From handcrafted tobacco rolls to machine-made cigarettes:
The transformation and Americanization of Puerto Rican tobacco, 1847-1903

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Juan José Baldrich
Professor
Department of Sociology and Anthropology
University of Puerto Rico
23345 UPR Station
Río Piedras, Puerto Rico 00931-3345
Telephones: (787) 764-0000 ext. 4311 and 3105
E-mail Juan.Baldrich.grd.soci@aya.yale.edu

Abstract

The Puerto Rican tobacco industry experienced a profound transformation from the middle of the nineteenth century to the U.S. invasion in 1898 that can be explained around three dimensions. First, growers started to harvest a leaf that resembled more Cuban leaf for cigars rather than the one used for cut tobacco or rolls to be consumed by chewing. Second, factories relying on wage labor replaced small artisanal shops operated by independent cigar or cigarette makers. This industrial capacity was not export oriented, thus contributing to the substitution of Havana cigars and Cuban cigarettes with domestic ones. Third, the development of an entrepreneurial class in tobacco manufacture came to a halt as a consequence of the invasion. At the turn of the century, the American Tobacco Company, the "trust," bought into the most technologically sophisticated

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tobacco manufacturing sector, machine-made cigarettes, and, soon after, independent cigar manufacturers faced stiff competition, when the trust attempted to monopolize the trade.

Resumen

La industria del tabaco puertorriqueño experimentó una transformación profunda desde mediados del siglo diecinueve hasta la invasión de los Estados Unidos en 1898 que puede explicarse en torno a tres dimensiones. Primero, los tabacaleros comenzaron a cosechar una hoja cada vez más parecida a la rama cubana para cigarros que a la usada para picadura o andullos. Segundo, fábricas con trabajo asalariado remplazaron los pequeños talleres artesanales manejados por tabaqueros o cigarrilleros independientes. Esta capacidad industrial no estuvo orientada a la exportación, así pues contribuyendo a la sustitución de cigarros habanos y cigarrillos cubanos con la producción interna. Tercero, el desarrollo de una clase empresarial en la manufactura de tabaco se detuvo de repente como consecuencia de la invasión. Al final del siglo, la American Tobacco Company, el "trust", compró en el sector más sofisticado de la manufactura de tabaco, el de los cigarrillos hechos a máquina, y, poco después, los fabricantes independientes de cigarros encontraron una competencia fuerte, cuando el trust intentó monopolizar el ramo.

Palabras clave: tabaco, tabaqueros, capitalismo, Puerto Rico

Keywords: tobacco, cigar-makers, capitalism, Puerto Rico

Journal of Economic Literature Classification System: N16, N36, N56, N66

INTRODUCTION

The most reputed tobacco growing district of Cuba, Vuelta Abajo, became the major theater of operations during the 1897 and 1898 campaigns of the second war for Cuban independence (1895-1898). The conflict dislocated production and the relocation policies of the Spanish regime

severely constrained the time that growers and work hands could dedicate to the plantations.[1] At the end of the war, large areas of the heavy and sandy clay soils were barren and laid to waste.[2] Seed for the 1898-99 harvest was scarce and needed to be imported from other areas as corporate and individual planters required excellent seed to maintain the markets and international reputation of their leaf. According to the authoritative Angel González del Valle growers generally imported it from Puerto Rico.[3]

Following the Spanish-American War, many residents of the United States surveyed Puerto Rico for their newspapers, for business opportunities, and for government agencies. One of these appraised tobacco factories extant in 1898-1899 as follows:[4]

> Rucabado and Portela are the owners of *La Flor de Cayey* cigars and cigarettes, manufactured in Cayey, and *La Ultramarina* cigar and *La Colectiva* cigarette factories in San Juan. The machinery and equipment are of the most modern classes, employing *La Colectiva* factory machinery as good as that of any other factory in Puerto Rico.
>
> In Ponce, Toro and Company operate a factory dedicated exclusively to cigars and in Playa de Ponce they have a very large one for cigars and cigarettes. With over 500 laborers and the most up to date machinery, Toro and Company can produce 1,000,000 cigarettes and 25,000 cigars daily.

These observations identify a lively and modern tobacco industry and even suggest some degree of industrial concentration where large factories had a considerable output and employed a sizable work force. Both firms reviewed had crossed the threshold from the hand-rolled commodity to the capital intensive machine-made cigarette and, besides, the bulk of the machinery was state of the art.

During the 1850s the situation was noticeably different. The quality of Puerto Rican leaf was

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1. González Fernández (1996), pp. 310-312.
2. Lestina (1940), p. 45-46.
3. González del Valle (1929), pp. 61-62.
4. Ceballos (1899).

poor, "unworthy for a good cigar," and was similar to the ill-reputed exports from the neighboring Dominican Republic.[5] At mid-century, the literature holds no known references to the manufacture of cigarettes in shops, mechanization was nonexistent, and no factories are reported. Perhaps, the best illustration of this state of affairs is Rafael Cordero (1790-1868) who is revered, to this day, as the great nineteenth century educator of the wealthy and the poor alike.[6] Figure 1 presents a detail of a large canvas, done by Francisco Oller in the 1890s, of the maestro at home with his students and discreetly reproduces his trade in the cigar-maker's bench with finished cigars besides a keg with filler leaf and other artifacts of the craft. On one hand, part-time artisans hand-rolled cigars in "the backrooms of retail shops and small grocery stores."[7] On the other, the principal medium of local tobacco consumption remained in rolls, – known as *tabaco hilado* and closely related to the Jamaican rope, the Cuban and Dominican *andullo*, and the U.S. plug – which the growers prepared themselves in their own homes. The rolls consisted in twisted tobacco leaves in the shape and length of a rope, then, to be marketed and sold in cylindrical rolls from which the user would cut a quid or chaw, a

Figure 1. Francisco Oller, *La escuela de maestro Rafael Cordero* (detail). Colección Ateneo Puertorriqueño.

5. Abad (1888), p. 317; San Miguel (1997), pp. 131-142.
6. Delano (1994).
7. Abad (1884), p. 97.

mascadura, suitable to be chewed for its juices.

Tobacco leaf was the third leading export before the U.S. invasion and, soon after, it would be second only to sugar. Besides, the men and women who toiled in tobacco factories became a vital element in anarchist groups, the trade-union movement, and the Socialist Party. However, historians have not researched changes in leaf quality, the development of the factory system, nor the penetration of U.S. capital in the tobacco industry at the end of the nineteenth century and early years of the twentieth. This article addresses these issues.

Thus, this paper seeks to document the expansion of leaf production and the veritable transformation of its attributes during the second half of the nineteenth century. When Puerto Rican growers gained awareness of the bonanza obtained by the leaf from the Vuelta Abajo region of Cuba many shifted their planting to a type of tobacco with properties similar to Cuban leaf. A second goal is to examine the displacement of small artisanal shops, run by independent cigar or cigarette makers, by the factory system employing wage labor. While this industrial capacity was not export oriented it contributed to the substitution of Havana cigars and Cuban cigarettes with domestic ones. The third aim is to document the halt of a developing entrepreneurial class in the manufacture of cigars and cigarettes. At the turn of the century, the American Tobacco Company, the "trust," bought into the most technologically sophisticated of all tobacco manufacturing sectors, cigarettes. Cigar manufacturers faced stiff competition from the trust when it attempted to monopolize the trade. The essay also seeks to interpret the development of the Puerto Rican tobacco industry with reference to changes in the Caribbean and elsewhere in the Americas and Europe. It holds that Cuban leaf and Havana cigars became the standard to judge domestic products.

TOBACCO AND THE CUBAN STANDARD

During much of the eighteenth century the dominant forms of tobacco consumption were snuff in Europe, chewing tobacco in the United States, and cigars and cigarettes in some of the Iberian

colonies. From the Americas, cigars first spread to Spain,[8] where they posted small gains by the end of the eighteenth century, where imports from Havana and Spanish Santo Domingo together with the production of the Royal Factories in Seville and Cádiz attended the demand.[9] The habit seems to have extended to Britain and its American colonies during the Seven Years War when the British occupied Havana in 1762.[10] It seems to have spread elsewhere in Europe during the Napoleonic Wars when armies of diverse national origins fought in Spain and soldiers picked-up a custom largely unknown in their own countries.[11] Cigars posted constant gains until they eclipsed snuff and chewing tobacco during the nineteenth century in both Europe and the United States.[12]

The tobacco trade of the Caribbean Islands was twofold: overseas manufacturers imported the leaf or merchants brought the manufactured product. Accordingly, minute quantities of cigars from Jamaica found their way to Austria and Prussia in the 1870s,[13] the Hanseatic ports of Hamburg and Bremen imported large amounts of leaf from the Dominican Republic as early as the 1840s[14] and U. S. and British merchants habitually bought Havana cigars from the onset of the century.[15] In Spain itself, the king instructed the directors of the Royal factories in 1817 to "manufacture in imitation to those remitted from the Havana factory, improving, where possible, their manufacture."[16]

Smoker and abstinent considered Vuelta Abajo leaf from Cuba and the hand-rolled Havana cigars

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8. Braudel (1984), p. 220.

9. Lluberes Navarro (1984), p. 7; Pérez Vidal (1959), p. 95.

10. Havana cigars competed with the aristocratic snuff and the democratic chaw of tobacco but also with a native cigar crafted by farmers in the Connecticut Valley and in Pennsylvania.

11. Kiernan (1991), p. 36; Robert (1964), pp. 95-96.

12. Corti (1931), pp. 208-50; Robert (1964), pp. 102-105, 173.

13. Fawcett (1907), p. 210.

14. Baud (1988), pp. 89-90.

15. Gottesegen (1940), pp. 140-141; Ortiz (1947), pp. 307-308.

16. Royal decree quoted in Pérez Vidal (1959), p. 324.

to be truly exceptional. "How Havana tobacco embarked upon its conquest of the world"[17] is well known and Fernando Ortiz recapitulated concisely:[18]

> As civil liberties triumphed and political constitutions were guaranteed, the cigar came into the ascendancy once more, coinciding with the advent of economic liberalism in Cuba, which threw the port of Havana open to all nations. And in this atmosphere of free industrial and commercial enterprise Havana tobacco, by the unanimous plebiscite of the world, was awarded the imperial scepter of the tobacco world. Havana tobacco from then on became the symbol of the triumphant capitalistic bourgeoisie. The nineteenth century was the era of the cigar.

By the 1850s, Havana cigars and Vuelta Abajo leaves set the standard to judge other cigars and cigar filler in the Caribbean, the Americas and Europe. Traders, merchants, and manufacturers elsewhere oriented their production to the lucrative Cuban standard through several strategies. Many obtained Cuban seed and planted in soils with precipitation, sunlight and drainage similar to those of Vuelta Abajo. Mexicans and the British stimulated it with Cuban hands in Veracruz and Jamaica during the 1860s.[19] During the 1870s, Canary islanders used the Cuban model to gain a foothold in the Spanish market.[20] Dutch and Spanish planters were successful in Sumatra and the Philippines respectively at earlier dates.[21]

EXPANSION AND TRANSFORMATION OF TOBACCO GROWING

At mid-century, the leading type of tobacco planted in Puerto Rico was employed in the manufacture of roll chewing tobacco for the domestic market.[22] Growers and merchants retained the best for the local market, while the lesser grades were exported as inexpensive filler for cigars and employed in the preparation of industrial dyes by European manufacturers. Small amounts made their way to the Netherlands where they gained something of a reputation as pipe-tobacco

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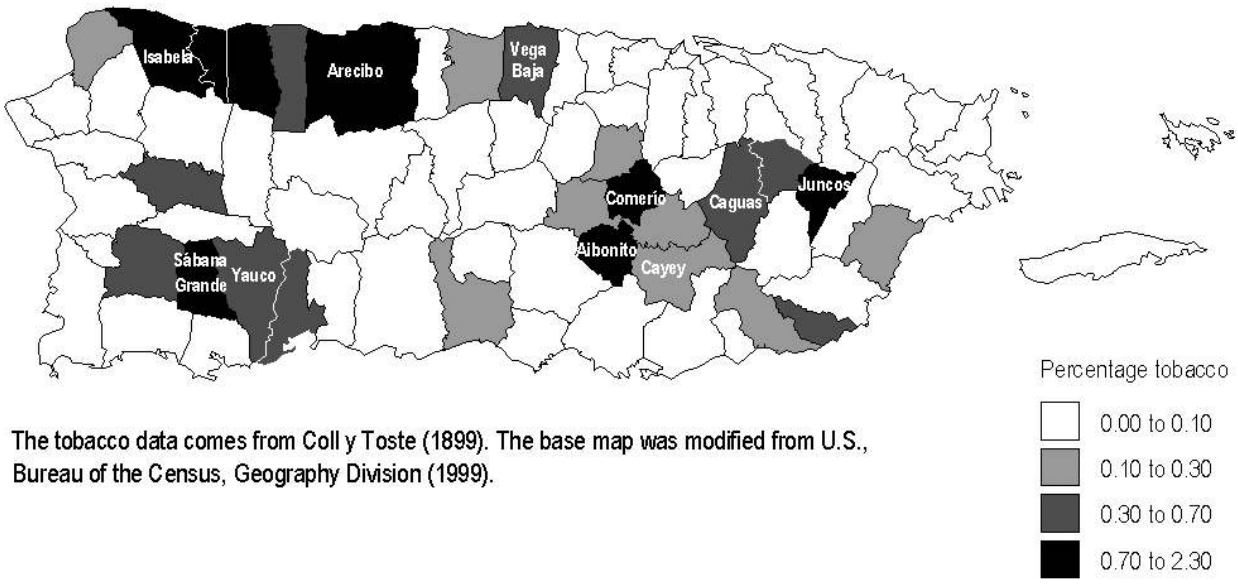
17. This is the title of Ortiz's (1947) second to last chapter.
18. Ortiz (1947), p. 309.
19. González Sierra (1987), pp. 73-74; Stubbs (1995), 51-81.
20. Luxán Meléndez (2005).
21. de Jesús (1980), pp. 2-3; Hanusz (2000), p. 77.
22. Abad (1884), p. 96; Gage (1939), p. 17.

and shag.[23] Hamburg and other Hanseatic ports bought 52.8 percent of leaf exports between 1845 and 1849 while the British took 31.1 percent during the same period. The Hansard ports and the British remained the principal destinations for domestic leaf during the next quarter century with Cuba and Spain gaining considerable ground after 1870.[24]

Map 1 identifies the three chief tobacco growing regions in the prelude to the U.S. invasion in 1898. The map represents the percentage of the total land area of each municipality planted with tobacco along four categories that range from 2.50 percent of the land area to no tobacco at all reported in 1897. According to the map, the main tobacco growing district was the northern coastal plain between Vega Baja and Aguadilla. The northern littoral included Camuy and Quebradillas, to its west, which were the leading municipalities in the country with 1.62 and 2.27 percent of their respective land areas planted with tobacco. An age-old district encompassed the rolling hills of the southeast centering around Yauco and Sábana Grande. Yauco and its vicinity

Map 1. Percentage of the land area planted with tobacco in Puerto Rican municipalities, 1897



The tobacco data comes from Coll y Toste (1899). The base map was modified from U.S., Bureau of the Census, Geography Division (1999).

23. Abad (1888), p. 318; Kimm (1964), p. ix.

24. Sonesson (2000), pp. 172-173, 209-210

seem to have been the main tobacco area until sometime in the nineteenth century.[25] The better leaf from these two districts was suitable for roll chewing tobacco[26] and the remnants, which were considerable, were exported mainly as scrap, *boliche*, for the manufacture of cigarettes, pipe-tobacco, short-filler for cigars, shag and industrial dyes.[27] Finally, Map 1 identifies a developing tobacco region in the slopes and valleys of the eastern highlands between Juncos and Aibonito, the latter being the third leading tobacco municipality with 1.55 percent of its land area planted with the leaf.

Tobacco cultivation and growing in Puerto Rico experienced three major changes during the second half of the nineteenth century. The first refers to the nature of the commodity produced in the mountainsides and the narrow river-valleys of the eastern highlands identified in Map 1. The leaf that slowly ascended and spread to the Cordillera Central was not the leaf consumed domestically as chaws of tobacco and the inferior grades exported for the inexpensive markets in Europe; it was a superior leaf, if employed, in the manufacture of cigars. For instance, a nineteenth-century observer considered the leaf from Cidra excellent and, as early as 1878, merchants and manufacturers, who were then called fabricants, identified the tobacco of the highland municipality of Sabana del Palmar by the trade name of Comerío and considered it the best in the island.[28]

Puerto Rican growers and merchants had long been aware of the reputation and exceptional

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25. Moscoso (1999), pp. 201-205.

26. Abad (1884), p. 97.

27. Boliche refers to the lower, over ripe, leaves of the tobacco plant known as *colas* in Cuba. It also includes the sucker crop, the *segundo corte* in tobacco parlance, which are those obtained when the once harvested plant is left to sprout. These leaves are unsuitable for the manufacture of long-filler cigars or roll chewing tobacco because they cannot be stemmed. Refer to Frese (1929), p. 314; Saavedra (1929), p. 83.

28. Ubeda y Delgado (1878), pp. 251-252. Subsequently, Sabana del Palmar changed its name for Comerío. A report from the British consul considered Comerío the best tobacco for cigars. See Dávila Cox (1996), p. 87.

characteristics of the leaf from Vuelta Abajo. They sought to produce a cigar filler patterned on this successful model and, accordingly, sowed new varieties and harvested on the Cuban system.

A case in point was the adoption of Cuban-techniques harvest tobacco, remove it from the field, and, finally, carry it to the curing barn. Traditionally, field hands would cut the fully mature plant by the stalk, hence the practice came to be known as *de mata* or stalk-cut, let it wilt under the basking sun in the field, and, finally, carry it to the curing barn. Once in the barn, the stalks were tied to sticks, which in turn, hung from the ceiling of the structure.[29] This harvesting technique, dominant in the early nineteenth century, started to give way to what domestic growers, as well as those in other latitudes, called the Cuban method. When the plant started to mature, known when the lower leaves started to turn yellow, the farmer or his employees proceeded to cut the leaves from the top down in pairs, known as *mancuernas*, which were immediately classified as wrapper or filler tobacco. Each plant went through two to four such cuttings. The pairs of leaves, first

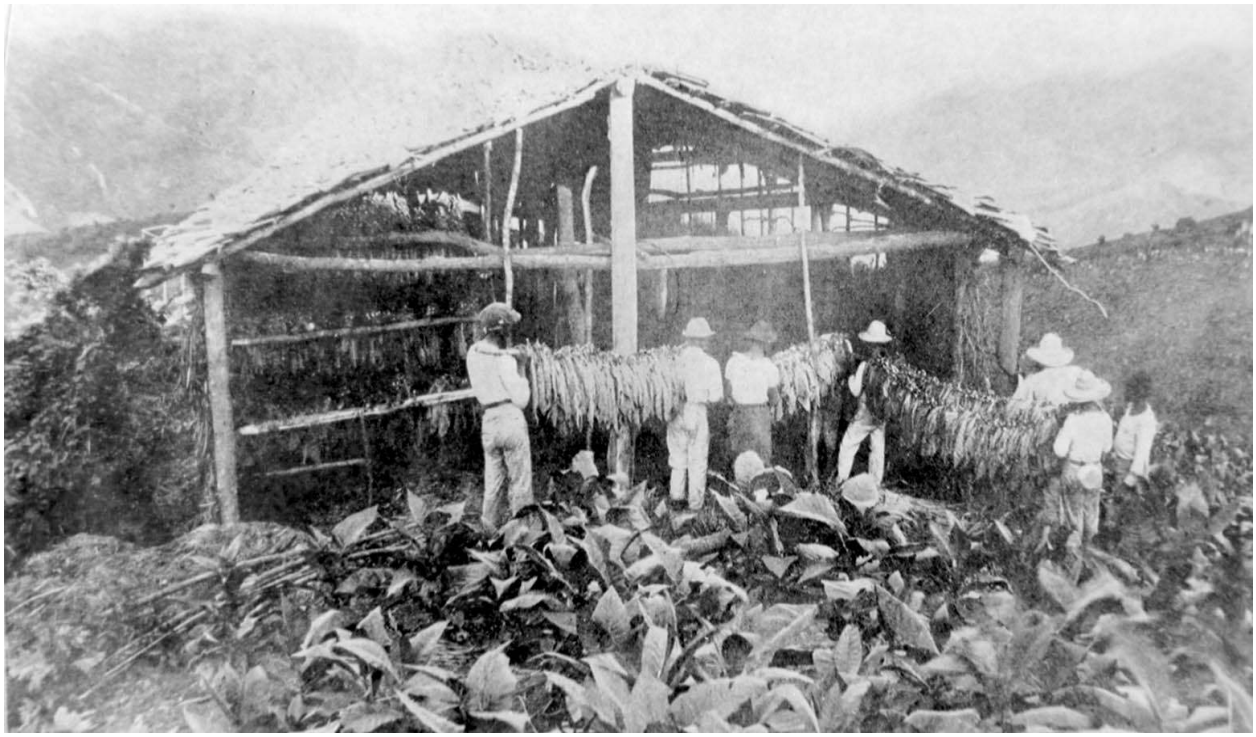

Figure 2. Men carrying tobacco sticks into a curing barn near Cayey. Reprinted from U.S., War Department (1901), p. 192.

29. Aguayo (1876), pp. 64-65.

hung across a man's arms, were slipped off on so called “tobacco sticks,” then known as *cujes* and more recently *varillas*, some three yards in length. Figure 2 shows several men carrying three *varillas* full of *mancuernas* as they were about to bring the sticks into a very modest curing barn to be hung in order to dry the leaves by air.[30] The differences between the two harvesting techniques affected the distribution of space and the internal structure of the barns.

By 1888 the men and women from the highlands had gained considerable experience with different varieties and growing and harvesting methods that their agricultural practices were clearly distinct from the traditional ones:[31]

> Havana seed has been taken to Puerto Rico several times, and it has not kept its superior qualities; on the other hand, an indigenous seed provides the exquisite tobacco of Cayey, Caguas, Comerío and Morovis.

By 1895, merchants and smokers alike associated the tobacco of the highlands rather than that from the northern plain or the hills to the southeast with the best Cuban tobacco. For instance, La Flor de Cayey factory:

> established, as it is, in one municipality of the island that enjoys the most legitimate fame due to its extensive tobacco plantations, bordering Caguas and Aibonito . . . it has become the Vuelta Abajo of Puerto Rico, it uses superb leaf. In [the 1888 Universal Exposition of] Barcelona it summoned much attention and attained, in justice, a gold medal.[32]

The second change experienced by domestic tobacco growing refers to its use in substitution of foreign leaf. As the quality of local cigar filler came closer to the Cuban model there was less need to import if from the sister island.

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30. Aguayo (1876), p. 58. Van Leenhoff (1905), p. 12. The twentieth century witnessed, still, a third harvesting technique called *deshojado* or primed where the leaves were picked one by one as they matured individually.

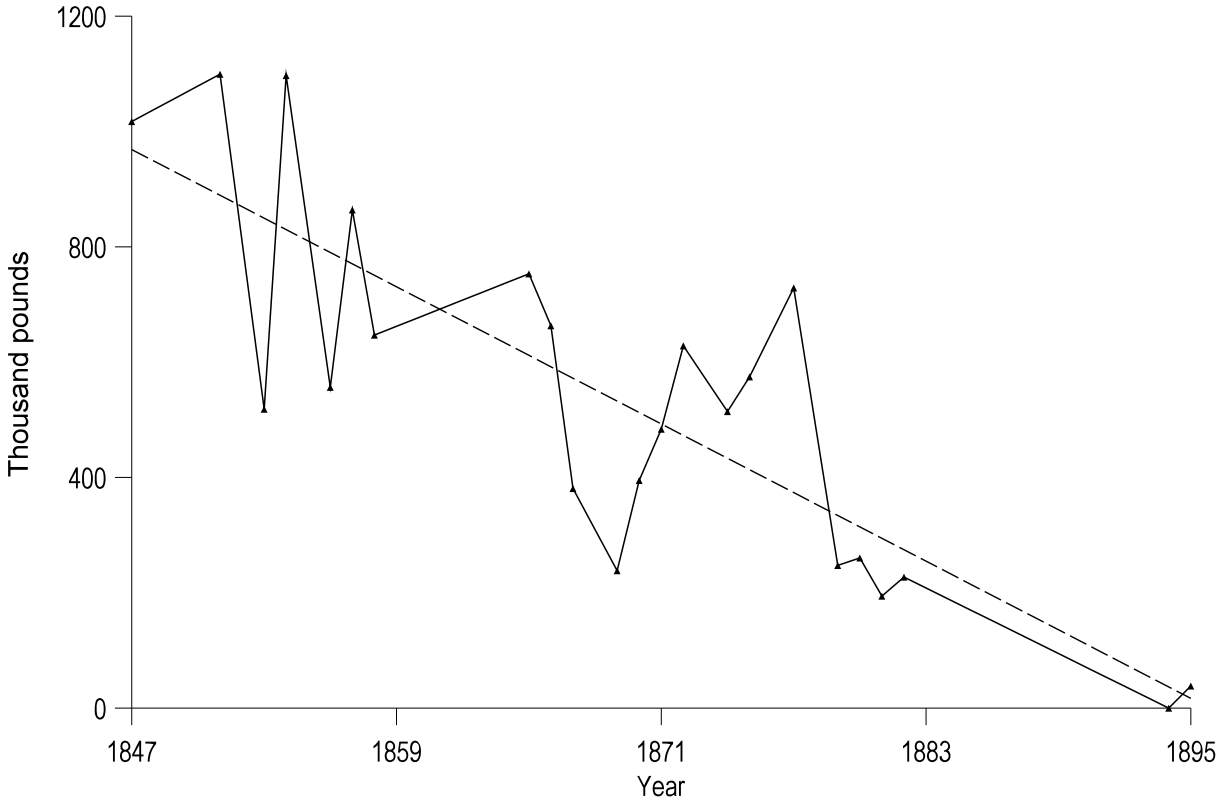
31. Abad (1888), p. 353.

32. Infiesta (1895), p. 214. Atienza Sirvent (1890), p. 11. Atienza Sirvent, an authority on tobacco, was less generous. He placed Vuelta Abajo, naturally, first followed by the Philippines on nearly an equal footing. On a second tier came the Canary Islands and Puerto Rico, in this order, which competed favorably with Cuban leaf planted in *Partido*.

> From that time [1860s] the intervention of some intelligent manufacturers and the increase of domestic demand, because of the shortage of Havana leaf, insured more attention on cultivation. Nowadays, the improvement is such that nobody seeks tobacco from Havana. The wrapper harvested summons prices ranging from $50 to $100 per hundredweight in their [Puerto Rican] factories. [33]

Figure 3 presents leaf imports to Puerto Rico and the linear trend from the three major sources: Cuba, Virginia, and the Dominican Republic for selected years between 1847 and 1895. The figure clearly identifies a reduction to the point of self-sufficiency by the end of the century.[34] It

Figure 3. Tobacco leaf imports to Puerto Rico, 1847-1895



Data from Aguayo (1884), p. 19; and Hitchcock (1898), p. 18.

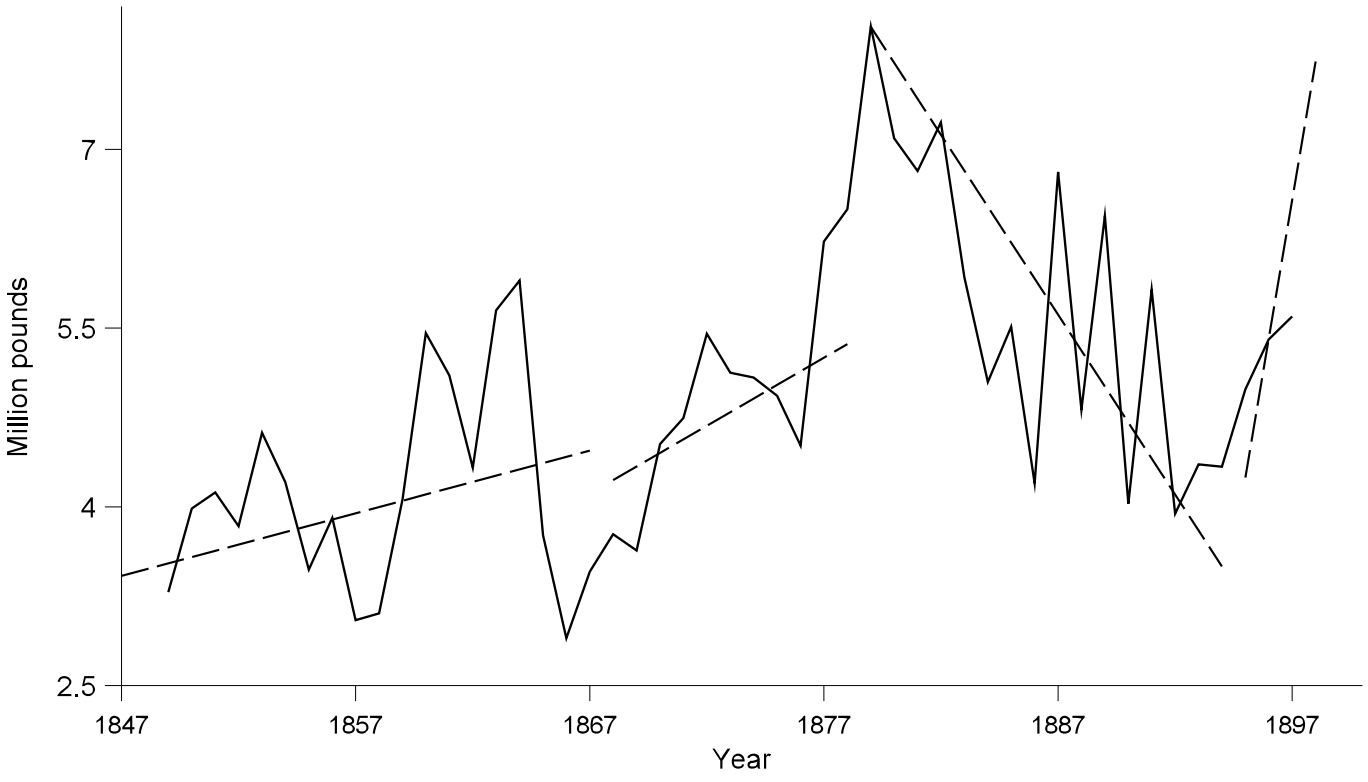
33. Abad (1888), p. 318.

34. The Pearson product-moment correlation coefficient between tobacco leaf imports and time measured in years is -0.83. The statistic is based on the 23 years with available import data. Cutbacks came at Cuban expense primarily and, to a lesser extent, from Virginia. Both handled a superior leaf. Imports of Dominican leaf, considered inferior, show wide fluctuations but no discernible trend during the second half of the nineteenth century.

suggests that local growers and merchants, albeit aided by a tariff, consolidated their position in the domestic cigar-filler market.[35] Needless to say, roll chewing tobacco, the major product -with its own varieties, harvesting and curing methods and consumption practices- was always secure.

The third major agricultural transformation was the increase of tobacco leaf exports. During the second half of the century, expanding consumption of cigars and cigarettes in the United States and Western and Central Europe stimulated Puerto Rican leaf exports. They experienced a secular

Figure 4. Puerto Rican tobacco leaf exports: Five year moving averages and trends, 1847-1898



Data from Colón (1930), pp. 289-291; Gaztambide Báez (1968), p. 11.

35. Rivera Rodríguez (1998), p. 195.

tendency to increase. Figure 4 presents the five-year moving averages of Puerto Rican leaf exports and shows their long term tendency to rise despite strong cyclical fluctuations.[36]

The tendency, however, did not show a clear-cut linear pattern because exports conformed to the ebb and flow of Cuban leaf markets. The Cuban wars for independence and the intervention of the United States in the second conflict disrupted planting, manufacturing, and commerce which resulted in benefits for Puerto Rican growers and exporters and markedly so during the second war. These fluctuations did not go unnoticed as Miguel Meléndez Muñoz, a sociologist and acute observer, held that the local economy became a thriving beneficiary of the paralyzation and ruin of Cuban industry and agriculture.[37]

The cyclical fluctuations of Puerto Rican leaf exports presented in the Figure 4 responded to the civil turmoil caused by the Cuban wars for independence. Four broken lines give the linear trends of Puerto Rican leaf exports during periods of war and peace in Cuba. The first broken line shows a slow rising trend for 1847-1867 that becomes steeper during the first Cuban war for independence (1868-1878). While the main export markets for leaf during the early stages of the war remained German, with a 41.6 percent share, and British, with 24.8 percent; Cuba and Spain entered the market in force to corner 17.9 percent and 11.9 percent respectively from 1870 to 1874.[38] To wit, small Cuban shops or buckeyes, known locally as *chinchales*, in opposition to export oriented large manufactories, relied on other leaf sources, Puerto Rican leaf being one, to substitute the lesser grades of Cuban leaf in the manufacture of cigars and cigarettes for the domestic market.[39] Puerto Rican leaf exports reached a level that Vuelta Abajo growers addressed the issue in writing and successfully pressured their colonial government to limit the imports

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36. The Pearson product-moment correlation coefficient between exports of Puerto Rico tobacco leaf and time measured in years is 0.36. Data was complete for 1847-1899.

37. Meléndez Muñoz (1963), p. 127.

38. Sonesson (2000), p. 173.

39. González Fernández (1992), p. 133.

solely to the port of Havana so that a commission could inspect the leaf.[40] Furthermore, the scarcity and high prices commanded by Cuban leaf induced the Spanish tobacco monopoly, during the early phases of the war, to forgo the mandatory auction it was required in order to procure Puerto Rican leaf. Thereafter, starting in 1870, the purchases of inexpensive *boliche* for the manufacture of cigarettes went through regular auction mechanisms.[41]

Figure 4 also presents the linear trend for the years following the first Cuban war (1878-1895). These were lean years for Puerto Rican leaf exports but good ones for Cuba as worldwide leaf exports from the latter island increased up to 1896, and cigar exports, between 1882 and 1890 when the U.S. protected once more its cigar manufacturing industry with another tariff.[42]

Again, Puerto Rican leaf exports present a steep rise during the second Cuban war for independence (1895-1898). In 1896, the Spanish authorities established that tobacco production in western Cuba was destined to supply the Spanish monopoly and colonial manufacture.[43] However, as war continued to ravage the tobacco growing areas, Cuban merchants and manufacturers increased their dependency on Puerto Rican leaf[44] to the extent that Cuba became the leading market for Puerto Rican leaf exports.[45]

In summary, domestic growers expanded and transformed tobacco agriculture along three dimensions by the end of the century. First, highland planters shifted to a leaf that fitted the model of the Havana cigar. Second, such leaf began to substitute imports from Cuba and Virginia to the extent that domestic production supplied local demand. Lastly, domestic leaf exports increased across the board but, significantly, Cuba itself became a major recipient of wrapper and filler for

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40. Memoria (1877); Villa (1876); Porto Rico tobacco (1877), p. 1.
41. Delgado y Martín (1892), pp. 64-65; Hernández (2005), pp. 15, 25-26.
42. Baldrich (1994), pp. 20-23.
43. González Fernández (1996), p. 310.
44. Rivero Muñiz (1965), p. 316.
45. del Valle (1969), p. 568.

Havana cigars.

THE FACTORY SYSTEM

No tobacco factories appear before the 1870s because manufacture was either a cottage industry, as in roll-chewing tobacco,[46] or the work of independent artisans rolling cigars and cigarettes by hand.[47] While the relations of production in the manufacture of roll-chewing tobacco remained much the same, the social relations between the men and women that crafted cigars and cigarettes and stemmed tobacco experienced sizable modifications during the ensuing decades. The salient transformations experienced by domestic cigar and cigarette manufacturing can be grouped into four changes of economic nature and two social ones.

First, the beginnings of the Puerto Rican factory system formed part of the transfer of Cuban cigar making to other countries as manufacturers attempted to participate in the bonanza of the Havana cigar by imitating its production. Cuban cigar-makers and manufacturers established and operated factories in New York City, Key West and later in Tampa that handmade cigars with the same techniques employed in Havana and relied exclusively on Cuban leaf.[48] In due time, this type of cigar acquired a good reputation and a distinct character of its own under the name of "Clear Havana." Likewise Cuban migrants planted tobacco and manufactured cigars in Jamaica, in Veracruz, Mexico, and elsewhere in developments that coincided or antedated the first documented instance of a cigar factory in Puerto Rico.

José Rodríguez Fuentes, a Spaniard who learned the craft in Cuba, is a case in point. He went on to establish a buckeye, a chinchal, in San Juan in 1870[49] which employed some 30 rollers six years

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46. Gage (1929), p. 43.

47. A few were slaves that kept to the trade after emancipation in 1873. See Mayo Santana, et al. (1995), p. 39.

48. Ingalls (1993); Westfall (1984).

49. *La Correspondencia* (1892), p. unnumbered.

later and was known as Las Dos Antillas.[50] Migrants like him carried the craft of the Havana cigar to other lands as under his "shadow commenced the development of the new industry in that country [Puerto Rico]".[51] The most common cigar shape, the *breva*, began to be complemented by other shapes, *vitolas* in tobacco parlance, such as *regalías británicas* and others that consciously imitated Cuban vitolas particularly in the larger manufactories.[52] By the end of the century the Havana model dominated the domestic cigar industry.[53] Some manufactories, such as La Flor de Cayey, gained sufficient acceptance for their imitations[54] to become providers for the Royal Spanish house.[55]

Although the diffusion of the Havana craft stimulated the Puerto Rican cigar industry, it was not enough by itself because indigenous circumstances had to be favorable. The second economic change refers to domestic conditions propitious for the establishment of the factory system. A reexamination of the tobacco leaf exports presented in Figure 4 allows a partial explanation of these conditions. Figure 4 shows that the 1880s and early 1890s were years of contracting or slow expanding tobacco leaf exports. That is, the growth of domestic manufacture coincided with the period of declining leaf exports (1880-1894). It is likely that growers, merchants and exporters sought to balance the loss of foreign markets with import substitution in both cigars and cigarettes as they sought manufacture to balance their weakness in the leaf business.

The 1880s were ripe for the development of the factory system in another sense. As indicated above, domestic growers had improved leaf quality by the 1880s so that local manufacturers had ready access to a choice binder and filler from the highlands that resembled more than ever the coveted Cuban model. Manufacturers and cigar-makers embarked themselves in their pursuit of

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50. García (1990), p. 246; *La cuestión tabaquera* (1885), p. 5.
51. *La cuestión tabaquera* (1885), p. 5.
52. Abad (1884), p. 29; Infiesta (1895), p. 209.
53. *Sketches* (1904).
54. Infiesta (1895), p. 214.
55. Villar, Lanza y Cª (1922).

Cuban vitolas and by the 1890s had gained some mastery rolling leaf in the style of Havana. A similar downturn in leaf exports earlier might have had a different result.

The third economic change is the transition from artisanal shops to the factory. Workshops remained small during the 1870s. For instance, there were six cigar workshops in the capital in 1879 but most of these seem to have been short-lived.[56] In 1883, there were still six in the capital but they failed to exhibit a stable nature because only José Rodríguez Fuentes appears twice; his factory, Las Dos Antillas, employed 100 cigar-makers and manufactured cigarettes.[57] Factories such as Portela and Lomba's renowned La Ultramarina appeared for the first time. By 1885 San

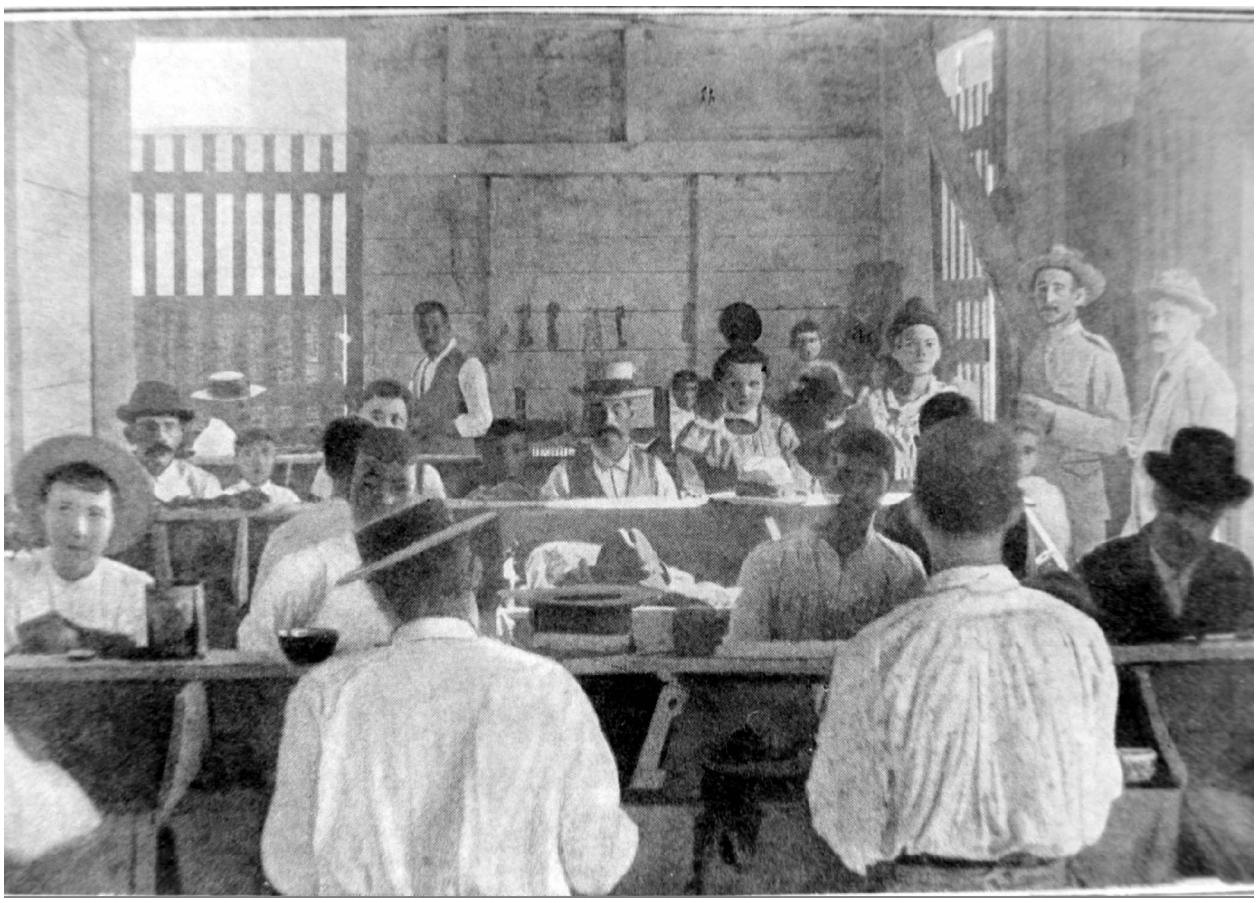

Figure 5. Cigar makers at the largest factory in Cayey. Reprinted from Dinwiddie (1899), p. 124.

56. Pérez Moris (1879), p. 40.

57. Abad (1885), p. 127; García (1983), p. 12.

Juan boasted nine manufactories with names that started to repeat themselves in the press and literature.[58]

The promotion of the trade began to assume more characteristics of a factory setting than the artisanal shop it was replacing. For instance, Las Dos Antillas traveled far to participate in the Universal Exposition of Barcelona in 1888 where it obtained a gold medal.[59] While mechanization was still rudimentary, Fructuoso Bustamante's La India Occidental in Ponce seems to have outstripped others in the introduction of machines by preparing the filler for its cigarettes with a U.S. made shredder.[60]

The factory system posted significant gains during the 1890s. Las Dos Antillas hired more than 100 rollers in 1892[61] and La Ultramarina employed some 160 cigar-makers by 1897.[62] The defensive strategies of tobacco merchants and planters, identified above, continued: Cándido Fariña and Co. and Rucabado and Co. established factories in Juncos and Cayey respectively.[63] Figure 5 presents a group of men, together with a few children, hand-rolling cigars at their benches possibly at Rucabado's La Flor de Cayey which claimed to employ some 68 rollers and produce 30,000 cigars weekly.[64] La Habanera, a large cigar and cigarette factory, was established in 1890.[65] During the last quarter of the century the factory system employing wage labor began to displace the independent artisan and the small workshop, the chinchal. By the turn of the century, several factories had been in existence for years as capitalist production was becoming

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58. *La cuestión tabaquera* (1885), pp. 5-6.

59. Infiesta (1889), p. 42.

60. Abad (1884), p. 61.

61. *La Correspondencia* (1892), p. unnumbered.

62. García (1990), p. 246.

63. Blanco Fernández (1930), p. 252; Infiesta (1895), p. 206; Paniagua (1902).

64. Carroll (1899), p. 749.

65. Cámara (1934), p. 62. This partly mechanized factory employed steam by 1899 and was located in the western municipality of Mayagüez. See Ceballos (1899).

the dominant mode of crafting cigars and cigarettes.

As tobacco manufacturing grew in scale, the manufacturer lost direct contact with the consumer. The tobacconist began to mediate between them in specialty shops, already existing in Europe, that seem to have spread to the larger urban areas of the island. Elsewhere the tobacconist, and his Puerto Rican counterpart, most likely provided "both the material and symbolic link between production and consumption (that is, he both handed over the product and advised the customer as to its quality and meaning)."[66] El Escudo Español, one such shop, catered its genteel clientele with both domestic and Havana cigars, cigarettes and cut tobaccos by the Ponce main square as early as 1892.[67]

Production from domestic shops displaced Cuban imports from the local cigar market[68] save for the small luxury sector that remained dependent on the workshops of Havana. Import substitution began in the 1870s and accelerated with the expansion of the factory system during the following years. The same, however, does not hold for cigarettes as Cuban imports outproduced local manufacture. During the early 1880s, the value of Cuban cigarettes imported exceeded that of Puerto Rican leaf exports to Cuba.[69] Despite efforts from Las Dos Antillas, La India Occidental, and others, the cigarette market remained firmly in Cuban hands during most of the nineties.[70] Besides, large Cuban firms promoted their cigarettes actively, for instance, each cigarette pack often included a single colorful and striking engraving, *marquilla*, depicting series of religious themes, sugar mills, royalty, mulattas, military uniforms and the like that intended to be collected.[71] Additionally, Cabañas and Carvajal and La Corona presented tall and elaborate showcases to display their products during the 1893 exposition held in San Juan in observance of

66. Hilton (1998), p. 131.
67. Tabaquería (1892), p. 3.
68. Carroll (1899), p. 141.
69. Abad (1885), p. 97.
70. Carroll (1899), p. 141.
71. Kutzinski (1993), pp. 43-80; Núñez Jiménez (1989).

the fourth centenary of Columbus' landing in Puerto Rico.[72]

The fourth economic change refers to the transformation of cigarette manufacture. Whereas cigars remained hand rolled, cigarette manufacturing experienced a mechanization process that started with introduction shredding machines used to prepare the filler for cigarettes. Mechanical shredders, as the Dubrul employed by La India Occidental, shredded, sifted, sieved, and separated the resultant tobacco by size but left the rolling of the cigarettes in the hands of skilled craftspeople.[73] The Emery, Allison, and Bonsack mechanical rollers used shredded tobacco and paper as inputs to produce a finished cigarette in what has come to be known as continuous process production. These

Figure 6. A machine-driven cigarette factory in Ponce. Reprinted from Bryan (1899), p. 394.

72. Infiesta (1895), pp. 211-212.

73. Abad (1884), pp. 64, 71.

contrivances, the Bonsack in particular, squarely placed the control of production in the hands of factory owners as operatives did "little more than feed materials in the machines, keep an eye of their operations, and in some cases, when it was not yet done automatically, package the final product."[74] In consequence, mechanical rollers effectively signaled the disappearance of hand-rollers after the 1880s in the U.S. and elsewhere somewhat later.[75] Figure 6 illustrates the reorganization of the factory as benches, hand-rollers, and knives gave way to machines handled by operatives. The figure shows several mechanical rollers, aligned against the wall, and powered by a hidden steam engine through a drive shaft that ran along the ceiling that was, in turn, connected to a number of belt-driven pulleys attached to each of the devices. The output of a single machine was impressive, by 1884 the Bonsack produced between 200 and 220 cigarettes per minute which represented the work of 48 craftspeople but was manned by three persons.[76]

Mechanical rollers became dear to entrepreneurs because they produced cheaper cigarettes than hand-rollers, reduced labor needs, and employed readily trained operatives rather than craftspeople. However, the large output of the mechanical rollers implied a change in the scale of the enterprise that most shop owners lacked the means to assume. Cigarette manufacturers had to secure steady supplies of leaf; invest in steam engines to drive the devices; pay the rental of the machines as they were rarely sold; distribute, advertise, and market the large output of cigarettes over wide areas.[77] Additionally the domestic market was small – roll chewing and cigars were more popular forms of tobacco consumption – and already cornered by Cuban cigarettes. Understandably, no domestic manufacturer crossed the threshold into the machine-made commodity until the end of the century.

Rucabado y Portela, a joint venture of two preexisting partnerships and appropriately named La

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74. Chandler (1977), p. 249.
75. Korzeniewicz (1989), p. 87; Rogoff (1994), pp. 141-157.
76. Tennant (1950), p. 18; Tilley (1948), pp. 572-574.
77. Chandler (1977), p. 249; Porter (1971), p. 43.

Colectiva, was the only domestic firm to cross the threshold. While the cigar business remained in the hands of the original partnerships, La Colectiva was a vertically integrated firm dedicated exclusively to the manufacture of cigarettes. It operated a steam driven factory employing eight Bonsack and several Comas mechanical rollers with a daily output of some 400,000 cigarettes which represented but a fraction of the capacity of the Bonsacks.[78]

The Rucabado brothers, their relatives and associates had been involved in a succession of merchant houses since 1865 which started to specialize in the tobacco trade and financing tobacco growers from the 1870s and one. By the turn of the century their partnership owned and grew tobacco in several hundred acres in the highlands of the eastern Cordillera. They started La Flor de Cayey factory during the early 1890s and the assets of Rucabado y Cía amounted to 470,634.46 pesos in 1899.[79] Portela y Cía, the second partnership to constitute La Colectiva, owned La Ultramarina, a large and well-known tobacco manufactory which provided cigars to the Royal Spanish house.[80] As previously indicated, this factory appears in the literature from the early 1880s when it was held by Portela and Lomba, an earlier partnership.

Rucabado y Portela established La Colectiva in San Juan at the end of the war in 1898. The outcome of the war and the reorientation of the economy to the United States affected the timing for the establishment of the factory. On the one hand, the partners must have been aware of the loss of Cuban and Spanish leaf markets as an outcome of the war.[81] On the other, Cuban factories lost the Puerto Rican market for their cigarettes during the last months of Spanish rule and were not likely to regain it under U.S. domination. However, there was a distinct possibility that U.S. manufacturers could gain a foothold in the domestic market. The probable opening of the

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78. Baldrich (1998).

79. This figure includes the participation in Rucabado y Portela and the remaining assets of previous Rucabado partnerships. Refer to Muñoz Morales (1900a), pp. 201-205; Muñoz Morales (1900b), pp. 422-38.

80. Portela y C^{a} (1899).

81. After the war, Cuba enacted a tariff on leaf imports. See Ramos Mattei (1974), pp. 63-64.

domestic cigarette market offered tempting possibilities to make the transition to mechanical rollers because their large output had, for years, discouraged their introduction. Under these conditions of uncertainty, Rucabado y Portela ventured on the cigarette factory to occupy the market lost by the Cubans ahead of U.S. companies and sought to enter the latter market. La Colectiva, together with the two original partnerships, contracted Graham and Sánchez as their agents in New York[82] and the firm's charter empowered them to pursue business in the Dominican Republic.[83]

La Colectiva sought to overcome another difficulty associated with the scale of mechanized cigarette factories by relying on the original partnerships for a steady supply of filler and advertised so[84] to capitalize on their goodwill. Besides, Rucabado y Cía., one of the original partnerships, were growers themselves with considerable experience in financing tobacco production.

As the artisanal shop gave way to the capitalist factory, the relations between those that stemmed tobacco leaf, and crafted cigars and cigarettes experienced a profound transformation. The ways in which they worked and perceived themselves and each other experienced deep modifications during the last quarter of the century. Two significant social changes took place during the establishment and early expansion of the factory system.

First, a group, if not class, consciousness started to emerge among manufacturers. During the 1880s tobacco entrepreneurs started to identify themselves as a group to advance common economic interests. Their first documented activity as a group was the tobacco pavilion within the fair-exposition held in the southern municipality of Ponce in 1882 where several tobacco factories,

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82. The available documentation does not provide evidence that the contract ever came into effect. Apparently, it fell through but Robert Graham aided their entry into the U.S. tobacco trade during the years to come. See Genuine (1901), p. 3.

83. Baldrich (1998).

84. Rucabado y Portela (1899).

houses of commerce and growers exhibited their products.[85] In 1883 several entrepreneurs obtained the aid of both the colonial government and the Ponce city council to organize an event of their own. They organized an exposition dedicated exclusively to the promotion and publicity of leaf, cigars and cigarettes that combined a contest of both cigar and cigarette hand-rollers with elaborate exhibitions from several enterprises. Conscious of foreign markets the directors sought but failed to take the exposition abroad.[86]

The collective promotion and defense of the trade remained forceful in years to come. In 1885 the colonial government planned to employ inmates to man a tobacco factory on the grounds of La Princesa jail in San Juan. Tobacco manufacturers mounted a strong opposition and the factory never got off the ground.[87] Another vigorous expression of solidarity among entrepreneurs in the tobacco sector took place over a decade later. In 1898, the Cuban government enacted a high tariff on tobacco leaf which effectively shut Puerto Rico off from its major market. Colonial government officials appealed the decision to the crown and a commission dominated by tobacco men went to Havana to seek the repeal of the tariff. When both failed, merchants, growers and manufacturers, in retaliation, sought and gained approval of a high tariff against Cuban manufactured tobacco to stimulate the domestic industry.[88]

The second social change was the articulation of the class struggle for bourgeois manufacture cannot be reduced to factories and wage labor alone. Fabricant, as they were referred to in the language of the day, and cigar-maker, capitalist and worker became an important dimension along which those who derived their sustenance from the manufacture of cigars and cigarettes viewed themselves. Labor strife amply documents how capitalists and workers in the tobacco trade began

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85. Abad (1885).

86. Abad (1884).

87. They published the petitions as *La cuestión tabaquera* (1885).

88. The first two, of the three-member-commission composed of Mateo Rucabado, Marcelino Solá and Evaristo San Miguel, were highly respected tobacco men. See Burgos Malavé (1989-1990), pp. 181-191; Coll y Toste (1921), pp. 57-58; Torres Grillo (1965), pp. 58-59.

to view themselves in terms of this opposition.

In 1892 José Rodríguez Fuentes, owner of Las Dos Antillas, could not subdue his chanting and "rowdy" workers and proceeded to shut down the factory effectively locking out, in today's parlance, more than one hundred workers.[89] Cigar-makers struck Sánchez y Hermanos' *La Comerieña* and a San Juan factory in 1895.[90] One hundred paralyzed La Ultramarina for a week in 1897 and strikes affected La Colectiva and La Ultramarina in 1898.[91] Public condemnation became another weapon launched against their opponents. For instance, a group of cigar-makers from Cayey wrote to the U.S. Commissioner that surveyed the island in 1898-99:[92]

> We belong to the working classes, who, up to the present time, have been ill treated by our eternal oppressors and the exploitation of our labor. The cigar-making industry in this country has dragged out a miserable existence, and the owners of factories have had no other end in view than the oppression of the artisan . . . That the whole world may know what means have been employed for this oppression, we have written you this letter, in which we state the plain truth.

Tobacco manufacture experienced a profound transformation during the last quarter of the century. In summary, the trade sustained four economic changes and two social ones. The first economic change was the diffusion of the Havana style of cigar manufactures to other localities, Puerto Rico included. Second, local conditions became favorable: domestic leaf gained in quality and its export markets weakened. Third, the artisanal shop started to give way to the factory system employing wage labor. Fourth, cigarette rolling became completely mechanized. The social changes were a rising consciousness among manufacturers to promote and defend their shared economic interests and, two, the beginnings of class conflict between workers and manufacturers.

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89. *La Correspondencia* (1892), p. 2.
90. Noticias (1895), p. 3; García, (1990), p. 241.
91. Fernández Juncos (1897), p. unnumbered; Iglesias de Pagán (1973), pp. 57-58.
92. Carroll (1899), pp. 764-765.

THE AMERICANIZATION[93] OF TOBACCO MANUFACTURE

A group of cigar-makers informed the U.S. Commissioner that surveyed the island in 1898-99 that: "This industry was started in the island by persons of capital who saw a profitable field of investment. It is needless to say that they were Spaniards."[94] Among them, there were migrants like Rodríguez Fuentes and the Rucabado brothers who married into local families and became permanent residents.[95]

A different situation arose when industrial concerns or merchant houses with substantial operations or financial resources in the industrial world established or gained control of industrial operations elsewhere. Among foreign enterprises, it was a German firm that got the head start in the establishment of tobacco manufacturing facilities in Puerto Rico. Leopold Engelhardt and Company was a Bremen-based partnership with investments in Cuba and Puerto Rico to wit that joined Fritze, Lundt and Company, a Puerto Rican-based partnership of German subjects, to establish Toro and Company in 1897 or 1898 which in turn established a factory aptly named La Internacional. These two partnerships provided the capital and Luis Toro, who was to eventually marry the daughter of one of the Germans partners, managed the firm.[96]

La Internacional employed more than 500 laborers in a cigar plant in Ponce itself and a combined cigar and cigarette factory close to the harbor. Facing the same marketing problems as Rucabado and Portela, Toro contracted the same agents to market its cigars and cigarettes in the United States soon after the invasion of 1898.[97] Toro and Co. employed steam engines[98] to run their

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93. I have used the term Americanization rather than denationalization since local tobacco factories could not be denationalized because several, among them the most important, were held by foreigners.

94. Carroll (1899), p. 765.

95. Cifre de Loubriel (1989), pp. 575-576; Cifre de Loubriel (1966), pp. 292, 416.

96. León Paz (1900); Macmillan (1911), p. 196; Mayoral Barnés (1946), p. 86.

97. Ceballos (1899).

98. Carroll (1899), p. 141.

Comas and Bonsack mechanical rollers and other devices at the combined cigar and cigarette plant. Instead of using the lithographic department of local printers, as El Boletín Mercantil, they relied on German lithographers to make labels for their trademarks, Toro & Cª, La Internacional, and El Toro.[99]

The development of the factory system in the hands of domestic entrepreneurs came to a halt in 1899 when the U.S. tobacco trust, the American Tobacco Company (ATC), made purchases consonant with its longstanding policy of growth and expansion in the cigarette business.[100] Puerto Rico became first ATC investment in the Caribbean when it secured both La Colectiva and La Internacional. The latter also manufactured cigars.[101] So to speak, ATC's first investment in the cigar business, cheroots excepted, was accidental.

The Porto Rican-American Tobacco Company (PRATC) was incorporated in New Jersey on September 1899 by men connected to ATC. It bought the goodwill and manufacturing facilities held by La Colectiva for stock in the newly created corporation and a petty amount of cash.[102] At the end of 1899, $166,000 had been issued in stocks where ATC held $99,100 and Rucabado y Portela the balance.[103] As part of the deal Fausto Rucabado and José Portela, the managing partners, entered the service of PRATC for one year. It was stipulated that PRATC might send them over to the Dominican Republic if the trust decided to venture there.[104] Money wise, they became minority partners to the trust and, in terms of employment, its salaried managers.

Several months later, in May 1900, PRATC brought the cigar and cigarette factories of Toro and Company for $153,716.40 on terms similar to those above. H. C. Fritze, an associate of Fritze,

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99. León Paz (1900), p. 1829.
100. U.S., Bureau of Corporations (1909), pp. 180-193; Cox (2000), p. 5.
101. León Paz (1900), pp. 1826-1853; Portela v. (1903), pp. 30-39.
102. The deal explicitly excluded cigars.
103. U.S., Bureau of Corporations (1909), pp. 82-83; Muñoz Morales (1900a), pp. 201-205.
104. Contrato (1899).

Lundt & Co., joined the board of directors of PRATC for a few years. Luis Toro, the managing partner, became board member and president of the local subsidiary of the tobacco trust[105] until the 1930s.

The expansion of the trust was fast. Its control of the cigarette market was nearly absolute from the very beginnings; I have estimated it at roughly 98 percent of total production in 1906-1907. In 1901 ATC reversed its policy on cigars as it tried to gain a monopoly position in the manufacture of cigars in the United States and Cuba. PRATC, consequently, followed suit and expanded operations; the trust exported 10.2 per cent of all cigars in 1901, 16.7 percent in 1902 and 42.7 percent in 1903.[106] As PRATC cigar production was oriented to the U. S. market, its share of the domestic market, consequently, was smaller. In conjunction with expanding operations its value increased considerably, at the close of 1902 ATC held $266,900 of the $400,000 issued by PRATC, outstanding capital stock amounted close to $2 million by 1906 for a fivefold increase in just a few years.

In 1902 PRATC, the American Cigar and others organized the Porto Rico Leaf Tobacco Company to grow, buy and handle leaf principally to supply its manufacturing branches. As in other subsidiaries, the trust held control with 62.2 per cent of the $500,000 issued in stock in 1906.[107] During the following years, the Porto Rico Leaf bought thousands of acres of prime tobacco land from large and small proprietors alike in the valleys and slopes of the eastern Cordillera to become, in due time, the leading grower without ever achieving near monopoly status.[108] The Industrial Company of Porto Rico became the third and smallest subsidiary of the trust with an initial capitalization of $83,000 in 1903.[109]

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105. Portela v. (1903), pp. 30-39.
106. U.S., Bureau of Corporations (1909), p. 429.
107. U.S., Bureau of Corporations (1909), p. 216.
108. Baldrich (1988), pp. 40-41.
109. U.S., Bureau of Corporations (1909), p. 302.

The domestic subsidiaries of the ATC monopolized cigarettes for domestic consumption and export in 1899 with the acquisition of two factories; after 1901, they became the leading manufacturer of cigars for export and held a sizable portion of the domestic market. They planted thousands of acres of tobacco after 1902. In a matter of a few years, major portions of the tobacco business passed into the hands of the trust. Local residents held about 40 per cent of the assets of these subsidiaries in 1906 while several held top management positions. The former proprietors of the larger businesses tended to become minority partners of the trust while the owners of lesser properties sold outright.

Despite the trust's fast expansion and seemingly inexhaustible resources, independent manufacturers defended vigorously the local market and mounted an aggressive pursuit of the U.S. cigar market.[110] In September 1900, Rucabado and Portela established a cigar factory in Providence, Rhode Island, that was manned by some 200 cigar-makers to manufacture their Máximo brand[111] with Puerto Rican leaf, in order to benefit from the low tariff on unprocessed tobacco leaf as compared to the higher one levied on the manufactured product. Soon after the reduction of the tariff and, more so, with the enactment of free trade, other businessmen sought a participation in the U.S. cigar market through consignees as Jerónimo Menéndez in New York City.[112]

The Solá family, often in conjunction with other private individuals, formed a number of partnerships over the years that stood up to the trust when it attempted to monopolize the cigar industry but collaborated with it in other ways. The Solá's had partaken in the expansion of the leaf business for cigars as many others firms and individuals from the eastern highlands. For instance, in 1893, Solá y Compañía appeared as tobacco farmers in Borinquen which was a barrio

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110. After the invasion, a number of U.S. residents and businesses became an important force in the local tobacco industry. Several bought tobacco land in Cayey, Caguas and elsewhere, established cigar factories, stemmeries, and became leaf merchants.

111. Genuine (1901), p. 3.

112. Those cigars (1900), p. 1.

in the rolling hills of Caguas as they give in to the Cordillera.[113] Modesto Solá y Hermanos exported tobacco leaf to Cuba and were deeply affected by the 1898 Cuban tariff on the leaf and by the protection that the U.S. government granted its own industries. Once the Foraker Act, in 1900, allowed the free entry of tobacco leaf and cigars to the U.S., the Solá's joined other manufacturers, the tobacco trust among them, in the crafting of cigars to reach that market. However, lacking experience and knowledge of the aromas, styles and, shapes, *vitolas* in the parlance of the trade, appreciated by the U.S. smoker, Marcelino Solá, who by this time had become the head of the family business, established a partnership with Magín Argüelles, a Spaniard that had learnt the business in Cuba and was knowledgeable of the U.S. market.[114] Solá, Argüelles and Co. rolled cigars in the style of Havana for export and led a continuous existence, up to at least 1910.[115] Around 1900, Solá formed a short-lived partnership for the manufacture of cigars with Quintiliano Cádiz who, like Argüelles, knew the tastes and markets of the North from the vantage point of Cuba.[116] The firm was dissolved in 1902 whereupon Cádiz went into business by himself.[117]

M. Solá e Hijos maintained a branch, in the argot of the times, to handle cigar exports and the U.S. end of the business separate from the manufacturing division.[118] Family members and associates traveled routinely to New York to confer with jobbers, salesmen, and importers in downtown Manhattan. Just to take an early year, it can be pointed out that Marcelino set sail for New York to tend business in conjunction with his brother Mauricio in April 1903 and that Magín Argüelles, a business partner, joined one of the Solá brothers in June of the same year.[119] The tobacco leaf and cigar dealings of the partnerships, where Marcelino Solá had a stake, were

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113. Bunker (1975), p. 343.
114. Bunker (1981), p. 238; Caliumet III (1905), p. 2.
115. Cigars (1910), p. 31.
116. Bunker (1981), p. 238; Puerto Rico (1900), p. 1.
117. A new line (1902), p. 1; Current comment (1902), p. 5.
118. Caliumet III (1905), p. 3.
119. U.S., Department of Labor (1903a); U.S., Department of Labor (1903b).

numerous enough that, by 1905, they established an office in Pearl Street, in the heart of the tobacco district of New York.[120] While the Solá partnerships competed with the trust for a share of the cigar market, albeit a minuscule one, they did not refrain from a long streak of collaboration which ranged from selling it tobacco that they grew, to buying tobacco leaf in behalf of the trust in the Caguas area.[121]

Other local factories followed the same path and opened offices and established depots in New York to be closer to their clients. Portela's La Ultramarina survived the presence of PRATC as a "principal factory" in Puerto Rico and tended its export business in the Manhattan tobacco district as early as 1900.[122] After the closing of the Providence manufactory, Mateo Rucabado maintained, for years, an office for La Flor de Cayey in Pearl Street, Manhattan.[123] Other useful marketing strategies proved to be the booths and medals obtained in exhibitions held in Buffalo, Chicago and St. Louis by Infanzón and Rodríguez's La Habanera between 1902 and 1905.[124] In summary, over half of the cigar business remained outside the orbit of the trust as independents exported 57 percent of all cigars to the United States in 1906.[125]

CONCLUSION

This essay examined the transformation of Puerto Rican tobacco planting, manufacture, and trade from the mid nineteenth century to the early years of the twentieth. It examined the introduction of a model of tobacco growing patterned on Cuban leaf and cigar manufacture on the styles of Havana which gained the upper hand against the older standard based principally on tobacco suitable for roll chewing tobacco and secondarily on exports for cheap cigar filler and industrial dyes in Europe. The deep changes that affected the Puerto Rican tobacco industry were part and

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120. M. Sola (1905), p. 21.
121. Bunker (1981), p. 239.
122. Paniagua (1902); Porto Rico Cigars (1900), p. 29.
123. "Mateo Rucabado" (1904), p. 34.
124. *Puerto Rico Ilustrado* (1939), p. 86.
125. U.S., Bureau of Corporations (1909), p. 429.

parcel of a large-scale transformation of the habits of tobacco consumption in Europe and the Americas during the nineteenth and early twentieth centuries. Focusing on two aspects of Cuban culture that dispersed throughout the globe, whether the taste for the cigars crafted in Havana or the diffusion of Cuban tobacco (Vuelta Abajo leaf), accompanied with its distinct methods of cultivation, this paper has identified the pains and toils of growers, merchants, and manufacturers of diverse means to provide their commodities, leaf or cigars whichever, the same identity as those originating in Cuba. What happened in Puerto Rico bear powerful similarities to the changes in the general identity of the cigar industry in the Caribbean, the United States, Europe, and lands as far away as the Philippines and Sumatra with Cuba so that "Havana" and "Vuelta Abajo" started to signify a style and not a place of origin. Wars, turmoil, and civil strife in Cuba and U.S. tariffs to protect its own cigar manufacturing industry – whether in the nineteenth century or, even much later, as a consequence of the 1959 Revolution – provided a fertile ground for the diffusion of the art and culture of crafting cigars and leaf growing.[126] Migrant craftspeople, growers, and manufacturers mostly anonymous, as well as the likes of José Rodríguez Fuentes, Magín Argüelles, Quintiliano Cádiz presented above, became themselves an efficient mechanism of diffusion.

This paper explored the metamorphosis of the tobacco industry along three dimensions. The first refers to three major changes in the character of tobacco agriculture during the second half of the nineteenth century. One, Puerto Rican growers sought to participate in the bonanza obtained by the leaf from the Vuelta Abajo district of Cuba and started to follow closely the Cuban paradigm. Two, as local cigar filler gained in quality, leaf imports from Cuba and Virginia came to be substituted with domestic leaf from the eastern Cordillera. The third major agricultural change was the general tendency for tobacco leaf exports to increase.

The second objective of the paper refers to the transformation of cigar and cigarette manufacture. The craft of Havana cigars diffused over many locations, Puerto Rico included, which had good

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126. Jean Stubbs refers to this phenomenon during the 1990s as the "offshore Havana cigar." See Stubbs (2000), pp. 235-256.

domestic markets and access to superior leaf. Several merchants and growers picked up the craft and started the passage from the artisanal shop to the factory system. As the transition advanced, capitalists and workers began to develop and gain consciousness of their opposition to each other. Despite considerable success, most domestic producers faced difficulties with the mechanization of cigarette manufacture in their path to the modern factory system. Nevertheless, one colonial firm crossed the threshold together with a German firm. This industrial capacity was not export oriented. It was destined almost exclusively to the domestic market and contributed to the substitution of Havana cigars and Cuban cigarettes with domestic ones.

Finally, the paper documents how the sudden irruption of the American Tobacco Company, the trust, stymied the growing, yet fragile, bourgeois impulse in tobacco manufacture. While ATC gained control of cigarette manufacture and entered other realms of the industry, production of cigars for domestic consumption and a considerable part of its exports remained in the hands of local residents for years to come. However, after ATC, the configuration of the tobacco industry precluded the large capitalist enterprise such as Rucabado and Portela, particularly in the cigarette sector, but allowed for a prosperous local leaf growing and cigar manufacturing sector. At times, the participation of the Rucabado brothers and associates as minority shareholders of the trust or that of Marcelino Solá as one of its buying agents, while they both managed cigar manufactories of a certain scale, tended to blur a clear-cut distinction between ATC and the independents.

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