Intraregional trade in South America, 1913-50. Economic linkages before institutional agreements

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Abstract: With the exception of the North American Free Trade Agreement (NAFTA), trade integration is still modest in Latin America, at around 20% of total trade. Surprisingly, these levels were higher in 1945, when the figure for imports stood at 25.6%. Paradoxically, this result shows that trade integration reached its peak before trade integration agreements were signed. To understand the reasons for this, we examine intraregional trade throughout the interwar period (1913-1950). We analyze five national cases: Argentina, Bolivia, Brazil, Chile and Peru. As far as we know, this is the first paper in the literature on intraregional trade during the interwar period. There are other papers on intraregional trade in Latin America, but they focus on the period after the 1960s. The analysis of intraregional trade in the interwar period is also useful to the Latin American industrialization debate. Given the disruption in world trade flows and the existence of some industrial capacity, the paper looks at any possible increase in intra-industry trade. There are two main conclusions: a) with the exception of the World War periods, intraregional trade has been low since 1913; b) in general, intraregional trade reflects the overall trade specialization: there is a high concentration of low value added products.

JEL codes: N46, N76, F15.

Key words: regional integration, international trade, Latin American economic history, trade agreements, the World Wars, the Great Depression.
Introduction

Over time, the political objectives that guide South American regional integration have changed. During the first wave of trade agreements in the 1960s, the main goal was import substitution. Under a cepalian vision, the idea was to encourage the internal industrialization process. However, the relative failure of these agreements and the impact of the 1980s debt crisis determined a strong change in the regionalization objectives. Hence, in the 1990s, the main idea became export substitution, based on the experience of the Asiatic “tigers”.

In relation to this, Bulmer-Thomas talks about two Latin-American kinds of regionalism: the “old” one from the 1960s, which was based on import substitution industrialization (ISI); and the “new” one from the 1990s, based on manufacture exportation.\(^1\) He focused on the impact of trade integration agreements throughout the 1990s and stated that MERCOSUR was the main leader of this process, as it reached around 20% of total trade. The Central American Trade Agreement (CACM) had around 15%, the Andean Community 10% and CARICOM less than 5%. It is true that NAFTA reached even higher levels of intraregional trade (40%). However, this success was driven by the United States’ important role as a trade partner. In general terms, intraregional trade peaked in around 1999, when it accounted for 20% of total Latin American trade. This level then decreased as a result of the Asiatic crisis and only recently reached the peak of 1999 again.\(^2\) Thus, aside from NAFTA, it is clear that Latin America trade integration is still too modest.

Surprisingly, these figures do not exceed those of the Second World War. Latin American integration was first encouraged during this period, as traditional imports from the USA and Europe were interrupted. Given the increase in commodity exports, Latin American countries could satisfy internal demand by buying from neighboring

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countries. Thus, by 1945, 25.6% of all Latin American imports were intraregional, while intraregional export levels reached 16.6% of total exports.\(^3\)

Paradoxically, trade integration reached its peak before trade integration agreements had been signed. To understand this fact, the present paper examines intraregional trade throughout the interwar period (1913-1950). Specifically, we analyze five cases: Argentina, Bolivia, Brazil, Chile and Peru. As far as we know, this is the first paper to address this topic. Other papers examine Latin American intraregional trade, but they focus on the post 1960s period.\(^4\)

Furthermore, the analysis of intraregional trade in the interwar period is useful to the Latin American industrialization debate.\(^5\) The interwar period can be considered a good context for fostering industrial growth in Latin America. On one hand, war and world trade disruptions could have signified *de facto* protection against competition from the more industrialized economies. On the other hand, the interwar period offered to Latin America what Williamson calls “*Dutch health*”.\(^6\) Of course, disruptions in international trade could also have had negative effects on Latin America industries and reduced the availability of key inputs. Nonetheless, this last limitation could have been overcome by an increase in intra-industrial trade among Latin American countries. Hence, given the disruption in world trade flows and the existence of some industrial capacity, the paper looks at whether intraregional trade specialization was different from the overall trade specialization: trade based on manufactures instead of commodities or low value added products.\(^7\)

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\(^4\) Calderón, Chong, and Stein, *Trade Intensity and Business Cycle Synchronization: are Developing Countries any Different?*.


\(^6\) While it is true that the trade worsening between 1870 and 1930 affected export purchasing power, at the same time it raised the relative price of manufactured goods in the local market. That is, trade worsening gave an incentive to local industries. Williamson, *Industrial Catching up in the Poor Periphery 1870-1975*.

The paper is organized as follows. First, the database and the sample are presented. Second, we analyze the overall trade development. Third, we focus on bilateral trade intensity rates. This initial approach allows us to compare the results for 1913-1950 with the post 1960s. Fourth, we present the intraregional trade percentages for each one of the countries considered. These figures allow us to compare the results from the interwar period with those of the 1960s and the 1990s. As a result, we can evaluate the impact on integration of the several trade agreements made since the 1960s. Fifth, we analyze the composition of the most relevant intraregional trade flows. The final section presents the main conclusions.

The database

The use of historic trade statistics is not always straightforward. They may be inaccurate, difficult to compare, and have limited temporal coverage. Consequently, trade statistics have frequently been reconstructed using official sources from the main exporters in the world, i.e. the United States, the United Kingdom and Germany (or the G3) for the study period. This has been done partly for reasons of reliability. For example, Federico and Tena (1991) and Tena (1991, 1992) found a positive correlation between economic development and statistical reliability. This methodology assures the use of homogenous classifications. It also enables us to extend the temporal and geographical coverage. Furthermore, it is a convenient strategy, as statistical sources from different countries do not need to be checked.

Instead of the main exporters’ trade statistics, the paper is based on Latin American sources. There was no choice in this matter, as we are interested in intraregional trade and these flows are not covered by G3 statistics. In fact, the reconstruction of Latin American trade using data from its main trade partners is one of the main reasons why intraregional trade has been neglected in literature on the region’s economic history before the 1960s. In contrast, the temporal and spatial coverage of Latin America’s own statistics has increased significantly since the early twentieth century. Furthermore,

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Latin American official statistics have been qualified as reasonably good in previous papers⁹ and have recently been found to be more accurate for most countries in the study period.¹⁰

The paper analyses intraregional trade in five South American countries: Argentina, Bolivia, Brazil, Chile and Peru. Although Latin American statistics have reasonable levels of statistical accuracy, not all countries have the same reliability level, as mentioned before.¹¹ The present paper has prioritized Chilean official statistics for two main reasons. First, Chilean sources are widely recognized as highly accurate in the Latin American context. Second, they report exports and imports in f.o.b prices, which means we can use both sides of trade as useful data for this study. Therefore, all bilateral flows in which Chile is considered have been reconstructed using Chilean information. We also used Bolivian statistics for all the bilateral flows in which Bolivia is considered, except the Bolivian-Chilean flows. We also analyzed Peruvian and Brazilian statistics. Due to problems with the value system of its official statistics, we totally reconstructed Argentinean trade flows using its trade partners’ statistics. In sum, the database is composed of 1,480 bilateral trade flows. Exports and imports have been considered separately. To compare the data among different countries and to calculate aggregate figures for the whole region, all the information is expressed in constant dollars.

There are several reasons for selecting the above country sample. On one hand, it was chosen to take into account historical trade relations. We considered the historiographical tradition in Latin America, which emphasizes the existence of a dense trade network between southern Peru, northern Chile, northern Argentina and Bolivia.

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¹⁰ Antonio Tena-Junguito and Henry Willebald, What Do We Know About the International Trade Integration of the American Continent between 1820 and 1940?, in CLADHE II (Mexico DF, Mexico.: 2010).

¹¹ The prioritization of the Latin American trade statistics was based on José Peres Cajías, Marc Badia-Miró, and Anna Carreras-Marín, Comercio Intrarregional en la América Latina de Entreguerras. ¿Una Oportunidad Perdida? Los Casos de Argentina, Bolivia, Brasil, Chile y Perú, in X Congreso Internacional de la AEHE. Sesión 15: América Latina ante la globalización, Carmona, Spain: 2011.
since colonial times. According to this literature, intraregional trade was also significant during post-independence and even during the First Globalization. The sample was also chosen to reflect the present situation. We wanted to explore the trade relations between Brazil and Argentina before trade agreements were signed. Finally, Bolivia was introduced to include greater variation in transport costs. Although the term “South America” is used to characterize the country sample throughout this paper, two important countries are lacking: Paraguay and Uruguay. These countries were excluded from the sample due to lack of trade information in the first case, and accuracy problems caused by transit trade in the second case.

**Development of total trade (1913-50)**

During the interwar period, the development of total trade highlights the impact of three external shocks: the First World War, the Great Depression and the Second World War (see Figure 1). While the Great Depression had a negative effect on total trade, the World Wars had a positive one. The literature has focused closely on the first effect, whilst this paper is more concerned with the last. This paper does not consider the decrease caused by the Great Depression, but looks to identify whether the total trade increase during the World Wars and the 1920s led to an increase in intraregional trade in Latin America.

Many authors have explained the changes in trade among Latin American countries and their main trade partners that were due to the First World War. The resources lottery

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15 As a result of transit trade-related problems with Uruguay’s statistics, we excluded this country from the present study.
16 This issue is not analyzed in the present work, but in a study which identifies the determinants of intraregional trade: José Peres Cajás, Marc Badia-Miró, and Anna Carreras-Márín, *Regional Trade Integration in Latin America between the World Wars: A Missed Opportunity?*, in European Historical Economics Society Conference, Dublin, Ireland: 2011.
drove the performance of the export sector in South American countries during the war and the 1920s. At the same time, the Net Barter Trade Terms (NBTT) started to decline in favor of export countries. However, as long as our focus is on intraregional trade, one question arises: what happened to the trade terms among Latin American countries? This is an unresolved problem. The importance of non-manufactured products in trade forces us to make a deeper analysis in the future.

Despite the decline in NBTT between Latin America and its developed partners, the share of some commodity exports increased during the 1920s (except in Brazil), partly due to the increase in intraregional trade. This reinforced the export-led model. However, the changes in commodity prices determined the real impact of this expansion on the economy. At the same time, financial instability due to the collapse of the gold standard affected the balance of payments and the equilibrium of the public sector budget.

Figure 2 splits the total trade into imports and exports. Although imports rose, it is clear that the increase during the World Wars was mainly led by exports. Here, we aim to identify the composition of this increase. What proportion of exports was destined to meet the global demand for commodities and how much, if any, was destined to increase intraregional trade?

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19 Luís Bértola and Pablo Gerchunoff, *Institucionalidad y Desarrollo Económico en América Latina*, 433 vols., Documentos de Proyectos (CEPAL / ECLAC, 2011) shows different patterns for Chile, Peru and Bolivia. While Chile and Peru recovered the export levels found at the end of the nineteenth century, Bolivia had some problems which were compounded by the Great Depression.


21 Bulmer-Thomas, *The Economic History of Latin America since Independence*. 8
Figure 1. Total trade of Argentina, Chile, Peru, Bolivia and Brazil
(millions of USA dollars, constant prices from 1926)
Values in index numbers 1913= 100

Sources: MOXLAD corrected by the prices of Hanes, C. (2006)²²

Figure 2. Trade from Argentina, Chile, Peru, Bolivia and Brazil
(millions of USA dollars, constant prices from 1926)

An analysis of total trade development in these South American countries reveals the following. During the two wars, trade increased everywhere. However, total trade during WWII was twice that in WWI in Argentina, Bolivia and Brazil. Furthermore, the collapse in trade due to the Great Depression was widespread, but was greater in Argentina, Chile and Peru, partially due to the positive development of trade during the 1920s.

As mentioned in the introduction, one of the aims of this paper is to check whether intraregional trade was of a different nature to total trade. In relation to this issue, there is some degree of consensus about the stages of industrial consolidation in Latin America. However, there is less agreement about the strength of each of these stages and the driving forces behind them. While some authors claim that industry was consolidated in several countries before the First World War or the Second World

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24 In general terms, four stages have been proposed. The first one was the result of export expansion and market integration during the first globalization. The second was the response to the collapse of the world market during the interwar period. The third started in the late 1940s and was characterized by the rise of explicit state programs on import substitution. Finally, the “mature” stage began in the early 1960s. Enrique Cardenas, Jose Antonio Ocampo, and Rosemary Thorp, *An Economic History of Twentieth-Century Latin America. 3. Industrialization and the State in Latin America: The Postwar Years*, vol. 3, New York: Palgrave, 2000.

25 Williamson, "Industrial Catching up in the Poor Periphery 1870-1975."
War, others warn that industrial growth must not be confused with industrialization. This is a lively debate in regional and national terms. For example, in the Chilean case, some authors claim that industrialization took off during the interwar period. However, recent evidence casts doubt on this claim. The identification of any relevant trade flow based on manufactured goods could be used as key input in this debate.

Whatever the controversies, it is critical to prove that intraregional trade can be based on manufactured goods. Consequently, data on industrial development must be checked. In the 1960s, it was claimed that industrial growth during the interwar period was considerable in Argentina, Brazil and Chile. This was confirmed by Bulmer-Thomas, who stated that in the Second World War, these countries, together with Colombia and Mexico, had a modern industrial base that could lead to an import substitution process for manufactured goods. It has been suggested that Peru also had a relatively mature industrial base.

These ideas are confirmed by looking at new data on industrial growth (see Table 1), which was notable in the analyzed countries both before and during the interwar period (see column A in Table 1). However, it is more illustrative to assess this industrial growth in relation to that of Germany, the United States and the United Kingdom – the main industrial producers of the time. This has been done using a ratio (see column B in Table 1). Instead of an increase, the ratio shows a clear decrease in Chile since the nineteenth century. In Peru, industrial growth in the interwar period was characterized by relative stagnation, rather than clear expansion. In contrast, the new information confirms strong industrial development in Argentina and Brazil. Therefore, the data

26 Haber, The Political Economy of Latin American Industrialization.
29 Cristián Ducoing, César Yañez, and José Jofré, La Industrialización por Sustitución de Importaciones y la Frustración de la Modernización Económica. Chile 1880 – 2000, in CLADHE II (Mexico DF; Mexico: 2010).
31 Bulmer-Thomas, Regional Integration in Latin America before the Debt Crisis: LAFTA, CACM and the Andean Pact, pp. 231.
again suggest that intra-industry trade was an economic possibility throughout the interwar period, at least in some countries.  

Table 1. Industrial Growth in South America, 1870-1975

<table>
<thead>
<tr>
<th></th>
<th>A. Industrial Output Growth (% per annum)</th>
<th>B. Industrial Output Growth relative to leaders (% per annum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>6.55</td>
<td>8.91</td>
</tr>
<tr>
<td>Brazil</td>
<td>n.a.</td>
<td>5.75</td>
</tr>
<tr>
<td>Chile</td>
<td>7.09</td>
<td>1.74</td>
</tr>
<tr>
<td>Peru</td>
<td>n.a.</td>
<td>6.19</td>
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</tbody>
</table>

Sources: Williamson (2011: 47, 50)

The next sections explore these issues. First, we evaluate intraregional trade development during the interwar period in two ways: we look at the development of trade intensity ratios in the long term (1913-1990); and we measure the weight of intraregional trade out of total trade for all the countries analyzed in this paper. Then, we explore the intraregional trade composition. Taking certain years as benchmarks, the study of trade composition can be used to assess the existence of a different trade pattern within South America and between South America and developed partners.

Trade intensity rates throughout the twentieth century: a story of stagnation

Calculations of bilateral trade intensity rates can be used to analyze long-term intraregional commerce. Different formulas are suitable for these calculations. In the present paper, the following expression was used:

$$T_{i,j,t}^F = \ln \left( \frac{1}{T} \sum_{t} \frac{1+f_{i,j,t}}{F_{i,t}+F_{j,t}} \right)$$

where the bilateral trade intensity between country $i$ and country $j$ is calculated as a ten-year average ($T = 10$ years), $f$ is the trade flow among the countries (exports plus imports in USA dollars) and $F$ represents the total trade for each country.

33 It is true that industrial development in Bolivia was minor in relation to the other countries. However, industry still grew considerably during this period (Herranz and Peres Cajías, 2011).

The use of this index for the interwar period allows us to analyze the development of intraregional trade from 1913 to 1990 (see Figure 3), by comparing our data with that of Calderon et al. This long-term approach shows high stability in the levels of many of the intensity trade rates that were analyzed (Argentina-Peru, Bolivia-Brazil and Peru-Brazil). In other cases, a moderate tendency to increase can be identified (Argentina-Chile, Argentina-Bolivia, Bolivia-Chile and Chile-Brazil). Similarly, the ratios for Brazil and Argentina were highest during the interwar period and after the 1960s. During the Second World War, bilateral trade between Argentina and Brazil was favored by a regional economic cooperation plan (the Pinedo Plan). Although this plan was not fully implemented, it did lead to a significant reduction in bilateral custom duty prices. It also reveals the importance of preferential trade agreements between these two countries long before the regional trade integration efforts of the 1960s. This plan helps us to understand the increase in this particular bilateral flow, and includes an institutional framework in our discussion. Although we argue that intraregional trade in South America peaked well before institutional arrangements for regional integration were made, we cannot completely deny the institutional forces behind this phenomenon. More precisely, we conceive institutional efforts to increase regional integration as multilateral agreements that complemented the previous bilateral preferential treaties.

However, our information shows that trade between Argentina and Brazil was high even before the Pinedo Plan. The long-term bilateral relation between Peru and Chile was a bigger surprise, particularly as intensity trade ratios decreased considerably from the interwar to the post-1960s period. The strong trade relations between Argentina and Brazil have been a constant and growing feature of the regional integration process. In contrast, the high Peruvian-Chilean trade in the interwar period was specific to that time.

Figure 3. Trade intensity rates. A comparison of 1910-50 and 1960-90

35 Calderón, Chong, and Stein, *Trade Intensity and Business Cycle Synchronization: are Developing Countries any Different?* tried to explain the relation between trade integration and economic cycle synchronization in different countries around the world. Their study emphasizes that, although the correlation between these variables is real and positive, it is lower in developing countries than in developed ones. This is explained by the fact that the intra-industrial weight of bilateral trade is lower between developing countries.

Another way to visualize the development of intraregional trade is to look at the trade intensity rate averages for each country (see Figure 4). This calculation allows us to identify intraregional trade trends, beyond each particular bilateral trade flow. Intraregional trade stagnation is more evident when we use this approach. In general terms, the level in the 1990s was slightly higher than that of the 1910s, similar to the 1920s and 1930s, but lower than the 1940s. This general pattern is also evident in Bolivia and Chile, but is somewhat different in Argentina and Brazil – the 1990s levels are lower than those of the 1940s. However, the most remarkable fact is again the decrease in the Peruvian case.

Bilateral trade intensity ratios allow us to analyze the long-term development of intraregional trade. However, they do not enable us to understand and measure the weight of intraregional trade over total trade. Consequently, the following section presents alternative intraregional calculations based on total trade percentages.  

Figure 4. Trade intensity rates, 1910-50 versus 1960-90, country averages

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37 Transit trade data is not included in this calculation, to ensure the accuracy of our results.
Intraregional trade share of total trade

When we consider the entire sample, the *relative* analysis of intraregional trade confirms the stagnation described in the last section (see Figure 5). On average, intraregional trade was around 10-15% of total trade. These levels are quite similar to those reached after the signature of trade agreements. However, the study of trade percentages highlights the incidence of external shocks on intraregional trade. The three external shocks identified above – the World Wars and the Great Depression – favored an increase in intraregional trade. It is true that these increases are not strictly similar. When the percentages are analyzed, we can see that a relative increase may not be the result of an absolute increase in the amount of intraregional trade, but of an absolute decrease in other variables. If we look at Figures 1 and 2, this explanation applies to the period after the 1930s increase in intraregional trade. During this period, total trade decreased in absolute terms, while intraregional trade held constant. Consequently, intraregional trade reached 25% during the Great Depression. 38 In contrast, intraregional trade increased in relative and absolute terms during both World Wars. During the First World War, intraregional trade levels were just above 10%. The only exception was

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38 In this case, the increase in intraregional trade share over total trade could be explained by the collapse of trade between South America and its main trade partners. That is, the increasing share is the result of a smaller decrease in trade.
1918, when the level was 15%. During the Second World War, the expansion was greater and intraregional trade reached 30% of total trade.

Figure 5. Intraregional trade over total trade, regional average (percentage)

If we separate the data on imports and exports, we can see that intraregional imports were clearly greater than intraregional exports (see Figures 6 and 7). An examination of intraregional imports shows that the three external shocks generated a relative increase in intraregional flows (see Figure 6). As mentioned above, the effect was not the same in absolute terms. While the relative increases during the Word Wars were also absolute (see Figure 2), the relative increase during the Great Depression mainly shows that intraregional flows were maintained in a general framework of trade contraction. However, even if the greatest increase in intraregional imports took place during the Second World War, we can say that external trade shocks were, if not beneficial, at least not harmful for intraregional imports.

This general pattern was not homogenous for every country (see Figure 6). Bolivia had the highest levels in terms of intraregional imports: 50% during the First World War, 30% during the Great Depression and 60% during the Second World War. In the Brazilian case, the relative incidence of intraregional imports peaked to a similar level at 25% during both wars. More surprising is the fact that the intraregional import ratio rose

39 This is due to the destination of Latin American exports (Europe and the USA).
to 50% during the Great Depression. In relation to the other countries, the levels of intraregional imports were modest during the First World War (15% for Chile, 12% for Argentina and 8% for Peru), but grew considerably during the Second World War (50% for Chile, 41% for Argentina and 31% for Peru).40

**Figure 6. Intraregional trade percentage, over each country’s total imports**

It is not always possible to identify a positive effect of the external shocks on intraregional trade exports. For example, the ratio for Bolivian intraregional exports did not change appreciably throughout the interwar period. We can only clearly see a positive effect of the First World War in the case of Brazil and Chile. However, these effects were extremely transitory. The Great Depression led to a considerable decrease in Peruvian intraregional exports. This is a critical fact, given that Peru had a higher weight of intraregional trade exports during the interwar period, equivalent to 22% of total Peruvian exports during the First World War. Peruvian intraregional trade exports increased during the 1920s to reach 30%, but decreased to almost 5% in 1935. It was not until the beginning of Second World War that the pre-Great Depression levels were recovered. In relation to Argentina, Brazil and Chile, a significant increase in intraregional trade exports was only identifiable in the case of the Second World War. This is particularly true in the Argentinian case, where the ratio increased from 5% in the First World War to almost 16% during the Second World War.

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40 Figures only increased (by 20%) for Chile as a result of the Great Depression.
The information presented above confirms the pattern of long-term stagnation in intraregional trade and reveals the exceptionality of external shocks, particularly that of the Second World War. The pattern identified in our sample can probably be extended to all of Latin America. As stated by Bulmer-Thomas, \(^{41}\) Latin American intraregional trade represented 16.6% of total exports and 25.6% of total imports in 1945. When the Second World War ended, those percentages were considerably reduced. They remained low throughout the 1950s. In the 1960s, intraregional trade represented 8% of exports and 9.9% of imports. The first ISI politics led to an increase in tariff barriers on products exported from outside the region and products from other Latin American countries. In this context, ECLAC perceived that the loss of a neighbor’s market could have a negative impact on the industrialization process. Consequently, this Commission started to encourage regional trade agreements.

The first of these agreements was the Latin American Free Trade Association (ALALC)\(^{42}\). This included Argentina, Brazil, Chile, Mexico, Paraguay, Peru and Uruguay. Subsequently, Colombia, Ecuador, Venezuela and Bolivia were incorporated. Intraregional trade among all these countries reached 7.7% of total exports in 1960:

\(^{41}\) Bulmer-Thomas, *Regional Integration in Latin America before the Debt Crisis: LAFTA, CACM and the Andean Pact*, pp. 231.
\(^{42}\) In Spanish, *Asociación Latinoamericana de Libre Comercio*. 
9.9% in 1970, 13.6% in 1980. It then dropped to 8.3% in 1985. In the 1980s, the ALAC was replaced by the Latin American Integration Association (ALADI)\textsuperscript{43}, but this change did not lead to greater economic integration. In sum, these levels can be qualified as modest \textit{per se}, but even more so if they are contrasted with those reached during the interwar period.

In 1969, another integration organization was created in parallel to ALALC: the Andean Pact\textsuperscript{44}. Bolivia, Chile, Colombia, Ecuador and Peru were original members of this pact; Venezuela joined at a later date. In 1976, Augusto Pinochet decided that Chile should leave the pact. The results of intraregional trade in the case of the Andean Pact were much more modest than those attained by ALALC. In 1970, 3.4% of exports were intraregional, while in 1975 this figure rose to 5.5%. However, in 1980, the percentage decreased to 3.7% and a few years later, in 1985, it went down even further to 3.2\%\textsuperscript{45}

Throughout the 1990s, the Andean Pact trade flows were higher than in the 1980s, but represented only 9.3\% of the total trade of their member countries. At the beginning of this decade, MERCOSUR\textsuperscript{46} (the South American Common Market) was created as a result of bilateral trade agreements between Argentina and Brazil. Subsequently, Paraguay and Uruguay were incorporated. The four nations signed an agreement in 1991. Three years later, their intraregional trade represented 18.6\% of their exports\textsuperscript{47}. By 1995, MERCOSUR had two more members: Bolivia and Chile. The institutional efforts to promote trade integration were evident and may have been partially responsible for the substantial increase in regional trade percentages. Nevertheless, the highest levels of intraregional trade as a percentage of total Latin American trade reached 20\%.\textsuperscript{48} These levels were similar to those reached during the First World War and lower than those attained during the Second World War.

In comparison with the post 1960s, the interwar period could be appreciated as positive in terms of regional integration. However, we must not forget the context of this period.

\textsuperscript{43} In Spanish, \textit{Asociación Latinoamericana de Integración}.
\textsuperscript{44} In Spanish, \textit{Comunidad Andina}.
\textsuperscript{45} Bulmer-Thomas, \textit{Regional Integration in Latin America before the Debt Crisis: LAFTA, CACM and the Andean Pact}, pp. 245
\textsuperscript{46} In Spanish, \textit{Mercado Común del Sur}.
\textsuperscript{47} Bulmer-Thomas, \textit{Regional Integration in Latin America before the Debt Crisis: LAFTA, CACM and the Andean Pact}, pp. 258
\textsuperscript{48} Bulmer-Thomas, \textit{Debate: Regional Integration in Latin America and the Caribbean}.
In the next section, an analysis of trade composition casts doubt on the achievements of interwar integration.

**Intraregional trade composition: was there any sustainable diversification?**

Theoretically, all trade integration processes could have two effects: create new trade flows or divert existing ones. The previous sections showed that intraregional trade flows grew in response to external trade shocks. At first glance, this suggests that a trade diversion process had occurred, at least during those years. In other words, European trade importation was replaced by imports from South American neighbors. However, the data availability does not allow us to confirm or reject any trade diversion processes, using an econometric approach such as that applied in studies that use more up-to-date trade data. However, an analysis of the composition of intraregional flows can provide some evidence on this issue, with some clues from a qualitative approach.

The goal of this section is to check whether Latin American countries took advantage of trade disruptions to global markets. The idea is to analyze whether the intraregional trade pattern was different from the overall trade specialization. Throughout the interwar period, South American trade was based on commodities exports. This was a general pattern, in which there was some variation. For example, Bolivia was the least diversified exporter, as tin exports made up 70% of its total exports. Chilean exports were also highly concentrated on mining, mainly of copper and nitrates. Argentinian and Brazilian exports were more diversified. Argentina sold wool, wheat, meat, linen seeds and leather. Brazil exported agricultural products (sugar, cacao, cotton and rubber) and mineral products (iron). Peru had the most diversified export sector, selling different mining and agricultural products (cotton, sugar, wool, copper, rubber, lead, oil and derivatives, zinc and silver). Therefore, the idea is to check whether intraregional exports were only composed of these kinds of commodities or low-value added products, or whether they contained a higher share of manufactures.

As mentioned above, this change in trade pattern was a real possibility in the region, not only due to the special international context, but also to the relevant industrial

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development. The expectations of a new trade pattern are even higher if some historiographical precedents are considered. For example, in 1945, 11.9% of Brazilian exports were destined to Argentina and 43% of them were manufactured products. While it is true that bilateral trade levels subsequently decreased, it was also verified that a large proportion of bilateral trade was still composed of manufactured products (26.7% in 1965; 41.7% in 1970 and 45.2% in 1975). Therefore, international institutions, such as ECLAC, are promoting the growth of intraregional trade as it is supposed to be composed of more value added goods.

Given these precedents, a trade composition analysis was carried out for all the countries analyzed in this paper. The entire sample was considered to identify any relevant process beyond the Brazilian and Argentinian cases. Likewise, the interwar period was studied to test the sustainability of this hypothetical higher value added trade. Two strategies were used to analyze the trade composition. First, a concentration index was built under the assumption that product diversification could reveal a new trade pattern. Then, in order to prove this change, a deeper product analysis was carried out.

Chilean intraregional exports show a diversification trend (see Table 2). However, this diversification process was not really the result of any new trade pattern. The product analysis for 1944 helps to prove this. The main exports were: gold coins, iron and copper to Argentina; copper, saltpeter and malt to Brazil; rice, malt and explosives to Bolivia; rice, saltpeter and malt to Peru. Therefore, as in the case of the total exports, Chilean intraregional exports were mainly composed of primary products from mining and agriculture. In this context, the absence of any manufactured products questions the possibility of any new trade pattern.

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51 While exports to Argentina and Brazil tended to involve higher diversification, exports to Peru and Bolivia remained highly concentrated. However, the former flows were greater than the latter. In 1915, Argentina absorbed 3% of Chilean exports; while this figure was lower than 1% in the other cases. In 1925 and 1935, the Argentinian ratio decreased to 1.5% and 1.4% and remained lower than 1% in the other cases. In 1944, the relative importance of each country increased (Argentina 8.25% of total exports; Brazil, 3.84%; Bolivia, 2.61%; and Peru, 8.25%). The relative importance of each country decreased once the war ended, but Argentina and Brazil remained the most important countries (both absorbing 4% of total exports, while exports to Bolivia and Peru were less than 1% of total exports). Therefore, given the relative importance of each flow, we can identify a general diversification trend.
52 This year is taken as a benchmark because of the greater relevance of South American markets for Chilean exports.
Table 2. Concentration of Chilean intraregional exports, with the first three products as a percentage of total flow

<table>
<thead>
<tr>
<th>Destination</th>
<th>1915</th>
<th>1925</th>
<th>1935</th>
<th>1944</th>
<th>1949</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>64.55</td>
<td>41.96</td>
<td>32.88</td>
<td>34.96</td>
<td>36.68</td>
</tr>
<tr>
<td>Brazil</td>
<td>92.62*</td>
<td>97.56</td>
<td>64.75</td>
<td>41.65</td>
<td>55.49</td>
</tr>
<tr>
<td>Peru</td>
<td>60.21</td>
<td>65.63</td>
<td>23.39</td>
<td>54.22</td>
<td>59.97</td>
</tr>
<tr>
<td>Bolivia</td>
<td>46.12</td>
<td>73.71</td>
<td>54.48</td>
<td>55.27</td>
<td>69.29</td>
</tr>
</tbody>
</table>

* Only two products: walnut and raisins

Sources: Chilean Official Trade Statistics

Chilean intraregional imports remained at more or less the same concentration level throughout the interwar period (see Table 3). However, there were some changes in product composition.\(^{53}\) In 1944, which was the most important year in terms of intraregional trade levels and diversification, imports from Argentina were mainly comprised of cows, sunflowers seeds and wool cloths. The most important imports from Peru were sugar, oil and raw cotton. In the case of Bolivia, imports were minimal and were mainly traditional minerals (tin and silver). However, imports to Brazil were more complex and included cotton cloth.

Table 3. The concentration of Chilean intraregional imports, with the first three products as a percentage of total flow

<table>
<thead>
<tr>
<th>Origin</th>
<th>1915</th>
<th>1925</th>
<th>1935</th>
<th>1944</th>
<th>1949</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>63.65</td>
<td>52.32</td>
<td>47.46</td>
<td>41.32</td>
<td>74.08</td>
</tr>
<tr>
<td>Brazil</td>
<td>99.27</td>
<td>97.09</td>
<td>98.39</td>
<td>65.45</td>
<td>76.26</td>
</tr>
<tr>
<td>Peru</td>
<td>79.61</td>
<td>87.13</td>
<td>78.71</td>
<td>76.10</td>
<td>73.98</td>
</tr>
<tr>
<td>Bolivia</td>
<td>67.91</td>
<td>62.13</td>
<td>68.60</td>
<td>65.86</td>
<td>79.69</td>
</tr>
</tbody>
</table>

Sources: Chilean Official Trade Statistics

The inclusion of sugar, oil, raw cotton, cotton and wool cloth could be indicative of a new trade pattern that was more dependent on manufactures. Sugar, which is a manufacture, could be cited as an example of the strength of Peruvian industry. Oil and raw cotton imports show that Chile’s industrial demand was supplied by a foreign country. Finally, the export of cotton and wool cloth are an indicator of the competitiveness of Argentinian and Brazilian industry, whose productivity level was

\(^{53}\) In 1915, the main South American imports came from Peru and were equivalent to 8.52% of total imports. This was followed by Argentina (4.39%), Brazil and Bolivia (which represented less than 1% of total imports). In 1925 and 1935, the importance of imports from Peru and Argentina decreased (7 and 3%), while imports from the other two countries remained under 1%. In 1944, the relative importance of each country except Bolivia increased (17.18% for Argentina; 16.61% for Peru; 9.25% for Brazil). Finally, in 1949, the relative importance decreased again (to 10.72% for Peru; 4.39% for Argentina; 4.25% for Brazil; and 0.06% for Bolivia).
high enough to enter markets that were traditionally supplied by the USA and European countries.

How new and sustainable were these flows? In relation to Peruvian exports to Chile, it is true that sugar is a manufacture, but it is also true that is not a very complex one. Furthermore, sugar exports from Peru to Chile were not at all new. In fact, they had been at a similarly high level since colonial times. Oil and raw cotton exports are probably a better indicator of a new intraregional trade pattern. Raw cotton implied an intra-industry trade relationship, and oil is a sign of the growing energy independence of South America from US or European imports.

The study of Peruvian and Chilean exchanges is critical, given their regional relevance (see Figures 3 and 7). To assess a new trade pattern in one of the most relevant regional exchanges, we analyzed the product composition for these two countries in more depth (see Table 4). This analysis confirmed the Chilean specialization in mining and agricultural products. It also revealed the continuing importance of sugar exports from Peru to Chile. However, it also showed the relevance of a new key input for industries and modernization: oil. Oil, which makes up a considerable proportion of intraregional trade between these two countries, supports the hypothesis of an emerging industrial process in the region during the study period.

| Table 4. Chilean and Peruvian bilateral trade composition, 1915 and 1944 |
|-----------------|-------------|-------------|-------------|
| Exports from    | 1915        | 1944        |
| Chile to Peru   |             |             |
| Salt peter (42.37%) | Rice (24.25%) |
| Barley (9.47%)   | Saltpeter (16.25%) |
| Raisins (8.37%)  | Barley (13.71%) |
| Olives (4.33%)   | Crockery (5.20%) |
| Horses (3.81%)   | Raulí wood (4.96%) |
| Quillay (2.64%)  | Pine wood (2.96%) |
| Sheep (2.18%)    | Linghe wood (2.44%) |
|                 | Apples (2.20%) |
|                 | Oak wood (2.07%) |
| Peru to Chile   |             |             |
| Sugar (50.37%)   | Sugar (44.86%) |
| Raw oil (16.88%) | Raw oil (16.40%) |
| Cows (12.37%)    | Cotton (14.84%) |
| Rice (4.60%)     | Benzene (10.7%) |
| Cotton seeds (3.23%) | Diesel (3.27%) |
| White sugar (3.12%) | Fuel oil (2.61%) |

Sources: Chilean Official Trade Statistics

Cloth exports from Brazil and Argentina to Chile are clearly a new trade feature. However, neither the magnitude nor sustainability of this trade were high enough to consider that it represented a new pattern.

The supply side of the Bolivian case does not provide us with any new information: Bolivian intraregional exports were minimal and almost constant throughout the interwar period. In contrast, the relevance of intraregional imports makes Bolivia interesting as a case study. In this context, imports from Brazil were the most diversified (see Table 4), but only made up a very small percentage of total trade with Bolivia (3.5% in 1917; 1.07% in 1927; 0.7% in 1931; 9.05% in 1945; 2.07% in 1950). The only exception was the Second World War, when Brazil exported some manufactures (wool cloth, rubber tires and sugar). However, once the Second World War had ended, these flows returned to their previous low levels.

In contrast, the relative importance of Peruvian imports was considerable (13.5% of total Bolivian imports in 1917; 5.13% in 1927; 11.68% in 1931; 19% in 1945; 10.82% in 1950), but their concentration level was constantly high. This reflects the importance of sugar imports and the relevance of the Peruvian sugar industry. However, it also shows the decline of Bolivia’s own sugar industry, which started in 1900 and lasted until the 1960s.

<table>
<thead>
<tr>
<th>Imports from</th>
<th>1917</th>
<th>1927</th>
<th>1931</th>
<th>1945</th>
<th>1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>60.61</td>
<td>38.07</td>
<td>35.99</td>
<td>32.25</td>
<td>47.38</td>
</tr>
<tr>
<td>Brazil</td>
<td>19.87</td>
<td>28.67</td>
<td>n.d.</td>
<td>38.53</td>
<td>24.75</td>
</tr>
<tr>
<td>Peru</td>
<td>76.52*</td>
<td>67.63</td>
<td>71.37</td>
<td>69.18</td>
<td>77.22*</td>
</tr>
</tbody>
</table>

*Only one product: sugar

Sources: Bolivian Trade Official Statistics

The Bolivian sugar industry’s decline was part of a broader process of long-term agricultural stagnation. This process can be verified by looking at Bolivian imports from Argentina. These were not inconsiderable (6.44% of total trade in 1917; 7.91% in 1927; 10.81% in 1931; 25.3% in 1945 and 17.66% in 1950) and were comprised almost exclusively of agricultural products (cows, sheep, wool and wheat) or foodstuffs (wheat

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flour). In this context, the relevance of Bolivian intraregional trade does not necessarily prove a new trade pattern. In fact, it is probably a better indicator of the Bolivian economy’s limitations. Specifically, it indicates some kind of Dutch Disease in terms of agricultural production, i.e. the use of tin profits to buy foodstuffs in foreign markets.

Finally, the Argentinian-Brazilian bilateral flow was the biggest intraregional flow, with a very interesting composition. Brazilian exports to Argentina were much diversified (see Table 6). Furthermore, cloth exports were important. On average, they were equivalent to a fifth of Brazilian exports to Argentina, not only during WWII, but also throughout the 1940s. Given the importance of this bilateral trade and its maintenance throughout the decade, we can confirm that the Brazilian cloth industry was competitive enough to insert its products into neighboring foreign markets. Taking into account the data from Bulmer-Thomas and the review presented by Perim,57 we can apply this to other Brazilian manufacturing sectors.

<table>
<thead>
<tr>
<th>Table 6. Exports composition from Brazil to Argentina, 1942-50 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
</tr>
<tr>
<td>Cloth and its manufactures</td>
</tr>
<tr>
<td>Wood and its manufactures</td>
</tr>
<tr>
<td>Tobacco and its manufactures</td>
</tr>
<tr>
<td>Rubber and its manufactures</td>
</tr>
<tr>
<td>Iron and its manufactures</td>
</tr>
<tr>
<td>Miscellaneous</td>
</tr>
<tr>
<td>Chemicals and pharmaceuticals</td>
</tr>
<tr>
<td>Oil</td>
</tr>
<tr>
<td>Stones and pottery</td>
</tr>
<tr>
<td>Metals. without iron</td>
</tr>
<tr>
<td>Machinery and vehicles</td>
</tr>
<tr>
<td>Paper and cardboard</td>
</tr>
<tr>
<td>Drinks</td>
</tr>
</tbody>
</table>

Sources: Argentinian Official Trade Statistics

If we look at Argentinian exports to Brazil, we can identify some manufactured exports (see Table 7). During the Second World War, they were equivalent to 15% of total

Argentinian exports to Brazil. However, in contrast with the Brazilian case, they were not maintained throughout the decade. Hence, in general terms, agricultural exports were still by far the most important export from Argentina to Brazil.

Table 7. Composition of exports from Argentina to Brazil, 1942-50 (%)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>84.45</td>
<td>78.83</td>
<td>70.14</td>
<td>70.27</td>
<td>79.38</td>
<td>57.34</td>
<td>89.80</td>
<td>93.17</td>
<td>93.77</td>
<td>83.65</td>
</tr>
<tr>
<td>Manufactures</td>
<td>12.88</td>
<td>15.52</td>
<td>12.77</td>
<td>10.47</td>
<td>10.03</td>
<td>5.97</td>
<td>3.25</td>
<td>2.60</td>
<td>11.39</td>
<td></td>
</tr>
<tr>
<td>Livestock</td>
<td>2.04</td>
<td>4.89</td>
<td>10.84</td>
<td>16.67</td>
<td>8.59</td>
<td>8.17</td>
<td>3.25</td>
<td>3.01</td>
<td>3.35</td>
<td>4.54</td>
</tr>
<tr>
<td>Mining</td>
<td>0.47</td>
<td>0.47</td>
<td>3.47</td>
<td>1.91</td>
<td>0.72</td>
<td>0.70</td>
<td>0.12</td>
<td>0.12</td>
<td>0.06</td>
<td>0.16</td>
</tr>
<tr>
<td>Forest</td>
<td>0.14</td>
<td>0.11</td>
<td>1.34</td>
<td>0.25</td>
<td>0.88</td>
<td>1.31</td>
<td>0.46</td>
<td>0.12</td>
<td>0.04</td>
<td>0.07</td>
</tr>
<tr>
<td>Hunting and fishing</td>
<td>0.03</td>
<td>0.18</td>
<td>1.45</td>
<td>0.43</td>
<td>0.41</td>
<td>1.30</td>
<td>0.40</td>
<td>0.31</td>
<td>0.18</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Sources: Argentinian Official Trade Statistics

In sum, beyond some specific periods and some specific flows, it is difficult to say that the nature of intraregional trade changed during the interwar period. The Second World War years were the most important period in terms of new intraregional trade. However, most of the flows were not sustainable. The only major exception was Brazil. Our data as well as the historiographical evidence suggest that Brazil’s manufacturing sector was able to introduce cloth products in foreign markets and to compete with US or European manufactures beyond the extraordinary conditions of the World War years. Exports from Peru could also be qualified as more complex. Peru’s oil exports could help to foster economic modernization and economic growth in some South American countries. Although sugar is clearly manufactured, its low value added nature and long-term historic precedents prevent us from qualify this flow as really new.

The Argentinean and Chilean cases show a clear predominance of raw mining and agricultural exports. This is surprising, given the last reappraisal of the Argentinean manufactured sector. Finally, Bolivia emerges as an important case of intraregional trade. However, it is mainly relevant as a result of its economic weakness and dependence. Hence, in general terms, South American intraregional trade during the interwar period was, if not always highly concentrated, at least based mainly on traditional products that have been exchanged since colonial times or low value added products such as raw mining and agricultural products. This was similar to total trade during the same period. Could intraregional trade have changed this pattern at some point? This question is still open today, as intraregional trade in the region is being driven by raw materials and commodity exports to the growing Asian foreign markets.
Conclusions

The annual report of the commercial situation of Latin America and the Caribbean carried out by ECLAC for 2010\textsuperscript{58} indicates a remarkable recovery in regional trade, driven by the growing demand for raw materials and natural resources in the Asian market. However, ECLAC points out that low intraregional trade has been one of the main obstacles to the development of the region, as it could increase the added value of South American exports. Our paper makes two important contributions to this issue. First, the limited role of intraregional trade in Latin America is also observed during the interwar years, and only increased during the exceptional WWI and WWII years. However, this apparent opportunity to change the region's trade composition and diversify the growth model is only a mirage that is broken by a detailed analysis of the nature of exchanged products with higher levels of disaggregation. The only exception is the Brazilian textile industry, which represented a significant percentage of intraregional trade. For all the other countries analyzed, tradable products were strongly dependent on natural resources. The limited capacity of South American countries to increase the weight of manufacturing in its export structure seems to have continued over time. This long-term overview of the development of intraregional trade in South America may help us to understand the persistent weaknesses of commercial integration in the region.

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