The Rise of the Textile District of Buenos Aires and the Limits of Import Substitution Industrialization in the First Half of the Twentieth Century

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Introduction

One of the characteristics of the Argentine manufacturing sector throughout the twentieth century is its geographical concentration, particularly in the metropolitan region of Buenos Aires. While the country occupies an area of almost 2.8 million square kilometers, the strong dynamism of the Pampas, where meat and grain are cultivated, and the early process of urbanization involving the formation of large cities in the region of littoral, encouraged a settlement pattern of industry in a very small coastal area of Buenos Aires.

The settlement of industry around the City of Buenos Aires completed a long process which, following the end of the colonial relationship with Spain, accelerated after 1870, incorporating Argentina in the international market as a primary supplier of meat and grain. The northwest region of the country that had been the principal place of settlement soon lost favor to the Pampas region, which became the driver for the entire national economy.

This article analyzes the case of the cotton textile industry. This case presents its peculiarities, as this industry emerged relatively late in Argentina, even compared to other Latin-American economies of similar size, such as

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Received: October 2014 Accepted: September 2015

Revista de Historia Industrial N.º 66. Año XXVI. 2017. Monográfico 3

Brazil and Mexico. The literature offers two confronting explanations for this delay; firstly, influenced by structuralism and different currents of Marxist tradition, some authors hold that Argentine free trade policies and, especially, economic dependence on Great Britain explain the underdevelopment of textile industry.² In contrast, another interpretation, based on neoclassical and neo-institutionalist thought, emphasizes the disadvantages associated with the absence of cotton production until the 1920s.³

Over the past decades, some studies have investigated the problems faced by the artisanal production of textiles in the nineteenth century, the difficulties of cotton cultivation in Chaco, especially labor shortage and high transport costs, and the first attempts to establish textile mills.⁴ However, we still know little about the first stage of the modern textile industry. Less attention has been given to other problems, such as labor productivity and the competitive weakness of the Argentine business to deal with foreign competition.⁵

The concentration of the textile industry in Buenos Aires has not been analyzed. Unlike other industries, such as food and beverage, that had (and still have) important value in overall Argentine industrial production, the textile industry's raw materials were not from the Pampas region, but from areas such as Patagonia (wool) and Chaco (cotton).

Early studies of Argentina's industrial history underlined the geographic concentration of the industrial sector. Often, this theme appears as a problem to be solved in order to attenuate regional imbalances. In recent decades, studies have barely addressed the issue of geographic location. At the same time, economists have given priority attention to other dimensions of industrial development, such as economic concentration and trans-nationalization.⁷ Furthermore, several historical and anthropological studies have reduced the scale of observation to the communities defined by groups of concentrated industries, such as meat-packing houses or cement factories.8 Despite the persistence of industrial districts in various branches of the Argentine manufacturing sector, there are no studies on this subject in a historical perspective. The studies by Becattini and Porter, which reformulated the concept of Marshallian externalities, have not been discussed in relation to

- 1. Bulmer-Thomas (1994), p. 134-137; Korol & Tandeter (1999), pp. 100-101.
- 2. Dorfman (1942); Ortiz (1955); Colman (1992); Schvarzer (1996).
- 3. Petrecolla (1968); Díaz Alejandro (1975); Cortés Conde (1997).
- 4. Garavaglia & Wentzel (1989); Guy (1993, 2000); Panettieri (2000).
- 5. From the perspective of business history, see Belini (2010c).
- 6. See Dorfman (1942) and Ortiz (1955). In the 1940s the problem of industrial concentration in Buenos Aires was one of the most important worries from the point of view of the policymakers. See, for example, Ortiz (1944) and Llorens (1947).
 - Sourrouille, Kosacoff & Lucangeli (1985); Katz & Kosacoff (1989); Schvarzer (1996).
 Neiburg (1988); Lobato (2001).

its relevance to understanding the geographical concentration of Argentine industry.9

In this article, we aim to analyze the case of the development of the textile industry, with particular attention to the cotton industry. The hypothesis that we plan to sustain is that during the first half of the twentieth century, the development of the textile industry in Buenos Aires was shaped in accordance to the analysis of Alfred Marshall on the advantages of industrial concentration. During the period studied, the textile industry was highly concentrated in the city and suburbs, even more so than the food and beverage industry, which was the main branch of the manufacturing sector. Though Buenos Aires began to offer the advantages of a constant market for labor, and permitted the surge of subsidiary industries and the diffusion of improvements ("technological spill-over"), the late development of the textile industry seems to have reduced the weight of these external economies. The industrial growth assumed certain idiosyncratic characteristics consistent with the "late, late industrialization" described by Albert Hirschman. 10 The industry was structured principally to satisfy domestic demand and did not manage to increase its international competitiveness with a view to placing part of its production in the world market.

This article is divided into four sections. The first recounts the origins of the cotton textile industry in Buenos Aires, and some of the characteristics of the domestic textile market. The second section discusses the expansion of this sector between 1918 and 1945, the localization of this industry and the emergence of subsidiary industries. The third discusses changes in industrial policy and their impact during the government of Juan Domingo Peron. And finally, the fourth section will present some final reflections.

The origins of the Argentine modern textile industry

The emergence of modern textile industry was a late process, which slowly developed during the end of the nineteenth century. Indeed, while the first cotton textile operations emerged at the end of the nineteenth century, this production did not gain major importance until the second decade of the twentieth century. Two key factors explain this delay: first, Argentina did not cultivate large quantities of cotton until the 1920s. Second, low customs protection of cotton spinning mills and weaving factories raised certain obsta-

^{9.} For a discussion of this problem, see Catalan, Miranda & Muñoz (2011), pp. 9-36. About Porter's ideas and their relevance to the textile industry, Porter (1991) and Singleton (1997).

^{10.} Hirschman, (1968), p. 94.

cles. From 1870 onward, tariffs protected the establishment of clothing factories and knitting mills, but discouraged the production of yarns. Besides, others factors allow an understanding of the limits of industrial growth, such as higher wages, low labor productivity, the small size of the factories, and the existence of better opportunities for business. As a result, the development of the textile industry, and particularly the cotton branch, was delayed.

In 1914, the Third National Census revealed that the textile industry accounted for one fifth of enterprises and personal employment in the manufacturing sector, but only one tenth of capital investment and one seventh of the value of total production. Knitting mills and wool weaving factories were the most developed sectors of the textile industry in terms of investment, personal employment and the overall labor force, while the production of yarn and fabric was less advanced. In the cotton industry, one cotton mill existed with 7,000 spindles, and only nine weaving establishments with 900 employees and workers in total. In the wool industry, there was only one firm that spinning yarn for sale on the market. The census also revealed the production of traditional crafts, such as 1,500 artisanal spinners in Salta and more than 700 artisanal weavers in Salta and Catamarca.¹¹

Overall, it is estimated that the Argentine textile industry accounted for 23% of the consumption of textile. In these years, the domestic market already had certain importance. Since the last third of the nineteenth century, the successful integration of Argentina in the international market, the massive influx of immigrants and successful developments around major coastal cities such as Buenos Aires and Rosario encouraged the domestic demand for textiles. The most important item for consumption and imports was cotton textiles. The specialization of textile production in Lancashire allowed Great Britain to rapidly conquer the new textile market. The value of textile imports in Argentina surpassed Chile in 1877, the United States in 1891 and Brazil in 1903. By then, Argentina became the primary market for textiles in the Americas. 12

What were the primary features of the domestic market? In 1914, the Argentine population was only eight million. Argentina was essentially an agrarian export economy, although it became increasingly urbanized; 58% of the population lived in cities. Buenos Aires (and its suburbs), with two million inhabitants, was the largest city in the country and the tenth largest in the world. It was a modern city, and 50% of its population was foreign (mainly Italian

^{11.} REPUBLICA ARGENTINA (1917), Tercer Censo Nacional. 1914, Buenos Aires, Rosso & Cía., Vol. VII, p. 82.

^{12.} Farnie, (1979), p. 95. The situation was somewhat different in the case of wool fabrics, where the British had to face competition from the French and Germans, who were specialized in the development of better-quality fabrics and design. See Jenkins & Ponting, (1982), p. 252-253. However, nearly 50% of the imports of wool fabrics and garments came from the United Kingdom.

and Spanish immigrants), giving the city a cosmopolitan air. Rosario was the second largest city in Argentina, with two-hundred-thousand inhabitants, and the second largest port of grain exportation in the region.¹³

The increase in national wealth and the presence of foreigners led the domestic market to develop certain peculiarities. One U.S. report noted:

The demand of argentine commerce is for the best classes of merchandise, and a relative great amount of luxuries is annually imported. It should be noted by the American exporter that Argentina should not be grouped with other South American markets, and that strictly price considerations, will not alone win the trade, but that the best quality of merchandise of its kind, the state of the goods upon reaching the customers, their purchase tempting appearance, and the novelty and merit of design count for far more that merely low price and consequence low quality.¹⁴

Despite these characteristics, which separated Argentina from other Latin American countries, it should be noted that the local market was significantly segmented. On one hand, expensive articles of excellent quality were consumed. This demand was especially concentrated in Buenos Aires, where the market closely mirrored developments in Europe. The department stores on Florida Street, such as Harrods, Gath & Chaves, Ciudad de Mexico and Tiendas San Juan, featured similar goods to those consumed by the middle classes in London and Paris. At the same time, the majority of internal consumption was concentrated on fabrics of cheap or ordinary quality.¹⁵

The outbreak of the First World War began to change the economic environment that had conditioned the growth of the textile industry. The war disrupted international trade. The imposition of blockades, the rising cost of freight and the reduction of available warehouses presented significant obstacles to world trade. In the case of Argentina, the War led to a fall in grain exports, the most important exportable commodities, which caused, between 1913 and 1917, a decrease of 20% in GDP. The crisis of world trade also involved some difficulties in importing essential goods such as fuels, raw materials and industrial and agricultural machineries.

^{13.} Other prominent cities were Córdoba (100,000 inhabitants), Tucumán (90,000), La Plata (90,000) and Santa Fe (60,000).

^{14.} Garry (1920), p. 10.

^{15.} Costa (1920), p. 84.

^{16.} The crisis of 1913-1917 was also very important in terms of GDP per capita, which fell 34% in those years. The recession that began in 1913 was deep and prolonged, even surpassing the decline that occurred during the Great Depression, when GDP per capita contracted by 20% between 1929 and 1932. See Belini & Korol (2012), pp. 25-27.

TABLE 1 • Imports and exports of wool and cotton fabrics, 1911-1920 (in tons)

V	Wool	fabrics	Cottor	fabrics
Year	Exp.	Imp.	Exp.	Imp.
1911-1913	-	4,287	-	26,700
1914	88	3,205	-	16,457
1915	1090	1,793	-	16,937
1916	-	2,952	-	29,039
1917	26	2,152	-	23,229
1918	129	2,146	-	25,744
1919	39	2,044	140	24,870
1920	26	3,272	69	26,411

Source: Anuario de Comercio Exterior Argentino, 1917-1923.

In the case of consumer goods such as textiles, however, the situation was different. On one hand, the importation of textiles such as wool garments fell sharply. The increase of international prices allowed the Argentine textile industry to export products at competitive prices that could satisfy the demands of some European armies, especially French army. However, the impulse to export was only due to a shortage of products on the world market. As observed in Table 1, the volume of exports exceeded 1,000 tons in 1915, only to decline at historical levels in subsequent years. In fact, the export performance of the Argentine wool industry was mediocre compared to other neutral nations.¹⁷

On the other hand, the fall in agricultural exports resulted in a significant increase in unemployment from 6.7% of the working population employed in 1913 to 19.4% in 1917. At the same time, inflation caused a drop of 60% in real wages in the same period. As a result of this, domestic demand for food and textiles declined during the War.

As for the cotton industry, the First World War did little to improve its situation. In 1914, the production of cotton fiber barely surpassed 700 tons. By then, only one mill of 7,000 spindles was in activity. By the end of the war, only two more mills were established (one in 1918 and another in 1920), with only twice as many spindles employed in total. The annual domestic production of yarn did not exceed 1,000 tons until 1922.

Despite lagging domestic growth of the cotton industry, the importation of textiles sharply declined during the initial two years of World War I, before regaining its pre-war level. In consequence, the "natural" protection of the domestic market due to the War was very short. Only the knitting mills

^{17.} For the case of the Spanish textile industry, see Benaul & Deu (2004).

^{18.} Cortés Conde (2005), pp. 61-65.

and clothing industry seemed to have improved their situation during this period, whereas the supply of cotton yarn and fabrics remained fairly constant by 1915.

In summary, the First World War failed to generate the conditions for substantial import substitution in the textile industry. The halting of competition of imported goods was brief, and the domestic cotton industry was not developed enough in terms of quantity or quality to substantially boost the demand for local consumption over international. Moreover, the sharp increase of prices that accompanied the War led to a reduction in tariff protection.

The 1920s brought significant changes, especially with regard to public policy. The rise of international cotton prices, caused by a plague that struck U.S. production, stimulated agricultural production in the Chaco region, located in the northwest of the country. The Ministry of Agriculture Tomás Le Bretón encouraged this process through technical studies, the establishment of experimental farms and the free distribution of seeds among farmers. ¹⁹ Cotton cultivation was further stimulated by increased external demand. Fiber production rose from about 5,500 tons in 1920-21 to 13,000 tons in 1923-24, and to 30,000 by the middle of the decade.

Though the growth of the cotton industry was driven by external demand, it faced some major obstacles. The structure of tariffs continued to favor the importation of fabrics. In 1927, the ad-valorem taxes for cotton yarn were roughly 5%. In contrast, taxes for fabrics reached up to 40%. The increased valorization of Argentine currency aggravated the low tariff protection. Further, poor performance of the domestic workforce exacerbated the difficulties of the industry. Although little information is available regarding this subject, there is evidence to suggest an acute shortage of skilled and trained textile laborers. The structure of tariffs continued to favor the industry agravated the low tariff protection.

Despite these drawbacks, the increased availability of cotton fiber encouraged the establishment of more cotton mills. Through this, the local cotton industry made some progress in increasing its share of total internal consumption. While imports continued to have importance, and even increased in demand, reaching a record of 11,000 tons in 1929, the local cotton spinning industry accounted for 25% of total consumption by the mid-1920s. This growth in consumption was encouraged through the development of large enterprises (Fábrica Argentina de Alpargatas S.A., Compañía General de Fósforos S.A., Manufactura Algodonera Argentina S.A. and Ramón & Nicolás del Sel), which sought to integrate themselves in the market vertically, despite the fact that they

^{19.} Calvo, (1946), p. 31; Guy (2000); Larramendy & Pellegrino (2005).

^{20.} Díaz Alejandro, (1975), p. 285.

^{21.} Clark (1987) noted the importance of this factor to explain mixed performance of countries and backwardness of the peripheral economies.

specialized in activities outside of the development of the cotton textile industry, such as canvas shoes and the manufacturing of matches.²²

In the majority of cases, this vertical integration did not allow for these enterprises to compete easily with imports, as differences in the quality of Argentine cotton impeded the production of a full variety of fabrics. The number of cotton mills increased from two to five between 1919 and 1925, and remained at that figure until 1930. The number of spindles also increased slowly, reaching 50,000 in 1929.

Import substitution and growth of the textile industry, 1929-1945

The Great Depression changed the conditions that led to the development of the cotton industry. The decline in export prices collapsed national income, causing a deep crisis. Between 1929 and 1932, GDP declined 14%, and GDP per capita shrank 20%. Domestic consumption and imports of textiles declined sharply. However, the economic policies adopted to deal with the crisis reactivated the industrial sector. One factor of notable importance was currency devaluation (about 40%), as well as exchange market control and the increase in import tariff in 1931.²³ The fall in international cotton prices and the availability of a local market encouraged import substitution industrialization. The textile industry led industrialization in the 1930s, with an annual rate of 10.8%, while the manufacturing sector grew at a rate of 3.4%.²⁴ Despite changes in the macroeconomic environment and the level of industrial protection, the Great Depression accelerated a process that had its origins in the 1920s.²⁵

On the other hand, the impact of the Great Depression on the purchasing power of the market was negative. The data show that real wages in the Federal District declined 10% in 1931 and remained below the pre-crisis level to the beginning of the Second World War.²⁶ The substitution process advanced gradually in the 1930s. The share of imports in total volume of the consumption of cotton textile products declined from 92% in 1929 to 50% in 1935 and just over 40% in 1939. In the case of the wool and rayon industries, already before the crisis of 1929 nearly half the import quantity had been replaced, and the growth of the industry during the 1930s allowed to leave the domestic market to imported product.²⁷

^{22.} The case of Alpargatas was analyzed by Gutiérrez & Korol (1988). For the Compañía General de Fósforos see Badoza & Belini (2009). Also see Guy (2000).

^{23.} In 1931, taxes on yarn doubled, reaching 10%.

^{24.} Díaz Alejandro (1975), p. 220.

^{25.} Petrecolla (1968).

^{26.} Anuario Geográfico Argentino (1941), p. 555. Also, see Cortés Conde (2005), p. 118.

^{27.} For wool and rayon branches see Belini (2010b) and Belini (2010a).

How did the Great Depression affect the two main sectors (spinning and weaving) of the cotton industry? The number of spinning mills rose from five in 1930 to 18 in 1935. The number of spindles installed increased by 300%, from 52,400 to just over 214,000 in the same period. The number of spindles per factory averaged around 10,000, which was fewer than half the average on an international scale.²⁸

From 1931 onward, a strong expansion in industrial capacity was observed. Between 1935 and 1938, the number of spindles and production grew by just over 53%. However, it was in the war period when the expansion of production of yarn accelerated. Between 1939 and 1945 it grew by 119% while the number of spindles increased some 46%, a rate significantly lower.²⁹

In turn, the importation of yarn began to take on different roles based on qualities. During the 1930s, local industry began to replace importation of lower-quality yarn, while the importation of fine-quality yarn remained constant. Overall, imports of cotton yarn declined by 50%. In contrast, during World War II, foreign high-quality textiles were affected the most, as imports fell from 1942 onward.

The crisis of 1929 further encouraged the development of the cotton weaving industry. Fabric production increased from about 17,000 tons in 1935 to 27,000 in 1939, and just over 60,000 by the end of the war. Thus, the supply of domestic demand by local industry rose 43% between 1935 and 1939, to 85% in 1944. The importance of this expansion is augmented, considering an increase of consumption of 23% over this period. Conversely, imports declined by an average of nearly 30,000 tons between 1935 and 1939, and to 10,000 in 1944. That year, imports represented merely 15% of domestic consumption.

The localization of the cotton industry

The expansion of the cotton textile industry during the inter-war years closely mirrored the localization patterns of the manufacturing industry, which concentrated factories in the City of Buenos Aires and its suburbs. Beginning in the late nineteenth century, the first manifestations of the textile industry began to settle in that area. The Barracas district, located south of the city and near the port, was of particular importance. A big railway station, property of the British Ferrocarril del Sud, was installed in this district, allowing for the transport of primary goods and stockpiles of wools, which the country exported in large quantities. Meat packing plants were also specific to this area.

After the federalization of the City of Buenos Aires in 1880, the Barracas district was divided into two areas separated by the Riachuelo, but they were

- 28. Farnie & Yonekawa, (1997), p. 28.
- 29. Own estimates based on Junta Nacional del Algodón, (1964).

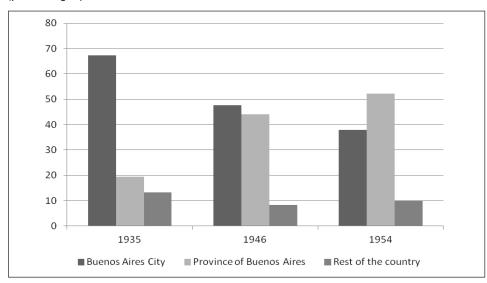


FIGURE 1 • Distribution of total production value of Argentine textile industry, 1935-1954 (percentages)

Source: Own work based on Industrial Census of 1935, 1946 and 1954.

demographically and economically unified.³⁰ There, the first operations in primary production were established – mainly wool-washing facilities – along with the first major spinning and weaving establishments, such as Luis Barolo & Co. (1895), Masllorens Hermanos (1905) and Campomar & Soulas (1906), which would remain the principle companies of this sector for the following decades.³¹ The three firms started out in the production of items such as knitted or woven sandals, which enjoyed strong tariff protection, or in production areas where they already had a family tradition. The latter was the case of Masllorens Hermanos, founded by Pablo, a Catalan immigrant whose family had factories in Olot, Sant Joan les Fonts and Barcelona.³² Avellaneda's high concentration of wool textile companies caused it to become known as "Argentina's Manchester".³³

The 1914 Census revealed that 96% of capital investment and the total production value of the Argentine textile industry was located in the province of

^{30.} This district was known as Barracas al Sud, where much of the industrial activity in the Buenos Aires province was concentrated. In 1895, it became a city, and in 1904, it was renamed Avellaneda.

^{31.} Álbum Argentino. Libro de la Provincia de Buenos Aires. Su vida, su trabajo y su progreso, Buenos Aires, 1910, Vol. II, p. 155 and pp. 186-187.

^{32.} Revista Textil. La Industria Textil Argentina. Obra Documental, Histórica, Gráfica e Ilustrada, Buenos Aires, 1933, p. 212.

^{33.} Selvini (1931).

Buenos Aires. Most businesses were located within several kilometers of the capital city. Very few enterprises were located further away. Two companies chose to follow the model of a factory-town: Quintín & Leodegario Córdova, which founded the town of La Emilia (1892), located 220 km from the City of Buenos Aires, and Algodonera Flandria (1929) which, owned by the Belgian Julio Steverlynck, founded the town of Jáuregui, 67 km from the capital.

From the middle of the 1930s, a new industrial concentration emerged in the north of Buenos Aires, in the district of San Martin. Urban expansion, encouraged by the extension of road transport buses, created the conditions for the establishment of a dense network of small and medium enterprises, most of them dedicated to the manufacture of knitted goods, but also wool and cotton yarn. Villa Lynch, a neighboring village to the Federal District attracted hundreds of Jewish immigrants from Poland and first-generation Argentines who, with some textile experience, founded small workshops which initially relied on two or three looms and employed predominantly family labor. Besides these workshops some spinning mills were installed as Establecimientos Textiles San Andrés (1948) and Algoselan (1951). 35

The geographic concentration of industry continued during the period under study. According to the Industrial Census of 1935, 87% of the value of textile production came from factories in Buenos Aires and its outskirts. Eleven years later, that proportion reached 91%. By 1954, at the end of the period, Buenos Aires city and province accounted for 90% of the value of textile production in its three branches: cotton, wool and artificial fibers. As shown in Figure 1, the most important change was the growing importance of the province as an area of industrial location.

What factors encouraged the geographical concentration of the textile industry? As noted earlier, Buenos Aires possessed the greatest consumer market in Argentina. Moreover, the city's port was the main route of entry for imported products. The location of businesses in that area was particularly important for an industry dependent on imports. Like other industries, the textile industry consumed coal and other imported fuels. At the same time, with the exception of the wool subset, the textile industry relied largely on the import of raw materials, such as yarn and fabrics of cotton and silk. In 1914, the value of imported raw materials in domestic textile production represented 63% of the total materials used. The machinery also was imported, generally for commercial representatives of the big English and North American factories installed in Buenos Aires. The concentration of textile enterprises

^{34.} Testimonials are available in Tribiarz (2006), Pinkus (2008). Also, see Belini (2010a).

^{35.} San Martin is nowadays in second position nationwide concerning the index of specialization in the Argentine textile industry, and nearly 15% of GDP of the district corresponds to textiles. See Stupenengo (2009), p. 52.

along the coast allowed for a reduction in the high cost of transport, which according to analysts was one of the major obstacles of industrial growth in the nation's interior.

Finally, Buenos Aires offered a labor market with greater opportunities to recruit skilled workers. At this point, we must remember that one of the greatest obstacles to the growth of the textile industry, in addition to tariffs, was the shortage of skilled and specialized laborers. Between 1914 and 1939, personnel rose by 110%, reaching a figure of just over 104,000 workers and employees. Growth in the workforce was particularly strong in the 1930s. The high demand for labor intensified the problems of the shortage of skilled workers. For decades, employers argued that the state should assume the costs of training of the workforce. Some projects were developed for educational programs that would help workers adapt to the demands of the industrial sector. Certain schools were even created that were directly affiliated with factories, for the preparation of supervisory positions. The section of the properties of the propagation of supervisory positions.

The shortage of government assistance in 1929 led a group of businessmen to found the *Instituto de Enseñanza Profesional de las Industrias Textiles Argentinas* (Iepita). Established in the quarter of Balvanera, where textile industry and commerce were also largely concentrated, the Institute provided courses in theory and practice for technical laborers. In 1934, 130 students were enrolled.³⁸ Iepita failed to increase their activity to match the pace of industrial growth. Indeed, in the late 1950s, the number of students was no more than 200.³⁹

An additional source of labor-power was derived from immigration. Spaniards, Italians and Poles who immigrated to Argentina joined the textile industry. However, these sources were not very stable, since after a reasonable time, many workers would leave their jobs in the large textile factories, such as Campomar & Soulas and Angel Braceras, to seek other opportunities. Many would acquire a few looms, either through rental or purchase on credit, and then installed home workshops. These workshops, which mostly consisted of family members, became very common in the industry, particularly in the manufacturing of knitted goods and rayon fabrics.⁴⁰

In short, the proximity of a large consumer market, the advantages offered by a port, and the presence of a labor market encouraged industrial concentration in Buenos Aires. As the cotton textile industry grew, it continued

^{36.} Federico Remendeau "Necesidad de fomentar la enseñanza técnica", *La Época*, 30 de enero de 1919.

^{37.} Bachofen (1926), pp. 13-15.

^{38.} Revista de la Unión Industrial Argentina, July 1929, p. 68.

^{39.} Federación Argentina de Industrias Textiles, *Bodas de Plata, 1932-1957*, Buenos Aires, 1957, pp. 99-101.

^{40.} Belini (2010a).

this pattern of localization. The first knitting and weaving workshops were established throughout the City of Buenos Aires. After 1920, large spinning mills became concentrated around the Barracas and Avellaneda districts. Firms such as Raúl & Nicolás of Sel (1920) and the Fábrica Argentina de Alpargatas (1924) exemplified this phenomenon. In only some exceptional circumstances, some companies were established in remote areas. This was the case with the Compañía General de Fósforos (1921), which placed its spinning establishment in Bernal, a town located south of the Greater Buenos Aires area.

In contrast, from the 1930s, during the period of the great expansion of the cotton industry, the large spinning establishments came to localize outside the city. The move to the suburbs was consistent with Alfred Marshall's "Principles of Economics", as the value of city property and the needs of businesses in the city area pushed larger firms to the city's outskirts.

While this was a key factor in motivating the construction of large establishments in the Greater Buenos Aires area, other factors also contributed to the increasing localization of this industry in the outer suburbs. Although the city and suburbs were tied as an economic unit, they were not unified by the standpoint of the law – particularly social laws. By moving the industry outside of the city and into the suburbs, companies were outside the purview of the National Department of Labor (*Departamento Nacional del Trabajo*), an agency that was responsible for the enforcement of social laws in the capital city. In Greater Buenos Aires, companies were under the jurisdiction of the Provincial Department of Labor (*Departamento Provincial del Trabajo*), a less efficient agency. The *Unión Obrera Textil* – textile workers' union – was able to exist and grow in the city, but was unable to permeate the large establishments in the suburbs. During the 1930s, union leaders complained about the weak power of provincial authorities in constraining labor violations, and denounced the practices of large companies that required employ-

TABLE 2 • Geographical distribution of the Argentine textile industry in 1940

	Spinning	Weaving	Knitting				
Province	Mills	Mills	Mills	Hosiery	Others	Total	%
Federal District	9	40	139	98	115	401	73.6
Buenos Aires	13	35	21	11	57	137	25.1
Santa Fe	-	2	1	1	1	5	0.9
Córdoba	-	-	-	1	-	1	0.2
Catamarca	-	-	-	-	1	1	0.2
Total	22	77	161	111	174	545	100

Source: Own work based on Boletín Mensual de la Junta Nacional del Algodón, no. 80, December 1941.

ees to work long hours for menial pay, and even employed minors to work eight-hour shifts, thus violating national and provincial labor laws.⁴¹

Table 2 presents information on the geographical distribution of the cotton industry in 1940. It is noted that 74% of plants were still located in the City of Buenos Aires. Also, interestingly, the only concentration of textile establishments in the suburbs that surpassed those in the city were spinning establishments (59%), while knitting workshops, the oldest facilities, remained concentrated in the Federal District. The cotton-producing provinces (Chaco, Formosa and Corrientes) had no industrial establishments.

The emergence of subsidiary industries: the manufacturing of textile machinery

The development of the textile industry during the first half of the twentieth century was largely based on the import of textile machinery. The introduction of such equipment was exempt from import tariffs, which was a major incentive for industrial investment. World War II, however, imposed severe restrictions on the importation of machinery. At the same time, the textile industry was growing, and demand for this machinery increased. Consequently, a domestic industry for textile machinery developed.

The first textile machinery companies were directly linked to companies in textile production and manufacturing. In 1942, Compañía General Fabril Financiera S.A. (formerly Compañía General de Fósforos) and Sedalana S.A. founded Talleres Coghlan S.A., a joint venture that manufactured textile machinery. Until the 1950s, Talleres Coghlan was the only South American firm that manufactured complete equipment for the spinning and weaving of cotton. In 1945, the company sold licenses to Piratininga Machines (1935) for the manufacturing of their equipment in Brazil. In 1944, the firm consisted of roughly 600 workers and 40 technicians, giving it an annual production capacity of approximately 35,000 spindles.⁴²

Other manufacturers of textile machinery arose, linked with small and medium textile companies. This was the case of Famatex (manufacturer of looms for silk and shinguards), IMAT (looms for wool), Beserman & Cavadini (looms for cotton and silk), and the companies Establecimientos Metalúrgicos Textiles Abraham Mehler and Cindemel (both manufacturers of machinery for woolen spinning mills). With the exception of the latter, these companies were established in close affiliation with small and medium firms founded by Jewish European immigrants, especially Poles, who were escaping

^{41.} Horowitz (1990); Di Tella (1993).

^{42. &}quot;Se construye en Argentina maquinaria para la industria textil. Actividad de los Talleres Coghlan S.A.", *Gaceta Textil*, no. 111, May 1944, pp. 40-47.

the Nazi persecution. These companies settled in San Martin in the northwest of the City of Buenos Aires.⁴³

In general, local production closely followed imported models, which, facilitated by the small industrialists, were available to study. Argentine companies were not specialized, but produced equipment for at least two textile branches with the aim of reducing risks of excessive dependence on a single production item. Furthermore, the local annual demand was often insufficient in absorbing the potential output.

The natural protection offered by the war stimulated the establishment of these firms, but after 1947, many had to face stiff competition from imports. However, in 1953, 20% of the equipment installed in the spinning of wool and cotton, 22% of the looms for wool and 15% of cotton looms were of domestic origin. At the end of the 1950s, the industry was represented by 24 well-equipped facilities and was closely linked to the foreign industry through the use of licenses and exchange of information.⁴⁴

The development of the textile industry also encouraged the emergence of other complementary industries. Especially important were the chemical factories that turned new products onto the market for the textile and apparel industries. The most important were the rayon and synthetic fiber factories, like the French Rhodiaseta (1935), owned by Rhône Poulenc group, and Ducilo (1938), a joint venture between the British Imperial Chemical Industries (ICI) and the American company Dupont. By the late 1930s, both companies fulfilled 37% of the domestic demand for rayon. A decade later, the increase in domestic demand encouraged the establishment of two new companies: Reysol S.A. (1948) and the Sociedad Nuevas Industrias Argentinas de Fibras Artificiales S.A. (SNIAFA) (1952), owned by the SNIA Viscose Italy and a large group of Argentine firms including Compañía General Fabril Financiera, Campomar, La Emilia and the Fábrica Argentina de Alpargatas. Of course, the considerable investment required and control over production technology meant these ventures emerged under the control of foreign capital with only minority interests from large Argentine companies. Overall, the manufacture of artificial and synthetic textiles was performed at very high costs, basically due to high input prices. During the post-war period production diversified, including rayon staple fiber and nylon. By the late 1950s, rayon production reached 14,000 tons, which made Argentina, for its per capita consumption, the most important Latin American market.⁴⁵ Other chemical

^{43.} Banco de Crédito Industrial Argentino, *Informes sintéticos*, Buenos Aires, 1948, Tomo I, p. 169 and ss. Also see Trybiarz (2006).

^{44.} Kund Aldinger, "La construcción de maquinarias en la Argentina", *Boletín de la Cámara de Comercio Argentino Alemana*, no. 93-94, Nov-Dec, 1960, p. 412.

^{45.} CEPAL (1965), p. 207.

products included dyestuffs, hydrogen peroxide, and other essentials inputs for improving the quality and appearance of textiles.

Prosperity and crisis during postwar Argentina

Economic and industrial policies under Peron, 1946-1955

By the end of World War II, the cotton industry had completed a growth cycle that had started in 1929 as a product of international crisis. However, textile entrepreneurs were aware that the end of global conflict would modify the conditions of industrial development. Foreign competition in the textile industry was expected to resume. In this regard, the Central Bank reportedly found that the silk and knitting industries, which in 1939 supplied much of the domestic demand, would be unaffected by the resumption of international competition. In fact, their report predicted that the resumption of normal trade could intensify domestic production by opening up external markets. In the case of wool textiles, this industry only faced significant international competition in high-quality textiles, since local industries did not produce them, which accounted for 15% of national consumption. The fabric industry underwent similar effects.

The situation seemed dramatically different for cotton textile production, which was negatively affected by the resumption of normal trade. The production of fabrics was affected most, even against competition from Brazil. The cotton industry would return to suffering similar international competition as it experienced before 1939. Shortly afterwards, another official report predicted the cotton industry would be totally or partially paralyzed by the reopening of international markets.⁴⁷ Pessimistic diagnoses regarding the future of the cotton industry seemed justified; British exporters believed that although the Argentine industry had developed, especially in textiles of ordinary quality, they could retain a position in the market thanks to their superior quality and better textile design.⁴⁸

In October 1946, the Peronist government included the cotton textile sector in its Five Year Economic Plan, 1947-1951. This program particularly aimed at promoting the spinning sector. The plan aimed to increase fabric production some 26% by 1951, achieving an annual volume of 80,000 tons.

^{46.} The Review of the River Plate, July 20, 1945, p. 16.

^{47.} Banco Central de la República Argentina, *Informe preliminar sobre los efectos que tendría en las actividades industriales internas la libre reanudación de las importaciones*, Buenos Aires, 1945, p. 36.

^{48.} Department of Overseas Trade by his Majesty's Stationery Office, *Argentina Review of Commercial Conditions*, January 1945, pp. 24-42.

Two government policies in particular encouraged this industrial expansion. First, Perón's government encouraged the redistribution of income through the agriculture and industrial sectors, and particularly to laborers. It has been estimated that between 1945 and 1949, real wages grew by 60%. ⁴⁹ From then, the inflation spoilt the real wages. After the application of a severe anti-inflationary program in 1952, real wages recovered, and by 1955 they were 50% superior to those of 1945. During these years, the government introduced a new pattern of income distribution. Between 1946 and 1950, the share of wages in national income rose from 38% to 46%, and remained at similar levels until 1954. ⁵⁰ These measures stimulated the domestic demand for textiles.

Second, the textile industry benefitted greatly from the government's official credit policy. From 1947 onward, the textile industry received a stake of 14% in the total balances of loans to the industry by the banking system. After 1950, this share rose to 20%, and remained at that level until 1955. This participation in the credit system was slightly higher than its contribution to total industrial production, which reached 12% in 1953.⁵¹

Credit provided to the industrial sector was mainly through the Banco de Crédito Industrial Argentino, an institution created in 1944, which proposed to solve the problem of long-term financing for manufacturing. Girbal and Rougier noted that the credit policy tended to strengthen the existent industrial structure which primarily supported the large factories. Anyhow, many small and average companies could gain access to a credit source that had not been available during the decades before the Peronist government. As a whole, the participation of the textile industry in loans granted by the bank rose by 12% between 1946 and 1949, and by 20% between 1950 and 1955.⁵²

Other instruments of encouragement to the textile industry were hardly employed until the 1950s. In contrast to what the majority of the studies on the economy of Peronism have argued, Peron did not use quotas or prohibit the importation of items that competed with the Argentine textile industry during the early post-war years. Only from 1949 onward, following the decline of dollar reserves, was the government was forced to implement more stringent measures to limit the importation of textiles.⁵³

In addition to external competition after World War II, the textile indus-

- 49. Gerchunoff (1989), p. 63.
- 50. CEPAL (1968), pp. 163-165; BCRA (1975), p. 38. Also, see Torrado (1992), pp. 264-268.
 - 51. Belini (2009), p. 160.
- 52. Girbal-Blacha (1996), pp. 5-9; Rougier (2001), pp. 85, 146; Girbal-Blacha (2003), p. 56-69; Rougier (2007).
- 53. The decline of dollars reserves was caused by the fall of the world prices of the primary products and the reduction of the agrarian production. It has been anticipated that the fall of the purchasing power of the exports was 50% between 1948 and 1952. See Eshag & Thorp (1974), p. 79.

try faced two other developments that modified the framework of industrial development. On the one hand, Perón increased state intervention in the textile market through the application of various controls on prices and company earnings. The official objective of these policies was to limit the impact of inflation on the cost of living for the working class. However, these policies were not very effective, as the cost of clothing was not the main driver of the increased cost of living during Peron's government.⁵⁴

Beginning in the early 1950s, the acceleration of inflation led to a reduction of real wages and domestic demand. In this context, the official regulations on the textile market deepened a crisis that lasted in this industry from 1950 to 1953. In the case of the cotton sector, the recession was relatively short and it recovered in 1954, whereas the crisis was more serious in the wool industry, the knitting and hosiery mills.

The second development of the Peronist period was marked by remarkable change in the bargaining power of workers. Beginning in 1946, Perón's government encouraged massive unionization of textile workers, and supported the economic demands made by the *Asociación Obrera Textil*. The union gained roughly 100,000 members during this period. Official government support in the context of a fully-employed labor market led to an increase in wages. At the same time, widespread internal organization tended to question the authority of the employers within the factories and workshops.

The expansion of textile production in the postwar period was led by the cotton sector. Table 3 shows the growth of the spinning industry. It is shown that the number of spindles increased rapidly after the war; between 1945 and 1950, some 278,000 spindles were employed, a figure comparable to the five years following 1930, when production accelerated rapidly due to import-substitution. In the early 1950s, the spinning industry averaged 13,000 spindles

TABLE 3 • Cotton spinning mills, number of spindles and medium counts.

1935 18 215,050 15,897 14.4 1940 22 347,328 32,925 15.1 1945 32 430,256 63,625 13.2 1950 54 708,451 76,677 14.0	Year	Establishments	Number of spindles	Yarn production	Medium counts
1940 22 347,328 32,925 15.1 1945 32 430,256 63,625 13.2 1950 54 708,451 76,677 14.0	1930	5	52,000	4,068	12.3
1945 32 430,256 63,625 13.2 1950 54 708,451 76,677 14.0	1935	18	215,050	15,897	14.4
1950 54 708,451 76,677 14.0	1940	22	347,328	32,925	15.1
	1945	32	430,256	63,625	13.2
1955 70 930,454 94,586 16.4	1950	54	708,451	76,677	14.0
	1955	70	930,454	94,586	16.4

Source: Boletín de la Junta Nacional de Algodón.

54. Belini, (2009), pp. 150-153.

	1935	1940	1945	1950	1955
Spinning mills	18	22	32	54	70
Weaving mills	34	77	316	702	1016
Knitting mills	75	161	240	235	346
Hosiery	91	111	158	207	213
Others	1	174	247	456	556
Total establishments	219	545	993	1654	2201

TABLE 4 • Number of establishments in the Argentine cotton textile industry, 1935-1955

Source: Junta Nacional del Algodón, Boletín Mensual, 1942-1953 and La producción de tejidos y otros artículos de algodón en la República Argentina, Buenos Aires, 1964.

per production center, exceeding the averages of the Brazilian and Mexican spinning plants during this period, according to a study by CEPAL (1951).

Increased capacity was accompanied by increased production, but at a slower rate. Despite this, the goal set in Peron's First Five Year Economic Plan was met in 1951, as yarn production exceeded 90,000 tons. Rising domestic demand was also satisfied by imports. In consequence, consumption of imported products declined slowly – from 15% in the period between 1937 and 1939 to 11% in 1952. Further, 90% of the yarn production was of low-quality. This was due to the fact that the cotton production methods in Argentina did not allow for the development of fine-quality fabrics.

The post-war industrial boom also impacted the weaving industry. As observed in Table 4, between 1945 and 1955, the number of shuttle-weaving establishments increased by 222%, knitting establishments by 44%, and hosiery by an average of 35%.

On the other hand, the number of shuttle weaving machines installed rose from 14,224 in 1945 to 26,987 in 1952, an increase of 90%. The strong post-war expansion helped modernize the sector of industry. The total number of automatic looms rose from 33% to 45% during this same period. According to a study by CEPAL, in 1951, the local cotton industry was more modernized that other industries in Latin America, such as Brazil, Chile, Mexico, Ecuador and Peru, as it possessed an average of 35% more automatic looms. 55

Overall, the production of textiles grew by 45% between 1945 and 1951. The industry went from supplying 87% of domestic consumption to 96% over this period. That year, the consumption per capita surpassed the record-level of 5 kg. After that year, however, the industry plunged into a severe recession until 1955.

55. CEPAL (1951).

TABLE 5 • Production, imports and consumption of cotton fabrics, 1935-1955

	Produc	Production		Imports		Consumption	Kg. per
	tons	%	tons	%	tons	tons	capita
1935	16,943	32.3	35,382	67.7	-	52,325	4.01
1939	27,458	57.0	20,567	43.0	-	48,025	3.44
1942	43,190	69.4	19,065	30.6	1,412	60,843	4.44
1945	60,201	87.5	8,571	12.5	762	68,010	4.41
1947	59,359	74.0	20,822	26.0	136	80,045	5.00
1949	70,793	85.8	11,751	14.2	16	82,528	4.95
1951	87,447	96.6	3,068	3.4	488	90,027	5.14
1953	76,555	99.9	82	0.1	9	76,628	4.20
1955	85,129	99.8	128	0.2	61	85,196	4.50

Source: Belini (2009).

While the industry expanded thanks to increasing domestic demand, exports of textiles, which had once reached a record high in 1943, declined to negligible numbers. During World War II, with the shortage of international textiles prices rose notably, which encouraged local entrepreneurs to sell their products abroad. The growth of exports took place as a consequence of the scarcity of textiles on the world market and not because of an increase of the competitiveness of the sector. Initially, exports were concentrated on residues such as cotton linters, but from 1941 onwards, exports of wool and cotton yarn and fabric ranked first; in other words, textile exports increased their added value (see appendix). Wool yarn/fabrics were principally exported, while cotton articles dominated the garment market. The principal markets for these exports were the South American countries (except for Brazil) and South Africa. The latter became a major customer of Argentine industry because World War II had disrupted normal trade, especially from continental Europe, and the United Kingdom was having difficulties in fulfilling her own cotton and wool textile needs.⁵⁶

However, after 1943, the military government began to set export quotas for these products with the aim of achieving first-place to satisfy the domestic demand. During the postwar period, rising production costs and soaring exchange rates led to a fall in exports. An external constraint was the resumption of exports from the United Kingdom, United States and Japan, which made it more difficult for the Argentine industry to provide for external markets.⁵⁷ In

^{56.} Carlos Luzzetti "Las exportaciones argentinas y el mercado sudafricano", *Revista de Economía Argentina*, October 1941, pp. 319-320.

^{57.} Belini (2009), pp. 156-159.

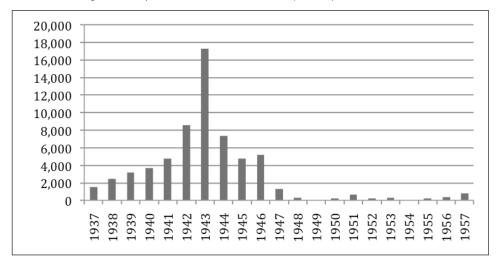


FIGURE 2 - Argentine exports of textiles, 1937-1957 (in tons)

Source: Belini (2009).

the case of South America, where the principal markets of the Argentina textile industry existed, protectionist policies led to stronger barriers in textile trade. Similar restrictions also caused a fall in Brazilian textile exports to Argentina.⁵⁸

From 1948 onward, the Peronist government stimulated the export of textiles through the fixing of exchange rates, involving preferential strong currency devaluations. However, these measures were simply compensating for the revaluation of the real exporting exchange rate, which was 43% between 1945 and 1954.⁵⁹ In addition, local inflation and rising prices of wages and raw materials and, increased production costs. By 1953, for example, the textile entrepreneurs argued that the "preferential" export rate was not enough to stimulate exports of cotton fabrics, advocating a rate of 20 pesos per dollar, a rate 300% higher than the "tipo básico".⁶⁰ Then, industrialists interested in export manufactured goods had to face a further difficulty: weakened global demand and increased Asian competition, especially from Japan, in world textile markets.⁶¹ Moreover, the strong expansion in domestic consumption between 1946 and 1952 discouraged exportation. Exporting required long-term strategies, adapting products to the tastes of foreign markets, improving quality and lowering the costs of production, and predictability with

- 58. Stein (1957), pp. 169-167.
- 59. My estimate based on Díaz Alejandro (1981).
- 60. The Review of the River Plate, August 21, 1953, p. 13.
- 61. Sugihara (2004), pp. 521-547.

regard to important economic variables.⁶² There is no evidence of which advances were taking place in these aspects during the 1940s. The expansion of the internal market very soon attracted the industrialists. In general, entrepreneurs were only interested in exporting during the context of the textile crisis of 1952-1953.⁶³

Other characteristics of the textile industry during the post-war period were the persistence of a polarized industrial structure and the geographic concentration of the industry along the coast. With regard to the first factor, the textile industry was composed of a few large factories, where large percentages of workers and production were concentrated, and many small, poorly equipped workshops. The climate of industry protection created by the shortage of foreign exchange increased the number of these small workshops, many of which were marginalized producers.

Industrial policy under Perón did little to alter the geographic concentration of the textile industry in the capital city or the Greater Buenos Aires area. During his government, Perón attempted to promote, with little success, industrial decentralization through various mechanisms, such as granting credit lines to promote the establishment of industry in the interior of the country and the direct intervention of the state. As previously mentioned, credit lines were inefficient in promoting the establishment of enterprises in other parts of the country.⁶⁴

With regard to direct state intervention, in 1947, the *Dirección Nacional* de Industrias del Estado (DINIE), a state-owned group of factories, took over the fabric and garment factories established by the National Cotton Board (Junta Nacional del Algodón) a decade earlier. At the end of the 1940s, the National Factory of Textile Packaging (FANDET) installed two spinning mills, the first in the city of Resistencia (Chaco Province) and a second in Huayco Hondo (Santiago del Estero Province), with 12,000 and 1,200 spindles respectively. Both establishments increased their capacities in 1954 to 15,000 spindles and 7,000 respectively. Then, the National Factory built a third mill in Formosa, with an initial capacity of 7,000 spindles. The three state-owned spinning establishments specialized in the production of different numbers of yarn (from 4-30). These investments sought to encourage the industrialization of fiber in the areas where it was produced, but had a very limited impact; in 1954, the two plants in operation accounted for only 2.5% of its total capacity. In contrast, 83% of production continued to be localized in the capital city and the Greater Buenos Aires area.

^{62.} Belini (2012), pp. 285-317.

^{63.} Gacetà Textil, July 1953, p. 8.

^{64.} Girbal (1996), pp. 5-7.

TABLE 6 • Geographical distribution of cotton textile establishments in 1950

Spinning mills	Weaving mills	Knitting mills	Hosiery	Others	Total	%
13	185	186	164	203	751	45.4
37	498	46	37	247	865	52.3
2	8	2	3	1	16	0.9
-	6	-	2	4	12	0.7
1	1	-	-	-	2	0.1
1	-	-	-	-	1	0.06
-	3	1	-	-	4	0.2
-	1	-	-	1	2	0.1
54	702	235	206	456	1653	100
	mills 13 37 2 - 1 1 - -	mills mills 13 185 37 498 2 8 - 6 1 1 - 3 - 1	mills mills mills 13 185 186 37 498 46 2 8 2 - 6 - 1 1 - - 3 1 - 1 -	mills mills mills Hosiery 13 185 186 164 37 498 46 37 2 8 2 3 - 6 - 2 1 1 - - 1 - - - - 3 1 - - 1 - -	mills mills Hosiery Others 13 185 186 164 203 37 498 46 37 247 2 8 2 3 1 - 6 - 2 4 1 1 - - - 1 - - - - - 3 1 - - - 1 - - 1	mills mills mills Hosiery Others Total 13 185 186 164 203 751 37 498 46 37 247 865 2 8 2 3 1 16 - 6 - 2 4 12 1 1 - - 2 1 - 3 1 - - 1 - 3 1 - - 4 - 1 - - 1 2

Source: Boletín Mensual de la Dirección Nacional del Algodón, no. 165-168, January-April 1953

The government's failure to encourage greater decentralization of industry is exemplified in Table 6. In 1950, 98% of the cotton establishments were located in the capital and its outskirts. While new factories in the interior provinces emerged, such as in Chaco, Entre Rios and Salta, the number was relatively negligible. However, Table 6 illustrates that during the 1940s, certain changes in the localization of industry occurred, with the increasing shift of industry outside the city to province of Buenos Aires. In 1940, the province contained 25% of cotton establishments. As Table 6 shows, just one decade later, over half of the nation's mills were located there. Only the weaving industry remained concentrated in the City of Buenos Aires.

Buenos Aires continued to be the main area of concentration for industry. By 1960, the city and its suburbs reached a population of nearly 6 million inhabitants (29% of the total Argentine population). From 1930, the acceleration of industrialization had accentuated its economic and demographic predominance. Although new centers of industrial location emerged, such as the settlement of the automotive industry in Córdoba and the establishment of steel and chemical industries along coastal strip between the capital city and Rosario, the Greater Buenos Aires area assumed the position as the nation's industrial and commercial nucleus.

^{65.} This figure was surpassed by New York (17 million), Tokyo (8.6), London (8.4), Paris (6.4), Chicago (6.3) and Shanghai (6.2). Presidencia de la Nación, *La República Argentina*. *Aspectos de su realidad económica y social*, Buenos Aires, 1960, p. 18.

Conclusions

The development of the textile industry in Argentina was a slow and late process, even in comparison with the major Latin American economies. In fact, the growth of this industry was accelerated only in the inter-war years. In the next 30 years, the textile industry led import substitution industrialization, oriented to cover domestic demand and achieving exceptionally to compete on the global market. In the 1980s, Argentina was the eleventh largest producer of textiles in the world, but Argentine firms failed to export.⁶⁶ The economic liberalization during the 1990s caused a very marked de-industrialization process, especially in textile and metallurgical branches. In the last decade, the textile industry has been reborn, achieving export even though the sectoral trade balance continues to be negative. The industrial recovery was located in districts which the textile firms had originally been established: the City of Buenos Aires, San Martin and the south of Greater Buenos Aires. New districts, protected by industrial policies, such as the provinces of Chaco and San Luis, were added to the older ones. Why was the textile industry reborn in those districts? What factors encouraged these locations? For an explanation it is necessary to return to the first half of the twentieth century, the time of the rise of the textile industry.

Between 1920 and 1950, the cotton textile industry was a leader in the process of import substitution. Until then, Argentina had been a major importer of manufactured cotton. The expansion of cotton cultivation in the north and the conditions created by the Great Depression encouraged import substitution. The new industry closely followed the path paved by the old wool textile mills that had been established in the cities of Buenos Aires and Avellaneda since 1880. Buenos Aires offered great advantages to an industry that aimed to replace imports, as it had the largest market of consumers in the country. The proximity of an international port allowed for cheaper transportation costs for an industry that utilized a large proportion of imported elements. In addition, Buenos Aires offered a large labor-market, where many people from northern provinces migrated in search of work. More importantly, Buenos Aires attracted European immigrants, many of whom had experience in the textile industry. Finally, during World War II, the industrial concentration in Buenos Aires and its outskirts allowed for the emergence of new industries to produce and repair textile machinery during a time when it could not be easily imported from Europe or the United States. In this way, the textile industry benefited from typical Marshallian externalities.

Furthermore, the Argentine textile industry's development also corresponded closely to the dynamics of import substitution industrialization as

66. Data from Singleton (1997), pp. 14-15.

described by Hirschman. It was "industrialization by tightly separated stages" and highly sequential, with less disruptive dynamics than characterized the late industrialization in Japan, Russia or United States. In the case of the Argentine textile industry, the First and Second World Wars and the Great Depression encouraged industrial growth that began in consumer goods. Unlike other Latin American experiences, production of cotton fabrics anticipated the emergence of spinning mills. This resulted in a less virtuous industrialization process via backward and forward linkage effects. The strong expansion of industry during World War II was particularly encouraged by the shortage of supply in the international market. The sudden surge of exportation was not due to improved competition, but a result of a moment of raised international prices, benefitting local manufacturers.

In the postwar years, industrial expansion continued due to government policies of redistribution that increased domestic demand, as well as credit support and protection incentives. Peron's economic policies expanded the domestic market and, through exchange control and credit policies, stimulated textile business. Under such conditions, the number of textile companies multiplied, with a large number of small workshops emerging. The concentration around Buenos Aires was accentuated but with this it failed to improve in competitiveness and increased exports. In this way, the export boom of the 1940s declined as soon as the conjuncture changed in the global textile market. The overvaluation of currency, the other side of policies to stimulate industrial investment and rising real wages, limited the chances of retaining foreign markets in a context of normalization of the global supply of textiles. The closure of the domestic market for Argentine industrialists discouraged collaboration between firms, and inhibited business strategies in order to reduce costs and improve textile qualities. Industrialists, who had a very limited influence on Peron's government and his policies, reinforced their presence in the Argentine market. Instead of a singular behavior of Argentine industrialists, it was the path taken by Latin American entrepreneurs which, as pointed out by Hirschman, preferred to stay at home longer.

APPENDIX 1 • Composition of Argentine textile exports, 1937-1957 (in tons)

Year	Total	Yarns and others	Fabrics in pieces	Fabrics in other shapes	Clothes	Others
1937	7,625.4	221.7	305.6	918.9	88.7	6,090.5
1938	7,367.5	393.2	267.2	1,718.0	93.4	4,891.7
1939	9,941.3	484.4	365.6	2,157.8	177.2	6,756.3
1940	8,190.7	866.7	394.2	2,256.3	172.0	4,501.5
1941	9,512.0	1,788.0	808.5	1,824.5	334.4	4,756.6
1942	9,924.7	3,054.0	1,951.2	2,604.8	972.0	1,342.7
1943	19,023.0	3,457.7	7,059.7	4,031.8	2,754.4	1,719.4
1944	8,288.8	1,371.8	3,137.5	1,818.2	1,008.1	952.2
1945	7,405.0	791.6	1,545.2	1,579.4	840.4	2,648.4
1946	8,890.5	612.6	1,348.1	2,394.3	877.3	3,658.2
1947	3,865.9	279.4	243.5	571.0	214.2	2,557.8
1948	1,159.3	124.7	48.4	41.7	109.8	834.7
1949	2,552.4	53.0	14.8	28.7	47.8	2,408.1
1950	6,648.8	111.6	38.9	52.2	59.4	6,386.7
1951	3,159.2	56.7	470.6	72.3	87.4	2,472.2
1952	1,301.3	117.3	36.4	93.8	31.5	1,022.3
1953	996.0	16.7	162.5	58.1	57.0	701.7
1954	1,172.0	4.1	103.7	37.6	0.8	1,025.8
1955	1,419.8	7.4	168.0	62.7	20.9	1,160.8
1956	2,350.5	15.6	322.7	55.7	23.0	1,933.5
1957	4,270.0	47.0	607.6	87.4	68.5	3,459.5

Source: Own work based on, Anuario del Comercio Exterior Argentino, 1937-1958.

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The Rise of the Textile District of Buenos Aires and the Limits of Import Substitution Industrialization in the First Half of Twentieth Century

ABSTRACT

This paper analyzes the origins of the textile district of Buenos Aires in the first half of the twentieth century. In this period, the cotton branch led import substituting industrialization. The growth of the textile industry accentuated the characteristics that the industrial location had assumed in Argentina; especially the spatial concentration in the City of Buenos Aires and its outskirts. It is shown that Argentine textile development partially fits the industrial district model. Although industrial concentration in Buenos Aires allowed the textile industry to benefit from Marshallian external economies, this industrial growth assumed typical forms of the "late, late industrialization" characterized by Albert Hirschman. On this subject, the article analyzes the factors that shaped the formation of the industrial district and the limits of industrial agglomeration advantages in the context of import substituting industrialization.

KEYWORDS: textile industry, industrial district, import substitution industrialization, Argentina

JEL CODES: N60, R30, N16, N66

El crecimiento del distrito textil de Buenos Aires y los límites de la industrialización por sustitución de importaciones en la primera mitad del siglo XX

RESUMEN

El artículo analiza el surgimiento del distrito textil de Buenos Aires en la primera mitad del siglo XX. En ese periodo, la industria algodonera lideró la industrialización por sustitución de importaciones. La implantación de la industria acentuó las características que había asumido el primer patrón de localización industrial en Argentina con la concentración espacial de las empresas en la ciudad de Buenos Aires y las localidades aledañas. Se sostiene que el caso bajo estudio se amolda parcialmente al modelo de distrito industrial marshalliano. La localización en Buenos Aires permitió a la industria textil beneficiarse de las típicas economías externas marshallianas, pero el crecimiento industrial asumió formas características de la industrialización «tardía y postrera» caracterizada por Albert Hirschman. El artículo analiza los factores que condicionaron la formación del distrito industrial de Buenos Aires y los límites de las ventajas de la aglomeración industrial en el contexto de la industrialización por sustitución de importaciones.

PALABRAS CLAVE: Industria textil, distrito industrial, industrialización por sustitución de importaciones, Argentina

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