scarce accumulation of productive capacities in those countries. Consequently, the limited accumulation of productive capacities chains these countries to the extraction of raw materials or to producing low technological intensity products (regarding production of goods).

Nevertheless, there are some exceptions in both blocs. Regarding Latin America and the Caribbean, the only country with a significant economic complexity is Mexico. This country is on the 25th place, widely surpassing the second country in the region, Colombia, which ranked 50th in the ECI for 2012. In turn, among ASEAN countries, Singapore, Malaysia, and Thailand registered favourable positions, ranking 10th, 24th and 30th, respectively. In spite of a few cases, in general terms, there are no significant differences between the two regions regarding economic complexity (See the classification for the remaining countries in Annex 2).

**CHART 11**  
**Technological composition of exported goods, 1995-2012**  
*(Current dollars as percentage of total exports)*



Source: Prepared by the authors, based on data from R. Hausmann et al. (2011) *The Atlas of Economic Complexity*. Puritan Press. Cambridge MA.; and United Nations Conference on Trade and Development, UNCTAD.

During the period under study, the technological composition of the exports of goods in Latin America and the Caribbean has been significantly different than that of the ASEAN. However, both regions present similar trends in some categories. Latin America and the Caribbean is a highlight because it mostly exports primary goods (fuel and non-fuel). In 2002, such goods represented 41% of total exports in the region. From 2003 to 2008, with the increase in raw material prices, these export increased their share, stabilizing at around 60% between 2009 and 2012.

The concentration of exports in primary goods in Latin America and the Caribbean shows that productive diversification is still in a fledgling stage (CAF, 2006), which makes countries in the region vulnerable to external shocks. This is negative for productivity and competitiveness of the economies. Some countries have implemented counter-cyclical policies to mitigate the negative effects of external shocks. For example, Costa Rica has diversified its productive structure of exports through promotion of innovation. However, this has not been the standard in the region (ECLAC, 2014; Sánchez and Sauma, 2011).

After understanding the benefits brought about by making the productive structure more complex, potential products were identified with which Latin America and the Caribbean could propel productive transformation. They would be: Automotive vehicles, oil refining, computers, integrated circuits and phones. In 2012, those products ranked among the 20 most relatively relevant goods in total exports in the region, accumulating 13%. Increasing production of these products would imply improvements for the region in terms of its productive structure, since they generate more added value to the economy.

In turn, exports of goods in ASEAN have been characterized for being medium and high technological intensity exports, which is partly due to the increases in productive capacities (CAF, 2005). This has allowed the region to become inserted into value chains, which favours its economic diversification process. However, it is a challenge for the ASEAN, as well as for Latin America and the Caribbean, to decrease the share of primary goods (fuels and non-fuels) in total exports, since they went from 20% of the total in 2003 to 40% in 2012. Such increase can be explained by the heterogeneity in the productive structures of ASEAN countries. This is because

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the mechanism includes exporters of goods with high technological intensity and others specialized in exporting primary goods, whose exports increased their share, due to the increase in their prices.

Both ASEAN and Latin America and the Caribbean have reduced their manufacture of natural-resource intensive goods. Likewise, it is noteworthy that exports of goods with high and medium technological intensity from ASEAN accounted for 45% of the total in 2012, while in Latin America and the Caribbean such goods reached 31% the same year.

It should be pointed out that primary goods and natural-resource manufactures are associated to intensive use of workforce and are generally easy to process (e.g. food, leather). There are industries that use extensively capital, technological abilities, and they take care of scale economies; for example, oil refining or processed foods. However, competitive advantages in these goods come generally from the local availability of natural resources, and they do not imply improvements in economic complexity, since they do not promote the accumulation of productive capacities, and they are activities generating few connections among industries (Lall, 2000; Hausmann et al., 2011).

In order to reach its productive transformation, Latin America and the Caribbean could rely on its comparative advantages and on the accumulation of productive capacities, thus spurring increases in productivity and making it easier to become inserted into global added value chains, which would enable it to consolidate gains in terms of competitiveness in the long run.

### CHART 12

#### Technological composition of imported goods, 1995-2012

(Current dollars as percentage of total imports)



Source: Prepared by the authors, based on data from R. Hausmann et al. (2011) *The Atlas of Economic Complexity*. Puritan Press. Cambridge MA.; and United Nations Conference on Trade and Development, UNCTAD.

The technological composition of imports of goods from the ASEAN and Latin America and the Caribbean were similar until 2002. For the ASEAN, high technological intensity goods (41%) are more relevant, while medium technological intensity goods were the main category in Latin America and the Caribbean (30%). However, from 2003 on, that behaviour changed, as the share of fuel primary goods increased in imports from both regions.



Such situation modified the structure of technological composition of imports from ASEAN, because fuel primary goods were second in importance in 2012, displacing medium technological intensity goods. In Latin America and the Caribbean, the technological composition of imports remained generally unchanged; medium and high intensity goods were the most relevant.

Understanding that the structure of technological composition of imports was in part determined by exports, it can be said that the ASEAN imports high technology goods as inputs for manufacturing other goods to be destined for export. This is related to the participation of ASEAN countries in value chains. On the contrary, in Latin America and the Caribbean, high technology goods are imported mostly for final users.

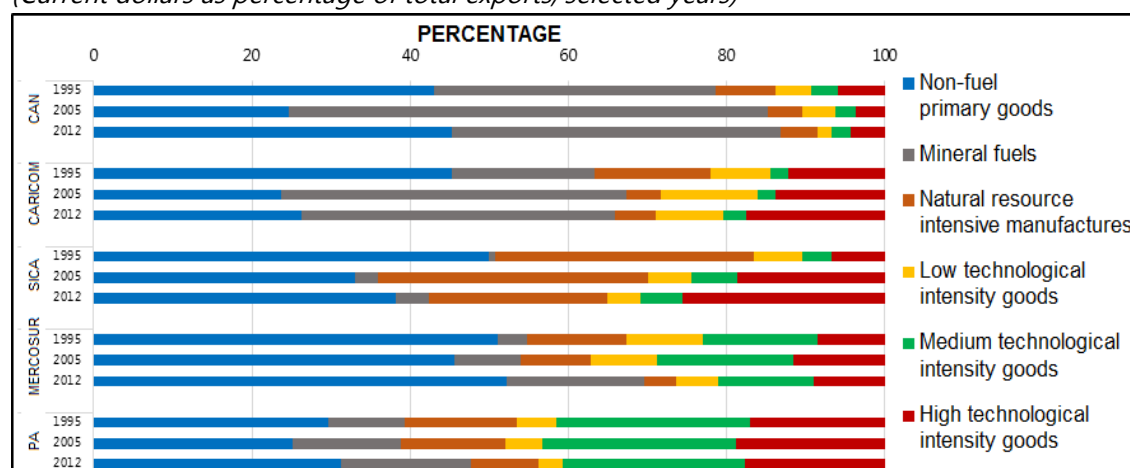
The insertion of Latin America and the Caribbean into global value chains has been somewhat unsuccessful. One highlight is the *maquila* industry in Central America and the Caribbean, which is mainly oriented to the US market. Noteworthy, the *maquila* industry depends on the imports of inputs and intermediate goods, and its contribution to added value and productive chaining is low. However, relatively larger economies – such as Brazil, Mexico, and Argentina – do have the productive capacity to produce high-tech sophisticated goods, which represents a potential for the active participation of the region in global value chains (Solimano, 2013).

For their part, ASEAN economies initiated their insertion into global value chains from 1960 on, with Singapore as pioneer country. Then, in 1980, such trend expanded to Vietnam, Indonesia and Malaysia (Solimano, 2013). This has contributed to make the exports structure of ASEAN more complex, by producing high-tech goods, with specialization in electrical machinery, transportation, and precision machinery (Dhar, 2011).

### CHART 13

#### LAC: Technological composition of exports of goods from integration mechanisms

(Current dollars as percentage of total exports, selected years)



Source: Prepared by the authors, based on data from R. Hausmann et al. (2011) *The Atlas of Economic Complexity*. Puritan Press. Cambridge MA.; and United Nations Conference on Trade and Development, UNCTAD. (\*) Cuba is included in SICA.

The evolution of the technological composition of exports of goods from the subregional integration mechanisms in Latin America and the Caribbean has been heterogeneous. However, primary goods (fuels and non-fuel) remain the ones with greatest relative importance. The PA is the mechanism in Latin America and the Caribbean with the largest technological contents in exports (41% in 2012). The Pacific Alliance has managed to keep a relatively stable performance.

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This shows solidity in the structure of exports from the PA, creating favourable conditions for its integration into the Asian global value chains.

SICA and CARICOM show changes in their productive structure of exports, since medium and high-tech goods have increased their share. This happens partly because of the new policies adopted by some Central American and Caribbean countries in order to favour FDI and trade opening (Martínez, 2015; ECLAC, 2015). In SICA, goods with high medium technological intensity went from representing 10% of total exports in 1995 to 31% in 2012. Meanwhile, in CARICOM they rose from 14% in 1995 to 20% in 2012. These changes point to a process of productive transformation in both mechanisms; that is, to the production of goods that generate more productivity and added value.

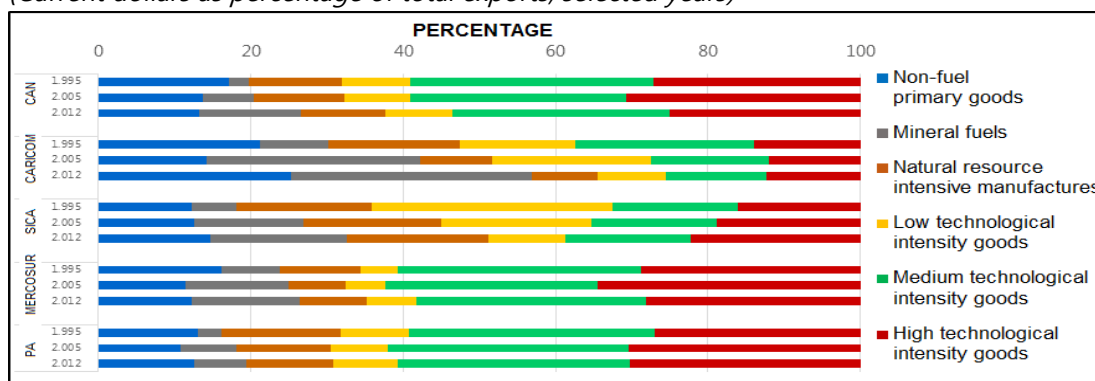
In turn, CAN and MERCOSUR lead exports of primary goods (fuels and non-fuels); and the relative proportion of those goods in CAN went from 79% in 1995 to 87% in 2012. There was a similar performance in MERCOSUR, since in 1995 exports of primary goods accounted for 55% and rose to 69% in 2012.

The technological composition of exports of goods in each Latin American and Caribbean integration mechanism and their behaviour reflect the comparative advantages they have. The region could consider a diversification strategy with greater emphasis on the exploitation of new activities within already existing internal sectors, so that completely new sectors can be initiated (CAF, 2006).

### CHART 14

#### LAC: Technological composition of imports of goods to integration mechanisms

(Current dollars as percentage of total exports, selected years)



Source: Prepared by the authors, based on data from R. Hausmann et al. (2011) *The Atlas of Economic Complexity*. Puritan Press. Cambridge MA.; and United Nations Conference on Trade and Development, UNCTAD. (\*) Cuba is included in SICA.

Taking into account the consideration of the technological composition of exports, it is possible to divide the imports of mechanisms of subregional integration of Latin America and the Caribbean into two groups. On the one hand, there are importers of medium and high-tech goods (CAN, MERCOSUR and PA); on the other hand, there are those which have increased imports of primary goods (SICA and CARICOM).

When evaluating the first group (CAN, MERCOSUR and PA), it can be seen that, between 1995 and 2012, the proportion of imports of medium and high-tech goods has remained relatively stable. In the PA, such behaviour suggests that a fraction of imports is destined to intermediate

consumption of exporting industries, since they trade a significant number of medium and high-tech goods. For their part, MERCOSUR and CAN exports are mostly composed of primary goods (fuel and non-fuel). Their exporting sectors are mainly low added value goods, depending on imports of higher technological intensity goods.

The second group (SICA and CARICOM) presented a very different trend. SICA has significantly reduced the imports of goods of low technological intensity, while it has increased imports of primary fuel goods. This fact corresponds to the evolution of exports of this mechanism. A trend to move from a productive structure based on low-tech goods to higher-tech goods can be seen.

CARICOM shows a similar behaviour. Between 1995 and 2012, it showed a decrease in its imports of low-tech goods and an increase in its imports of primary goods (fuel and non-fuels). Additionally, when considering the exports of the mechanism, a growing trend towards production of high-tech goods can be seen.

## **II. ANALYSIS OF THE ECONOMIC RELATIONS BETWEEN LATIN AMERICA AND THE CARIBBEAN AND THE ASEAN**

The creation of economic agreements between the ASEAN and Latin America and the Caribbean began with the establishment of cooperation organizations in the 1960s. Subsequently, in 2000, they began signing Free Trade Agreements (FTA) and Bilateral Investment Agreements (BIA) among countries.

The first organizations created, which included the countries of both regions, were institutions seeking cooperation among the countries of the Pacific coast. First, there was the Pacific Basin Economic Council (PBEC) created in 1967 as an independent and influential association aimed at enabling trade among the regions. Subsequently, in 1968 the series of Conferences of Pacific Trade and Development (PAFTAD) began. The ideas discussed in these conferences have helped in the creation of other cooperation organizations among the regions.

One of the first initiatives that include multiple countries of the ASEAN and Latin America and the Caribbean was the Pacific Economic Cooperation Council (PECC). Created in 1980, this council was one of the first supranational organization established to promote trade among the economies of the Pacific basin, uniting the countries of East Asia, Oceania and America. On the part of the ASEAN, the countries included Brunei, the Philippines, Indonesia, Malaysia, Singapore, Thailand and Vietnam, and on the part of Latin America and the Caribbean, they included Chile, Colombia, Ecuador, Mexico and Peru.

The efforts made by this organization led to the creation of the Forum of the Asian Pacific Economic Cooperation (APEC) in 1989, with the purpose of enabling trade, investment and the promotion of economic development of the Pacific basin countries. In the ASEAN, all countries are members except for Myanmar, Cambodia and Laos, with the latter two expressing in 2008 their desire to join the agreement. In Latin America and the Caribbean, the only member countries are Chile, Mexico and Peru.

In 1999, at the initiative of Chile and Singapore, the Forum for East Asia-Latin America Cooperation (FEALAC) was established. The objective of this forum was to increase knowledge and cooperation between both regions to maintain close dialogue and interaction. This is the only cooperation organization between both regions that includes almost all Latin American countries. On the part of Latin America all the countries belonging to the AP, the CAN, MERCOSUR, SICA (excluding Belize), Cuba, and Suriname are included, and on the part of the ASEAN, all countries are members.

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Another important initiative, given the magnitude of its proposals, is the Trans-Pacific Partnership (TPP) strategic economic agreement, which was established in 2006 with the objective of negotiating a multilateral FTA among member countries (Brunei, Singapore and Chile). Currently, Malaysia, Vietnam, Mexico and Peru have begun negotiations for their entry and the Philippines, Thailand, Indonesia, Laos and Colombia have expressed their interests in joining. In addition to these organizations, the countries have signed bilateral agreements to promote economic exchanges, whether FTAs or BITs.

**TABLE 1**

**FTAs signed between Latin America and the Caribbean and the ASEAN countries**

<i>Country</i>	<i>Brunei</i>	<i>Malaysia</i>	<i>Indonesia</i>	<i>Singapore</i>	<i>Thailand</i>	<i>Vietnam</i>
<i>Chile</i>	2005-2006	2010-2012	2014-n.d.**	2005-2006	2011-2013*	2011-2014
<i>Costa Rica</i>				2010-2013		
<i>Mexico</i>				2000-n.d.**		
<i>Panama</i>				2006-2006		
<i>Peru</i>				2008-2009	2006-2011	

(\*) The agreement was signed but is not in effect

(\*\*) Not Determined. The signing of the agreement is not yet complete, negotiations continue.

Note: The first year indicates initiation of the FTA negotiation process and the second year indicates when the agreement came into effect.

*Source: Prepared by the authors, based on data from the Foreign Trade Information System (SICE) and the Latin America Asian Pacific Observatory.*

Members of the PA and SICA are the only countries in the region that have FTAs with the ASEAN; with Chile being the country with the highest number of trade agreements with regard to Latin America and the Caribbean. In the case of the ASEAN, Singapore is the country with the highest number of FTAs. This may be so due to the geographic advantage of these mechanisms, as opposed to the others. It should be noted that in some cases the FTA negotiation process has begun, although not yet signed.

**TABLE 2**

**BITs signed between Latin America and the Caribbean and the ASEAN countries**

<i>Country</i>	<i>Cambodia</i>	<i>Philippines</i>	<i>Indonesia</i>	<i>Malaysia</i>	<i>Singapore</i>	<i>Thailand</i>	<i>Vietnam</i>
<i>Argentina</i>		1999-2002	1995-1997	1994-1996		2000-2002	1996-1997
<i>Chile</i>		1995-1997	1999-n.d.*	1992-1995			1999-n.d.*
<i>Colombia</i>					2013-n.d.*		
<i>Cuba</i>	2001-n.d.*		1997-1999				1995-1996
<i>Jamaica</i>			1999-n.d.*				
<i>Mexico</i>					2009-2011		
<i>Peru</i>				1995-1995	2003-2006	1991-1991	
<i>Suriname</i>			1995-n.d.*				
<i>Uruguay</i>				1995-2002			2009-2011

(\*) Not Determined. The signing of the agreement is not yet complete, negotiations continue.

Note: The first year indicates initiation of the BIT negotiation process and the second year indicates when the agreement came into effect.

*Source: Prepared by the authors, based on data from the Foreign Trade Information System (SICE) and the Latin America Asian Pacific Observatory.*

In the case of the BITs, among the ASEAN countries, Indonesia, Malaysia and Vietnam stand out for being the countries with the highest number of signed agreements, and Argentina and Chile for Latin America and the Caribbean. Considering only the FTAs, BITs and supranational organizations, it can be seen that all members of the ASEAN have some type of economic relation with Latin America and the Caribbean, with the exception of Myanmar and Laos. Meanwhile, only 33% of the countries of Latin America and the Caribbean have economic relations with the ASEAN countries. It should be noted that the approach has not been made through integration mechanisms but between countries.

In the following sections of this chapter, relevant information will be presented, in order to continue with the analysis of the economic relations between the ASEAN countries and Latin America and the Caribbean. In this regard, it will begin by studying the relevance and technological composition of the exchanges of trade between the ASEAN and Latin America and Caribbean countries. This information will be detailed by sub-regional integration mechanisms in order to observe the behaviour and identify comparative advantages of each of these. Subsequently, an analysis will be made of the FDI flows from the ASEAN toward Latin America and the Caribbean.

### 1. Technological level of trade between Latin America and the Caribbean and the ASEAN

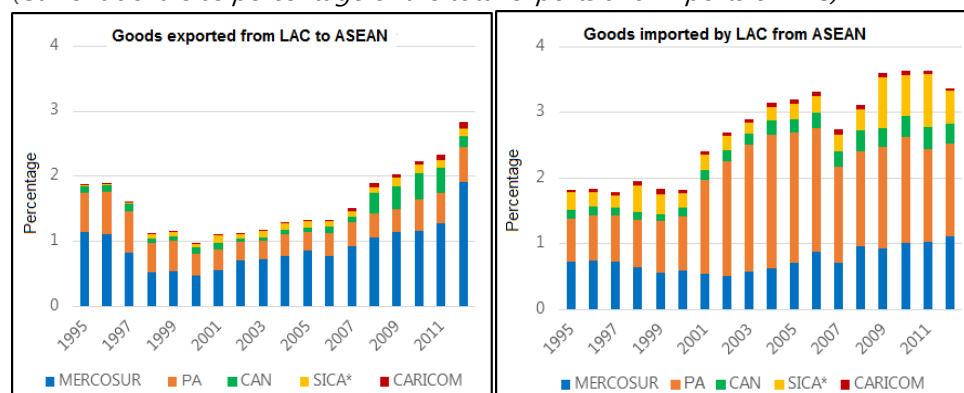
In order to determine the extent and relevance of the economic relations between Latin America and the Caribbean and the ASEAN, this section addresses three interrelated topics. First, a study is made of the evolution of the flow of trade between both regions, taking into consideration each mechanism of integration of Latin America and the Caribbean. Second, explanation of the technological composition is made of the products traded between both regions, with the purpose of identifying the type of goods that are in demand by Latin America and the Caribbean from the ASEAN and vice versa.

Third, a display of the technological level of the products traded between the ASEAN and each mechanism of integration of Latin America and the Caribbean is made, identifying the differences between each one of these, with regard to the productive specialization and comparative advantages, analysed in the previous chapter. Finally, this section closes with a review of the 20 products with most significant relevance in the imports and exports between Latin America and the Caribbean and the ASEAN. This allows for noting the diversification of the goods exported and the industries to which the products belong.

#### CHART 15

#### Trade between the integration mechanisms of LAC and the ASEAN, 1995-2012

(Current dollars as percentage of the total exports and imports of LAC)



Source: Prepared by the authors, based on data from R. Hausmann et al. (2011) *The Atlas of Economic Complexity*. Puritan Press. Cambridge MA. (\*)Cuba is included in SICA.

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Organizations such as APECC, FEALAC and others, which explore channels of cooperation and the complementarities between the ASEAN and Latin America and the Caribbean, have enabled the overcoming of several barriers for the strengthening of economic relations between both regions, such as geographical distance, lack of knowledge of industrial potentials, cultural differences, among others.

However, progress has been slow. Exports of goods from Latin America and the Caribbean to the ASEAN went from representing 1% in 2000 to 3% of the total exports in 2012. In the case of imports, these represented 1.8% in 2000 and reached a total of 3.5% in 2012. In general terms, imports by Latin America and the Caribbean from the ASEAN have been continuously higher than exports.

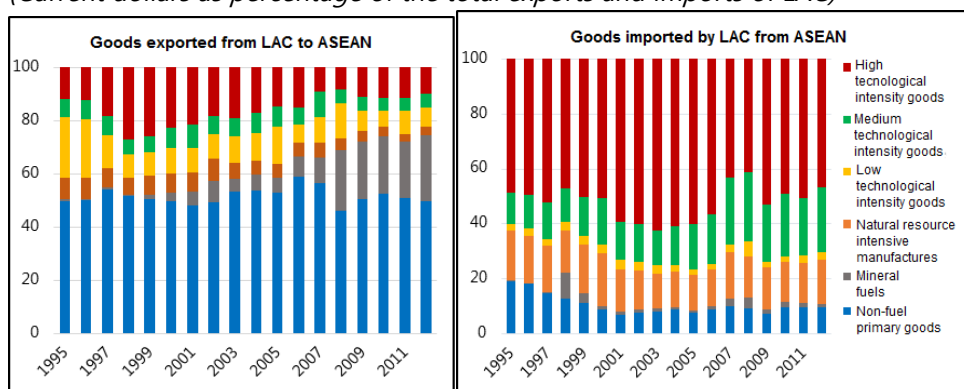
When studying trade from the ASEAN perspective, the proportions are similar: 2.8% imports and 3.2% exports. This is due to observations made in the previous chapter, with respect to the similarities in the total flow of trade of each region. MERCOSUR stands out as the mechanism of integration in Latin America and the Caribbean with the highest export of goods to the ASEAN, followed by the PA and CAN. Likewise it is outstanding the increase of exports by CARICOM since 2007, being able to associate this event to the increase in the export of mineral fuels by the mechanism.

With regard to imports of goods, it can be seen that the main trading partner for the ASEAN is the PA. This mechanism between 2001 and 2006 experienced an increase in the import of goods coming from the ASEAN. For its part, the SICA experienced a significant increase in imports from the ASEAN beginning 2009.

#### CHART 16

#### Technological level of exports and imports of goods between LAC and the ASEAN, 1995-2012

*(Current dollars as percentage of the total exports and imports of LAC)*



Source: Prepared by the author, based on data from R. Hausmann et al. (2011) *The Atlas of Economic Complexity*. Puritan Press. Cambridge MA.; and the United Nations Conference on Trade and Development, UNCTAD.

The technological composition of exports and imports of goods analyzed in the previous chapter, outlines the differences between the ASEAN and Latin America and the Caribbean countries with respect to the provision of productive factors and specialization; wherein, the comparative advantages of each region is positioned in different categories. Latin America and the Caribbean has shown advantages in the export of primary goods, given the local availability of natural resources, while the ASEAN has advantages in the exports of high technological intensity goods.

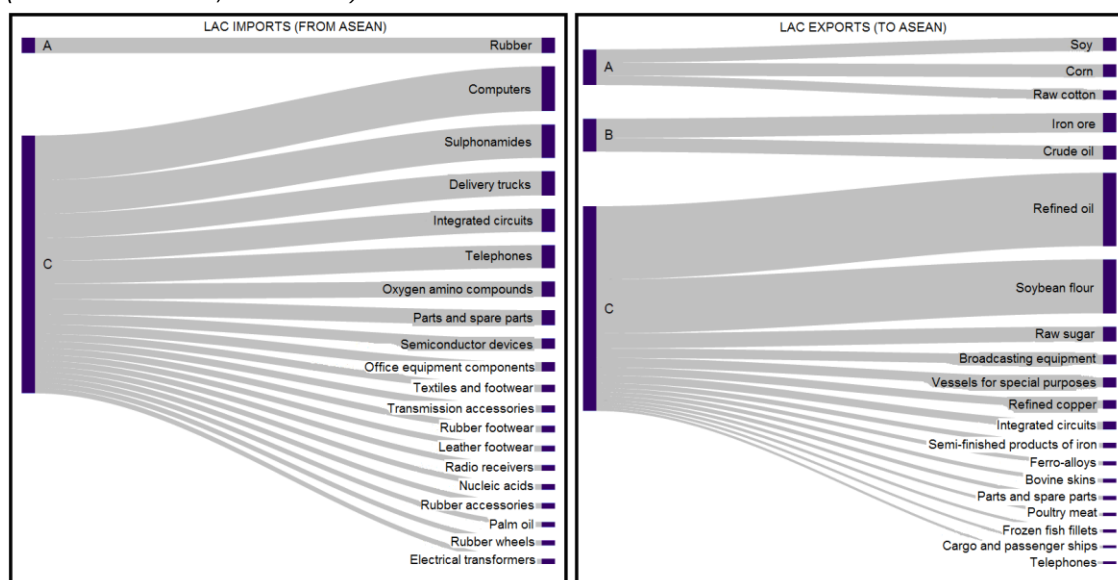
The differences between both regions in the provision of productive factors, particularly mineral resources, have represented an opportunity for Latin America and the Caribbean in reaching the Asian market. The above is evidenced in the accelerated growth of the participation of combustible primary goods, registered since 2008, in the total export of goods made from Latin America and the Caribbean to the ASEAN. This leaves the primary goods (fuels and non-fuels) as those with the highest relevance in respect of exports, representing 75% of the same in 2012.

Imports by Latin America and the Caribbean from the ASEAN were comprised mainly of high technological intensity goods. This reached its maximum in 2003, when it represented 62% of imports, after this year its participation was reduced until reaching 47% in 2012. Together, the medium and high technological intensity goods dominated the import structure, representing 71% of the total in 2012.

According to ECLAC (2015), between 2012 and 2013 the trade balance of Latin America and the Caribbean with ASEAN was negative. However, on separating by products, there is a surplus in the primary goods and intensive manufacturing in natural resources. Among the products with negative balance, the high technological intensity goods are outstanding.

Such information allows for recognizing potential trade between the regions. Initially, the trade ties can be strengthened by taking advantage of the comparative benefits of each region and the demands, whether it being the ASEAN or Latin America and the Caribbean economies that are in expansion. Likewise, Latin America and the Caribbean can advance in their entry into the Asian global value chains, through which the regions can make their productive structure more technical by transferring technologies directly from the ASEAN.

**CHART 17**  
**Top 20 products traded between LAC and the ASEAN classified by Industrial Activity, 2012**  
*(ISIC Classification, Revision 4)*



Source: Prepared by the authors, based on data from R. Hausmann et al. (2011) *The Atlas of Economic Complexity*. Puritan Press. Cambridge MA.; and the United Nations Conference on Trade and Development, UNCTAD.

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Based on the study carried out of the 20 most important products, with respect to the proportion of the total exports and imports between the ASEAN and Latin America and the Caribbean, for the year 2012, this analysis was made from a different perspective from the one used in the previous sections, where the focus is the technological sophistication of the trade flows. The panorama continues to be the same: Latin America and the Caribbean exports to the ASEAN products of lower technological sophistication, mineral fuels and primary goods and the ASEAN exports to Latin America and the Caribbean products of higher technological aggregate.

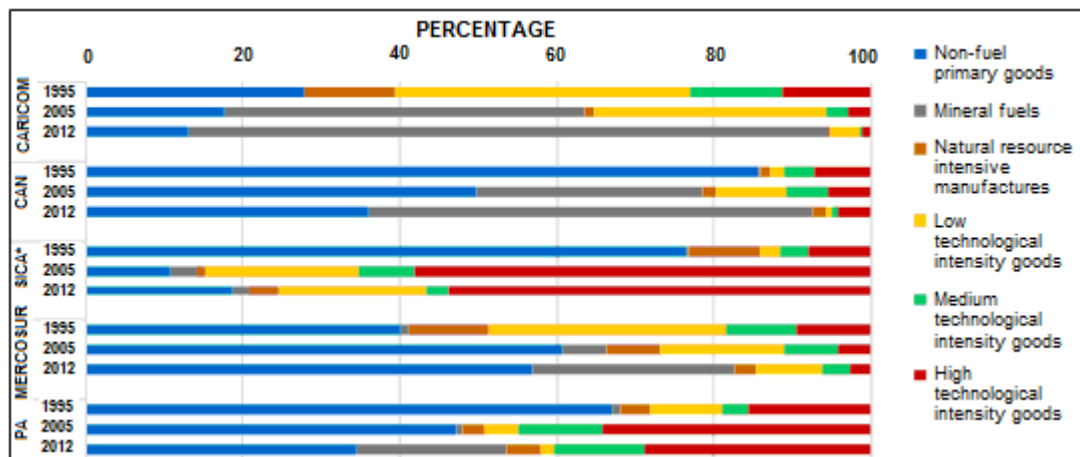
In the case of the products exported from Latin America and the Caribbean to the ASEAN, the 20 most important products are concentrated in three industries: Agriculture, forestry and fishing (A) Mines and quarries (B) and Manufacturing (C). However, 42% of the exports are grouped into only three products: oil refinery (21%), soya flour (16%) and iron mineral (5%); while the sum of the total products that do not enter into the categories of primary goods, combustible and non-combustible minerals in the top 20, barely reaches 10% of the total exports.

The above implies that in respect of technological sophistication, the exports from Latin America and the Caribbean to the ASEAN, in 2012, continued with an offer of low complexity. On the other hand, products imported by Latin America and the Caribbean from the ASEAN, show different characteristics. The three most important products are computers (16%), sulphonamides (12%) and cargo trucks (9%), together reaching 37% of the total exports. These products are classified as high or medium technological intensity goods, which reaffirms the argument that the exchange of trade between both regions are carried out at different levels of economic complexity.

#### CHART 18

#### LAC: Technological level of exports of goods destined to the ASEAN by integration mechanism

(Current dollars as percentage of the total exports, selected years)



Source: Prepared by the authors, based on data from R. Hausmann et al. (2011) *The Atlas of Economic Complexity*. Puritan Press. Cambridge MA.; and the United Nations Conference on Trade and Development, UNCTAD. (\*) Cuba is included in SICA.

In general terms, the evolution of the technological sophistication of exports by integration mechanisms of Latin America and the Caribbean directed to the ASEAN, has been concentrated on primary goods. Such is the case of MERCOSUR, mechanism where exports are focused on goods such as soya, corn, milk, among others. Likewise, this mechanism stands out in the region for having the highest flow of trade with the ASEAN countries, accumulating 68% of the exports made in 2012.



Of course, this panorama is consistent with the structure of the total exports of MERCOSUR, observed in the previous chapter. However, understanding the benefits of advancing toward the technological sophistication of the exports, one strategy suggested for this mechanism is to design policies that promote significant growth in the flows of DFI and direct them to the industries that generate higher aggregated value, stimulating the development of productive capacities in more complex goods.

For its part, the PA is the second mechanism in the region with the highest exports of goods to the ASEAN countries, these representing 19% in 2012. However, the offer of this mechanism is concentrated in few countries, principally Mexico and Chile; and in few goods, specifically manufactures intensive in natural resources.

Among the goods exported by the PA to the ASEAN countries, mineral copper is notable, products where Chile and Peru hold significant market shares. Also notably is refined copper (anodes and cathodes), these being products of high technological sophistication and exported principally by Chile. This indicates that the trade agreements signed by this country with the members of the ASEAN countries have had a positive impact.

However, concentration of exports by the PA to the ASEAN countries represents a challenge for the countries with the mechanism, understanding that diversification of their export product could represent an increase in trade, which at the same time results in more robust trade relations and stimulates the cooperation of the mechanisms in different areas of productivity.

The PA can favour growth of their exports to the ASEAN countries, by means of products with high technological sophistication that they currently export. However, this requires further intra-mechanism cooperation, enabling the transfer of productive capacities and avoiding productive concentration. Additionally, the countries of the AP have a geographical advantage, which facilitates trade with the ASEAN countries, in which they must support in order to strengthen economic relations.

Exports by CAN, as well as MERCOSUR, are concentrated in few products and these being mostly primary goods. However, the participation of this mechanism in the total exports of Latin America and the Caribbean to the ASEAN countries has been low, reaching 5% in 2012.

Among the products exported by CAN, outstanding are crustaceans, product exported principally by Ecuador and directed almost totally to the Vietnam market, raw aluminium and oil gas, products in which Bolivia and Peru, respectively, have low shares on the market.

SICA is the integration mechanism that shows the highest technological sophistication and diversification in its exports to the ASEAN countries. However, it holds a low share on the market, covered mostly by Costa Rica. SICA exported in 2012, 5% of the goods traded between Latin America and the Caribbean and the ASEAN, directed principally to Singapore (45%). In this regard, a challenge for the countries of this mechanism is to increase their productive capacities and in that way achieve a greater participation in the Asian market.

A strategy for achieving this objective is the coordination of forces for the articulation of intra-mechanism productive chains, which enables transfer of productive capacities to the other member countries. This results in an increase in the export product and diversification of the offering countries. Likewise, this strategy can be complemented by promoting the transfer of technology from the ASEAN countries, resulting in the increase of productive capacities, technological sophistication of the exports and participation in the global value chains.

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After analyzing the goods exported by SICA to the ASEAN countries, two products were identified – integrated circuits and office machinery – which could earn market shares in the short and medium period, since the ASEAN covers part of the demand of these goods with imports from other parts of the world with which SICA could compete by taking advantage of their geographic comparative benefits.

Finally, CARICOM is the mechanism of integration with the least export to the ASEAN. In 2012, their participation was 3% of the total of Latin America and the Caribbean. Exports by this mechanism are concentrated in primary goods. However, there is a significant diversification in the products of high technological sophistication exported by the mechanism, which are traded by different countries.

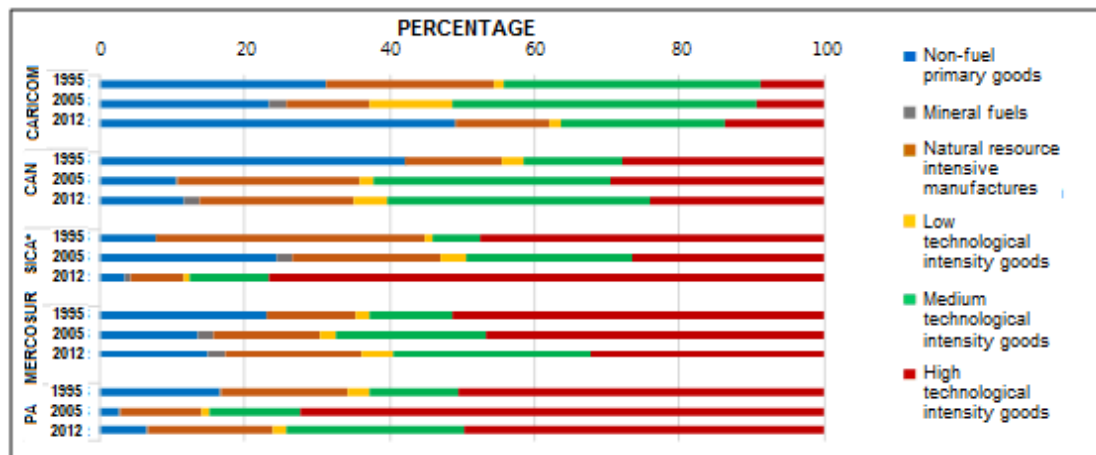
Among the products exported with high technological sophistication, notably are: automobiles, watches, electric resistance, office machinery, monofilaments and radio equipment. Among the exporting countries of these goods are Jamaica, Barbados, Belize and Haiti, countries that have significant market shares in the ASEAN countries.

Generally speaking, the integration mechanisms of Latin America and the Caribbean have the opportunity to increase their economic relations with the ASEAN by trading goods with high technological sophistication, which stimulates the transfer of productive capacities. However, there must be advancement toward cooperation and intra-mechanism productive articulation that would drive the productive transformation of the region taking advantage of its geographical location and the provision of factors inherent to each integration mechanism.

### CHART 19

#### LAC: Technological level of imports of goods from the ASEAN by integration mechanism

(Current dollars as percentage of the total imports, selected years)



Source: Prepared by the authors, based on data from R. Hausmann et al. (2011) *The Atlas of Economic Complexity*. Puritan Press. Cambridge MA.; and the United Nations Conference on Trade and Development, UNCTAD. (\*) Cuba is included in SICA.

Chart 18 shows the evolution of the composition of the imports of goods from LAC to ASEAN, detailed by mechanisms. Generally, all the mechanisms (except for CARICOM) show a similar trend: they are characterized by importing products of principally medium and high technological intensity. Interestingly, CARICOM shows a trend significantly different to the other mechanisms, importing from the ASEAN non-combustible primary goods in a proportion much higher than their imports of goods of high technological intensity, despite that they do import a significant amount

of goods of medium technological intensity. This may be partially explained because of the geographical convenience to import these goods from other destinations and the non-existence of trade agreements between CARICOM and the ASEAN.

In 1995, 2005 and 2012 the mechanisms of subregional integration of Latin America – CAN, SICA, MERCOSUR and PA – maintained a proportion of their import of goods of medium and high technological intensity from the ASEAN above or close to 50%. In this case, it is noted that imports of high technological intensity of SICA represents 77% of the total for 2012 and these same imports for the AP reached 72% of the total in 2005. Based on previous observation, it is known that SICA has increased exports of this type of goods to the world (including the ASEAN) and AP has been able to maintain an important level of export of high and medium technological intensity goods, which infers the possible formation of Global Value Chains between these mechanisms and the Southeast Asian block.

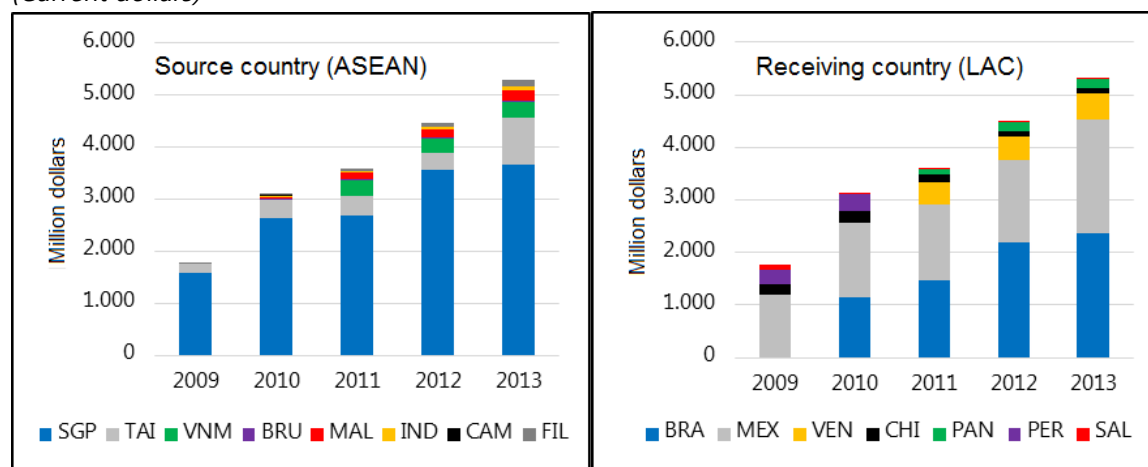
## 2. Analysis of FDI flows between Latin America and the Caribbean and the ASEAN

The following charts show FDI flows as percentage of the total, made by the countries of the ASEAN in Latin America and the Caribbean during the period 2009 to 2013. These flows were calculated based on information published by the International Monetary Fund. In the case of Chart No. 21, the thickness of the lines that connect the countries indicate the proportion of FDI flows; that is, the thicker the line, the greater the FDI flow that the country received.

### CHART 20

#### Stocks of FDI between Latin America and the Caribbean and the ASEAN, 2009-2013

(Current dollars)



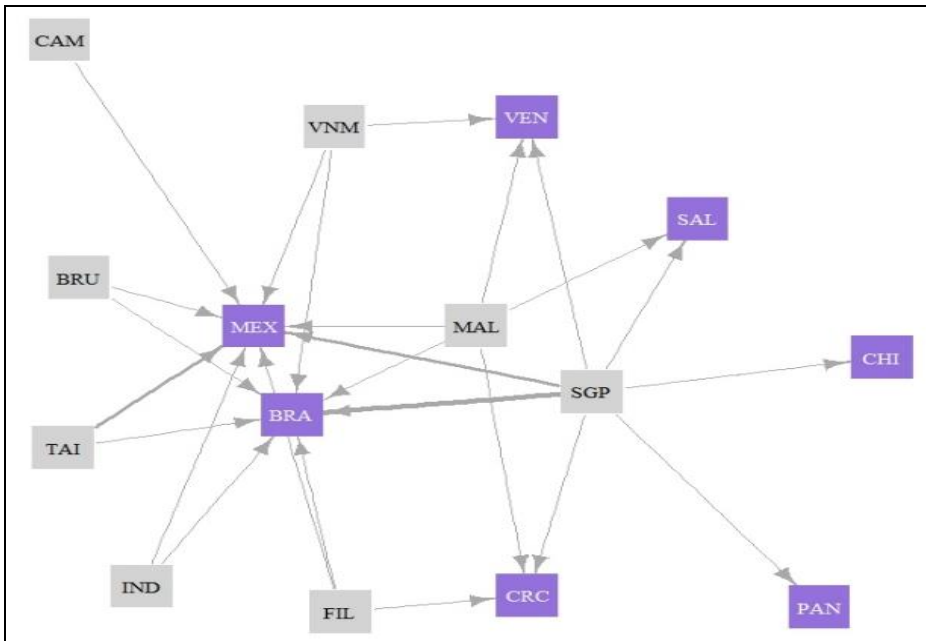
Source: Prepared by the authors, based on data from the International Monetary Fund, IMF. Note: Brazil (BRA), Brunei (BRU), Comoros (CAM), Chile (CHI), Costa Rica (CRC), El Salvador (SAL), Philippines (FIL), Indonesia (IND), Malaysia (MAL), Mexico (MEX), Panama (PAN), Peru (PER), Singapore (SGP), Thailand (TAI), Venezuela (VEN) and Vietnam (VNM).

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## CHART 21

## FDI flows between Latin America and the Caribbean and the ASEAN, 2013

(Current dollars)



Source: Prepared by the authors, based on data from the International Monetary Fund, IMF. Note: Brazil (BRA), Brunei (BRU), Comoros (CAM), Chile (CHI), Costa Rica (CRC), El Salvador (SAL), Philippines (FIL), Indonesia (IND), Malaysia (MAL), Mexico (MEX), Panama (PAN), Peru (PER), Singapore (SGP), Thailand (TAI), Venezuela (VEN) and Vietnam (VNM).

Generally, FDI flows from the ASEAN to the countries of Latin America and the Caribbean have been low. Of the total FDI granted by the ASEAN in 2009, 0.6% was directed to Latin America. This proportion increased to 1% in 2013. It can be seen that Singapore is the ASEAN country with the highest outflow of FDI to Latin America and the Caribbean, representing 69% of the total in 2013, followed by Thailand with 17%. For their part, Mexico and Brazil have been the Latin American and Caribbean countries to receive the most FDI flows from the ASEAN, each country receiving 40% and 44% of the total, respectively.

As mentioned in Chapter I, in 2013 the ASEAN focused FDI flows on the manufacturing (33%) and services sectors (55%). The higher proportion of the FDI directed to the service sector was concentrated on financial services and is explained by the increase in the participation of the region in the global value chains. In turn, out of the FDI directed to the manufacturing sector, 70% was concentrated on industries with medium and high technology. This is explained by the preference shown by the transnational companies on focusing research and development activities in the Asian countries (Urmenta, 2013).

There are various policies and initiatives implemented by the ASEAN to promote FDI flows and trade in the region. In 2010, the ASEAN Free Trade Area (AFTA) was established, which by 2013 was successful in achieving a 0% rate on intra-regional imports of approximately 88% of the 99,434 tariff lines of the ASEAN, (AIR 2013). Also in that same year, other agreements were implemented, which have an effect on FDI flows in the region, such as the ASEAN-China Free Trade Area (ACFTA), the ASEAN-India Free Trade Area (AIFTA) and the ASEAN-Korea Free Trade Area (AKFTA).

Another milestone in the policies to promote FDI in the ASEAN was the ASEAN Comprehensive Investment Agreement (ACIA), which came into effect in 2012. The objective of this agreement is to create an environment of free and open investment through the establishment and expansion of the agreements existing among member countries of the ASEAN, following the best international practices, and to provide complete and clear definitions in accordance with the existing international agreements, to increase the appeal of the ASEAN as a single destination for investment (ASEAN Secretariat, 2012).

These agreements have allowed for establishing several corporations in the region, thus improving the interconnection of the markets and generating an increase in the flow of FDI received by the ASEAN, which rose from approximately US\$ 45 million in 2009 to US\$ 100 million in 2010 (ASEAN Secretariat, 2014). The increase in FDI flows in the ASEAN and their orientation towards those sectors generating greater aggregate value have resulted in improvements in the productive capacities, through innovation and research and development, which has enabled the participation of the region in the global and regional value chains.

That represents a challenge and serves as an example of best practices for Latin America and the Caribbean in terms of policies to promote and attract FDI. As mentioned in the previous chapter most of the countries in the region have established promotion agencies for investment. However, very few are in operation. Therefore, it is obvious that there is a need for these institutions to complete their establishment and commence with the process of articulation and harmonization of the regulatory framework of the region, in order to direct the FDI flows towards the industries that generate greater aggregated value.

An advisable strategy for promoting FDI, which can be used by Latin America and the Caribbean, is to develop their economic relations with the ASEAN countries, since economic integration initiatives give rise to an increase in investment, taking advantage of the direct and indirect effects of the liberalization of trade and the integration of the markets, as well as, by the harmonization of the framework of general policies of the participating countries, including investment policies and through direct cooperation in investment projects (UNCTAD, 2013).

Another relevant factor for promoting FDI, from which Latin America and the Caribbean may advance, is the reduction of the costs for trade. According to figures of the World Bank, for 2012 in Latin America the real costs for the import and export of a container, with respect to the number of days worked and the documents involved, were an average of 27 days, while in the Southeast Asian countries this was an average of 12 days.

This means that in Latin America and the Caribbean, the costs to move merchandise inside and outside the region continue to be high, the institutional barriers – including transit points at the border and other obstacles – hinder the efficient flow of goods and services. The trade procedures are complex and different, the custom requirements are tedious, and the regulations are not standardized (Urmeneta, 2013).

Investments are crucially important for economic growth. However, they must attract the correct type of investment in order to strengthen the current economic structures. As have been argued in this study, it is necessary to concentrate on the quality of investment and do it this in a way that does not limit the capacity of the States to act or to regulate in favour of public interests.



## **CONCLUSIONS**

The current economic context is characterized by an accelerated dynamic which demands continued development of productive capacities that motivates structural transformations towards activities with greater economic complexity and a high technological component. The optimization of the productive processes has triggered the generation of global value chains, where innovation has become the main core of action to achieve better positioning in the global economy.

In general terms, the ASEAN has achieved a successful productive transformation that has allowed it to diversify its exports towards goods with high and medium technological intensity. This transformation has been based fundamentally on the absorption of productive capacities, the generation of conditions for attracting Foreign Direct Investment (FDI) and promoting research and development activities.

Another determining factor has been the consolidation of integration, which has allowed the proliferation of trade and investment agreements with the rest of the world, through various consensuses and an accelerated decision-making process. Additionally, the strengthening of the integration, together with the geographic proximity, has pushed the intra-regional economic relations among the countries of the ASEAN, enabling the spreading of new technologies and productive processes.

These advances are reflected in the technological composition of the structure of ASEAN exports, where the goods of medium and high technological sophistication dominates, representing in 2012, 45% of the total exports. However, since 2003 the participation of (fuel and non-fuel) primary goods has increased significantly, because of the rise in prices, reaching in 2012 a share of 39% of the total exports.

Despite the achievements reached, there continues to be differences among the ASEAN countries in accessing the dynamic of global trade, largely associated to the asymmetries in the relative economic size and productive specialization, which remains a pending task for this region in achieving higher levels of integration.

As for Latin America and the Caribbean, the productive transformation process has developed more slowly. Taking advantage of the provision of factors has resulted in the specialization in primary goods, whose contribution to the development of productive capacities is limited. These goods represented 58% of the total exports of the region in 2012, while exports of goods with medium and high technological sophistication reached 31%.

Generally, Latin American and the Caribbean countries have a less diversified exporting basket than that of ASEAN countries. This condition intensified during the period 2003-2008, with the higher prices of raw materials, thus increasing the volatility of income in the countries of the region.

Making a disaggregated analysis of the integration mechanisms in Latin America and the Caribbean, two groups are distinguished. On the one hand, are those groups that show advances in the transformation of their export baskets, as is the case of SICA, the PA and CARICOM; and on the other, those that face greater challenges to diversify their exports as in the case of MERCOSUR and CAN.

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MERCOSUR is one of the integration mechanism in the region that maintains greater trade ties with the ASEAN, accounting for 68% of the exports of Latin America and the Caribbean in 2012. However, its exports are concentrated on few products, with 83% corresponding to primary goods.

At present, MERCOSUR is an important supplier of food to the ASEAN, particularly soya oil, soya flour and corn. Strengthening these commercial ties can be used to lever activities of greater technology content through the promotion of FDI between these mechanisms. On this matter, the challenges point to overcoming the high concentration of FDI flows towards the region. A proof of this is that in 2013, Brazil received 44% of the investment made by the ASEAN in the region, with respect to only 9% received by Venezuela.

The Andean Community, like MERCOSUR, maintains a high concentration of their exports to the ASEAN. Proof of this is that in 2012, 92% of its exports were primary goods. However, its share barely reaches 5% of the total exports of the region with destination to the ASEAN. To strengthen trade ties, the opportunities identified are associated to the exports of crude oil and crustaceans, activities which could serve as the basis for the development of industries with higher technological sophistication. Additionally, it is necessary to make efforts to attract FDI, in view that at present there are no significant flows between both regions.

With respect to CARICOM, although exports to the ASEAN are still in an incipient phase (accounting for 3% in 2012), this mechanism is the one that shows greater diversification in terms of products and exporting countries. The products where opportunities were identified to strengthen the commercial ties with the ASEAN are: electric transformers, automobiles, polymers, electric resistances and medical instruments; these being medium and high technological intensity goods.

Regarding SICA, it can be seen that in 2012 its exports directed to the ASEAN represented 5% of the total exports of the region with this destination. Its exporting structure is characterized by the diversification in goods of medium and high technological sophistication. In this regard, one can note the comparative advantages that this mechanism has in the production of parts for office equipment, integrated circuits, perfumes, packaged medicines, and sound and recording equipment. However, the opportunities to expand trade relations with the ASEAN are limited, since the demand for these products is satisfied through intra-mechanism trade.

Finally, the PA is the mechanism with greater dynamism in its economic relations with the ASEAN. Proof of this is the number of cooperation agreements signed, the volume of trade and direct investment flows. With respect to exports from the PA, they represented in 2012, 19% of the exports of the region to the ASEAN. This mechanism shows a range of exports concentrated on primary goods (53%) and high technological sophistication goods (29%). In the case of specific goods, such as copper mineral and cathodes and anodes, the AP supplies a significant quota of the ASEAN demand.

This relation has been favoured by the geographic proximity between both mechanisms and the number of bilateral trade agreements signed, with Chile and Singapore being the countries most active in this connection. Another aspect to point out is the bilateral investment agreements, where Peru, Chile and Mexico maintain multiple agreements with the ASEAN. However, the latter is the largest recipient of FDI, receiving in 2013, 40% of FDI coming from made by the ASEAN to Latin America and the Caribbean.



With respect to imports made by Latin America and the Caribbean from the ASEAN, during the entire period analyzed, a constant demand of the region for medium and high technological sophistication goods can be seen. This demand accounted for 3% of the total imports of Latin America and the Caribbean during 2012, with the main products imported being computers, delivery trucks, telephones, sulphonamides and integrated circuits.

The analysis presented above clearly shows a set of opportunities that must be addressed with the purpose of strengthening economic relations between both regions. One of the centrepieces for action where there is work pending is expanding, consolidating and speeding up the signing of the agreements, which would provide a solid institutional framework to make progress towards greater coordination and complementarity.

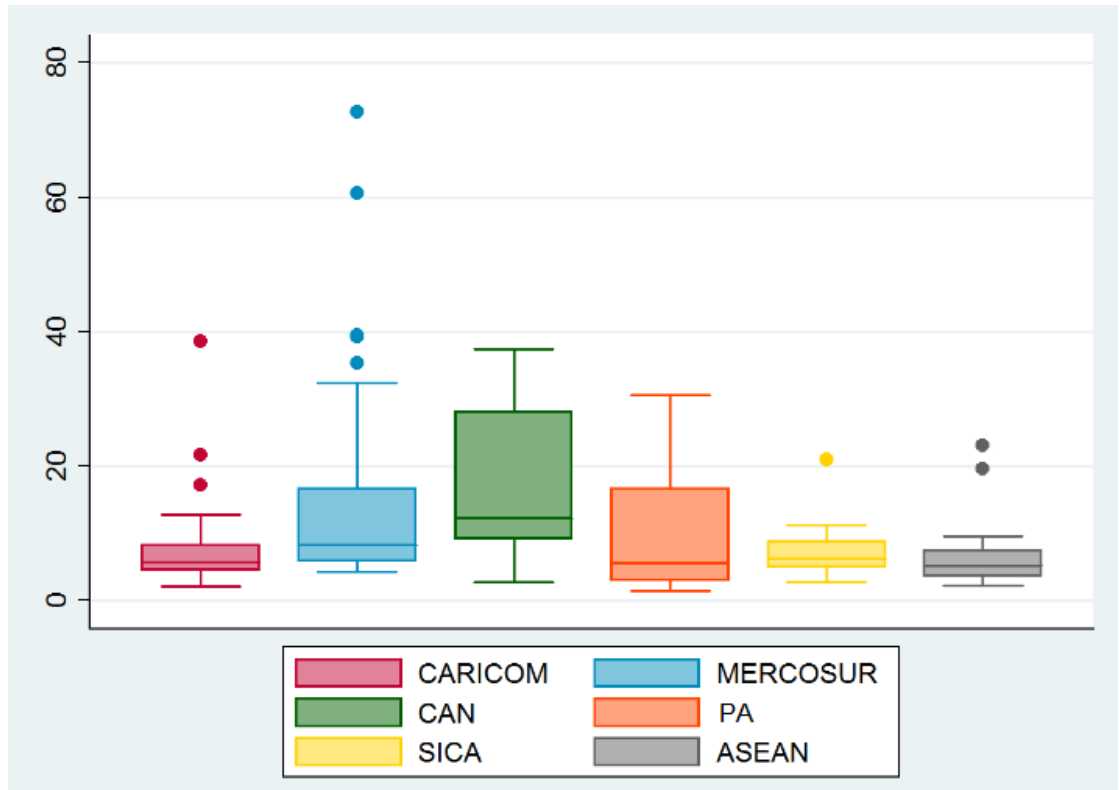
The increase in cooperation and trade and investment ties could be beneficial to improving economic development in both regions. Regarding infrastructure and logistics, the ASEAN has had successful experiences that could serve as a model for Latin America and the Caribbean, since some countries in the region seem to lag behind in these areas.

On the other hand, although the ASEAN has made progress in generating productive chains, both regions show potential to increase their participation in global value chains and the development of intra-industrial trade. This process may facilitate the transfer of technologies and encourage the necessary innovations to reach a successful productive transformation.



**BOX AND WHISKER PLOT OF INFLATION BY INTEGRATION MECHANISM, 1995-2013**





Source: Prepared by the authors, based on data from the United Nations Conference on Trade and Development, UNCTAD.



**CLASSIFICATION OF THE COUNTRIES OF LATIN AMERICA AND THE CARIBBEAN AND ASEAN  
ACCORDING TO THEIR ECONOMIC COMPLEXITY INDEX**





<b>Country</b>	<b>ECI Classification</b>
<b>Singapore</b>	10
<b>Malaysia</b>	24
<b>Mexico</b>	25
<b>Thailand</b>	33
<b>Philippines</b>	46
<b>Panama</b>	47
<b>Colombia</b>	50
<b>Costa Rica</b>	53
<b>Uruguay</b>	55
<b>Brazil</b>	56
<b>Argentina</b>	57
<b>El Salvador</b>	61
<b>Vietnam</b>	67
<b>Trinidad and Tobago</b>	68
<b>Indonesia</b>	69
<b>Dominican Republic</b>	70
<b>Chile</b>	72
<b>Jamaica</b>	75
<b>Guatemala</b>	79
<b>Peru</b>	80
<b>Honduras</b>	87
<b>Paraguay</b>	88
<b>Bolivia</b>	89
<b>Ecuador</b>	95
<b>Venezuela</b>	106
<b>Nicaragua</b>	111
<b>Cambodia</b>	120
<b>Haiti</b>	123
<b>Laos</b>	125

*Source: Prepared by the authors, based on data from R. Hausmann et al. (2011) The Atlas of Economic Complexity. Puritan Press. Cambridge MA.*



## **BIBLIOGRAPHY**

- Acevedo, S., Cebotari, A., & Turner-Jones, T. (2013). *Caribbean Small States: Challenges of High Debt and Low Growth*. Washington: International Monetary Fund.
- Adler, G., & Sosa, S. (2013). *External Conditions and Debt Sustainability in Latin America*. Washington: International Monetary Fund.
- AIR (2013). *ASEAN Investment Report 2012: The Changing FDI Landscape*. The ASEAN Secretariat, Jakarta.
- Amato, J., & Gerlach, S. (2002). Inflation targeting in emerging market and transition economies: Lessons after a decade. *European Economic Review*, 781-790.
- ASEAN Secretariat y UNCTAD (2014). *ASEAN Investment Report: FDI Development and Regional Value Chains*. Jakarta: ASEAN Secretariat.
- Barro, R. J. (1989). *Economic growth in a cross section of countries* (No. w3120). National Bureau of Economic Research.
- Basu, S. R., & Das, M. (2011). *Export Structure and Economic Performance in Developing Countries: Evidence from Non-Parametric Methodology*. UN.
- Bengoa, M., & Sanchez-Robles, B. (2003). Foreign direct investment, economic freedom and growth: New evidence from Latin America. *European Journal of Political Economy*, 19(3), 529-545.
- Bleaney, M. F. (1996). Macroeconomic stability, investment and growth in developing countries. *Journal of Development Economics*, 48(2), 461-477.
- CAF (2004). *"Reflexiones para retomar el crecimiento: Inserción internacional, transformación productiva e inclusión social"*. Direction of Economic Studies. Vice-Presidency of Development Strategies. Caracas.
- Calderón, C., & Schmidt-Hebbel, K. (2003). Macroeconomic policies and performance in Latin America. *Journal of International Money and Finance*, 895-923.
- Corbo, V., & Rojas, P. (2010). Investment, macroeconomic stability and growth: The Latin American experience. *Revista de Análisis Económico—Economic Analysis Review*, 8(1), 19-35.
- Dhar, B. (2011). *Trade Integration and Growth of Regional Value Chains: The Future Looks Promising*. Asia-Pacific Forum. Taipei: Asia-Pacific Forum.
- ECLAC. (2012). *Estudio Económico de América Latina y el Caribe: Las políticas ante las adversidades de la economía internacional*. Santiago: ECLAC.
- ECLAC. (2013). *La Inversión Extranjera Directa en América Latina y el Caribe*. Santiago: ECLAC.
- ECLAC. (2015). *La Inversión Extranjera Directa en América Latina y el Caribe*. Santiago: ECLAC.

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- Elms, D., & Low, p. (2013). Global value chains in a changing world. Geneva. World Trade Organization.
- Hidalgo, C., & Hausmann, R. (2009). The building blocks of economic complexity. Proceedings of the National Academy of Sciences, 10570-10575.
- Kim, S., Kim, S., & Choi, Y. (2014). Financing Investment in East Asia: Regional or Global Savings? Japan and the World Economy, 1-7.
- Lall, S. (2000). Export performance, technological upgrading and foreign direct investment strategies in the Asian newly industrializing economies with special reference to Singapore. Santiago: ECLAC.
- Lall, S. (2000). The Technological structure and performance of developing country manufactured exports, 1985-98. Oxford Development Studies, 28(3), 337-369.
- Lucas, R. (1988). On the mechanics of economic development. Journal of Monetary Economics, 22(1), 3-42.
- Manuelito, S., & Jiménez, L. (2014). *La inversión y el ahorro en América Latina: nuevos rasgos estilizados, requerimientos para el crecimiento y elementos de una estrategia para fortalecer su financiamiento*. Macroeconomía del Desarrollo Series, ECLAC.
- Martínez Piva, J. M. (2015). *Incentivos públicos de nueva generación para la atracción de inversión extranjera directa (IED) en Centroamérica*.
- Moreno-Brid, J., & Pérez, E. (2003). *Liberalización comercial y crecimiento económico en centroamérica*. ECLAC Magazine, 81, 157-174.
- Pisano, G. and Shih, W. (2013). Producing Prosperity. Why America Needs a Manufacturing Renaissance. Harvard Business Review Press.
- Poon, W. C., & Lee, Y. S. (2014). Inflation Targeting in ASEAN- 10. South African Journal of Economics, 82(1), 141-157.
- Romer, P. M. (1986). Increasing returns and long-run growth. The journal of political economy, 1002-1037
- Rosales, O. Inoue, K. y Mulder, N. (2015) "Rising concentration in Asia-Latin America value chains: Can small firms turn the tide?" ECLAC. Santiago.
- SELA (2014). *Las relaciones América Latina, el Caribe y la Cuenca del Pacífico: sociedad, política, empresas y tecnología*. Latin America and Caribbean Economic System, Extra-Regional Relations. Caracas.
- Solimano, A. (2013). *Comercio exterior, cadenas globales de producción y financiamiento: Conceptos y relevancia para América Latina y el Caribe*. Santiago. ECLAC.
- Ulvedal, P. B. (2013). Macroeconomic stability and economic growth in developing countries.

UNCTAD (2004). World Investment Report, the shift towards Services. United Nations Conference on Trade and Development, UNCTAD. New York.

UNCTAD (2005). World Investment Report, transnational corporations and the internationalization of R&D. United Nations Conference on Trade and Development, UNCTAD. New York.

UNCTAD (2013). World Investment Report, global value chains: investment and trade for development. United Nations Conference on Trade and Development, UNCTAD. New York.

UNCTAD (2014). World Investment Report, investing in the SDGs: an action plan. United Nations Conference on Trade and Development, UNCTAD. New York.