

DE LOS ORÍGENES DEL CAPITALISMO INDUSTRIAL
PUERTORRIQUEÑO A SU SUBORDINACIÓN
AL MONOPOLIO DE TABACO
DE LOS ESTADOS UNIDOS

Rucabado and Company, 1865-1901

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RÉSUMÉ

Ce article examine le développement du capitalisme dans la Caraïbe par l'étude de l'activité des commerçants de feuilles de tabac qui entreprirent de les manufacturer. Le texte étudie cette Maison de commerce portoricaine qui au cours du temps confecionna des cigares à la main et, à la fin du XIX^{ème} siècle, participa de façon notable aux activités d'une fabrique de cigarettes faites à la machine. Rucabado & Co. entreprit un processus d'intégration vertical dans trois domaines: planter, manufacturer et exporter le tabac dans le but de contrôler de plus en plus de facettes de cette industrie. Toutefois cette intégration verticale au niveau de la manufacture ne constituait pas un processus linéaire, l'expansion aux cigares et cigarettes ne se réalisant que lorsque l'entreprise dû faire face aux difficultés du secteur commercial. La même souplesse qui leur permit d'entreprendre la manufacture les conduisit, comme conséquence de l'invasion nordaméricaine de 1898, à "se vendre" et à devenir des associés de second ordre dans le trust nord-américain du tabac.

SAMENVATTING

Dit artikel analyseert de ontwikkeling van het kapitalisme in het Caraïbisch gebied door middel van de beschrijving van de fabrieksactiviteiten van de handelaren in de tabakblad. In konkreet wordt de studie gewijd aan een firma van Puerto Rico, die via handenarbeid sigaren produceerde en die op het einde van de negentiende eeuw begon met de machinale verwerking van sigaretten. Rucabado & Co. ondernam een vertikale integratieproces om alle facetten van deze bedrijfstak te kunnen kontroleren, te weten: het planten, de verwerking en de export van tabak. Maar dit proces ging niet rechtlijnig, toen het bedrijf geconfronteerd werd met commerciële moeilijkheden ging het over tot de manufaktuur. Dezelfde flexibiliteit heeft de firma getoond in 1898, na de invasie van de Verenigde Staten, het bedrijf werd namelijk verkocht en geïntegreerd in een Noord-amerikaanse tabaksonderneming.

FROM THE ORIGINS OF INDUSTRIAL CAPITALISM
IN PUERTO RICO TO ITS SUBORDINATION
TO THE U. S. TOBACCO TRUST

Rucabado and Company, 1865-1901

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ABSTRACT

This paper examines the development of capitalism in the Caribbean through a case study of tobacco merchants than ventured into manufacturing the leaf. It surveys a Puerto Rican house of commerce that in time produced handmade cigars and, at the end of the nineteenth century, participated in a large, machine-run cigarette-factory. Rucabado and Company embarked in a process of vertical integration into three areas, namely agriculture, manufacture and export of tobacco, in an attempt to control more facets of the trade. However, vertical integration into manufacture was not a linear phenomenon, expansion into cigars and cigarettes occurred when the trading side of the business faltered. These merchants sought manufacture to compensate the weakness of trade. In the end, the very same flexibility that carried them to manufacture led them to sell and become junior partners to the U. S. tobacco trust as a consequence of the American invasion in 1898.

RESUMEN

Este artículo examina el desarrollo del capitalismo en el Caribe a través de los comerciantes de tabaco en rama que emprendieron operaciones en la manufactura de la hoja. El trabajo pasa revista a esta casa puertorriqueña del comercio que al pasar el tiempo elaboró cigarros confeccionados a mano y, a finales del siglo XIX, tuvo una participación destacada en una

* The author acknowledges the advice and suggestions of the late Andrés Ramos Mattei, Humberto García, Carlos Buitrago, Carmelo Rosario, Félix Matos and Arturo Bird, and the research assistance of Lynnette Rivera. The Department of Sociology and Anthropology and the Fondo Institucional para la Investigación of the University of Puerto Rico sponsored this work. This is a revised version of the paper presented at the conference of the Society for Caribbean Studies, Institute of Commonwealth Studies, London, England, 5-7 July 1995.

fábrica de cigarrillos hechos a máquina. Rucabado y Compañía inició un proceso de integración vertical en tres áreas, a saber: la siembra, manufactura y exportación de tabaco, en un intento por controlar cada vez más facetas del ramo. Sin embargo, la integración vertical a la manufactura no constituyó un proceso lineal, la expansión a los cigarros y cigarrillos tuvo lugar cuando la empresa enfrentó dificultades en el ramo comercial. Estos comerciantes incursionaron en la manufactura para compensar la debilidad de la compraventa de tabaco en rama. Al final, la misma flexibilidad que los llevó a la manufactura los condujo, como consecuencia de la invasión estadounidense en 1898, a vender y convertirse en socios menores del *trust* norteamericano del tabaco.

The 1883 to 1913 period was generally favorable to commerce in the tropical regions of the globe, for trade in tropical goods increased faster than trade in good of four leading industrial nations (Lewis, 1969, 7-9). Puerto Rico was no exception to this worldwide pattern. Coffee exports surpassed sugar to become the major engine of growth during the 1880s and tobacco leaf gained the third position when it outstripped molasses around the same date (U. S., Department of Commerce and Labor, 1907, 54).

Urban centers, such as Mayagüez, Ponce and to a lesser extent San Juan, grew to service the expanding trade in tropical commodities (Quintero Rivera, 1988, 39-44). As elsewhere, State and private entrepreneurs invested part of the profits from agriculture into domestic railways, ports, aqueducts and the like. Urban centers provided an environment favorable for activities supplementary to these export commodities. One such business was the manufacture of cigars and cigarettes for urban consumption; the countryside remained attached to chewing tobacco. While tobacco manufactures did not threaten export agriculture, it altered the urban landscape with its warehouses, factories, aromas and the working-class character of its workers (García, 1990).

This paper follows the domestic partnership that established a hand-rolled cigar factory and, later, participated in a large, mechanized cigarette factory. It focuses on the succession of firms controlled by the Rucabado family and their partners during the last third of the nineteenth century, from their modest beginnings in commerce to the sale of their strong participation in manufacture. It examines the contribution of commerce to tobacco manufacture and, in broader terms, the contribution of merchants to the development of capitalism.

The Rucabados traded in everything, from groceries to real estate, but

from the beginning their business exhibited a marked preference for unprocessed tobacco or tobacco leaf. Rucabado and Company specialized early in choice leaf, patterned on the Cuban model, which served as cigar-filler or wrapper. This did not affect other trading activities, however these firms relied principally on credit to conduct their business. Clients purchased groceries, dry-goods and agricultural tools on credit. Mortgages and purchases with the redemption covenant were the usual form of credit where the collateral was real estate. In tobacco, the leaf comprised the commodity that tied the peasant household to the company.

The Rucabados successfully integrated their leaf trading specialty to tobacco planting and to a cigar manufactory and a cigarette plant. This analysis presents two explanations for vertical integration. The first attempts to explain the performance of the partnerships with respect to capital investment and to a lesser extent with profits. Investment had an inverse relation to the market for Havana cigars. The second shows how, when trading faltered, the firms ventured into areas where they already had some expertise. Planting and manufacturing handled a commodity, tobacco, that they knew well.

Finally, the very same flexibility which they pursued in vertical integration brought the Rucabado tobacco interest to an end when trading faltered. In the face of adversity, the Rucabados and their partners sold their technologically sophisticated cigarette plant to the American Tobacco Company (ATC) after the Spanish-American War. The change of strategy assured handsome profits as minority partners to the tobacco "trust."

TOBACCO IN PUERTO RICO (1847-1902)¹

Tobacco's contribution to the Puerto Rican economy increased during the second half of the nineteenth century as leaf exports surpassed livestock and molasses during the 1870s to become the third major export. Tobacco leaf and cigars, in combination, were second only to sugar after 1905 (U. S., Department of Commerce and Labor, 1907, 54). The importance of this sector transcended its trade statistics, in the sense that it is impossible to explain the origins of the working class movement

¹ Refer to Baldrich (1995) for a full discussion of these changes.

in Puerto Rico without the contribution of the men and women who toiled in tobacco factories.

Puerto Rican tobacco experienced three important transformations during the second-half of the nineteenth century. The first refers to three changes in tobacco planting. First, growers participated successfully in the bonanza of the best tobacco growing district of Cuba. Many started to plant the Cuban way. Secondly, there was import substitution. As local cigar filler and wrapper gained in quality, leaf imports from Cuba and Virginia declined. Third, there was a general tendency for tobacco leaf exports to increase.

The second modification was the development of an entrepreneurial class in the colony. During the last quarter of the century the artisanal shop gave way to the factory system. By the 1890s there were several cigar and cigarette-manufactories organized along bourgeois lines. Domestic producers faced difficulties with the mechanization of cigarette rolling. Only one colonial firm crossed the threshold; the other was German. These two firms were not export-oriented; their cigarettes were destined principally for the domestic market; thus they contributed to the substitution of Havana cigars and Cuban cigarettes with local brands.

The third change refers to the growing, yet fragile, bourgeois impulse in tobacco manufacture brought to a nearly complete halt by ATC; ATC gained control of cigarette manufacture, cigars for domestic consumption and a considerable part of their exports remained in the hands of residents for years to come. However, the large capitalist enterprise did not reappear.

TRADING PARTNERSHIPS

Many merchants in nineteenth-century Puerto Rico established trading partnerships that on the whole proved to be short-lived. They were set up for a year or two, then dissolved and the proceeds were distributed among the associates. Then each partner followed a course that rarely converged with his former associates. An occasional partnership lasted longer, particularly when the partners extended the term of the society. In some situations, they dissolved the company to reconstitute it with the same members but modifying the relations between them.

The Rucabado brothers, their relatives and partners formed and re-constituted several societies for some 36 years. This succession of part-

nerships had a singular influence, first, on the tobacco trade, then on cigar manufacturing and lastly, on a major cigarette factory. It transcended commerce, artisanal production and stimulated the development of capitalism in manufacture. There were seven such societies spanning from 1865 to 1901. Six were successive and, Rucabado y Portela, concurrent.

Valls y Rucabado (1865-1871). Francisco Rucabado migrated from his native Spain to Santo Domingo. Later, when Spain relinquished its sovereignty in 1865, he resettled in Puerto Rico (Cifre de Loubriel, 1989, 575-566). He established the first of these societies during the same year. It was a partnership with a fellow Spaniard, Francisco Valls, in the highland municipality of Cayey (Morales, 1871, 9v-10v). The society retailed and wholesaled textiles, groceries and other goods; it also dealt in real estate and slaves on a small scale. The firm also sold merchandise on credit. In 1870 it moved to a two-storey masonry store on a corner across the street from the town square (Morales, 1876, 785-787v). Valls sold his participation to Rucabado for 10 000 pesos and retired to his homeland in 1871.

Francisco Rucabado y C^a (1871-1877). Francisco joined his brother-in-law, José María Vázquez, to form a new partnership. Rucabado was clearly in command. The firm kept its advantageous position near the town square. It started trading in two new areas: the purchase of state-issued slave certificates that served as compensation to former owners; abolition was in 1873. Second, the first recorded dealing in tobacco appeared in 1877. As the business expanded during these years, they hired Francisco's brothers, namely Manuel and Mateo, and Manuel Otero Varela, another Spaniard, as clerks (Morales, 1877c, 807-812).

Rucabado Hermanos y C^a (1877-1885). Francisco and José María established this society to incorporate the three clerks just identified as partners. They became dormant partners while the former clerks managed the firm; Otero did not provide capital. The object of business remained the same. Manuel Rucabado's death and José María's retirement in 1885 provoked the dissolution of the partnership (Morales, 1885a, 286-287v; Morales, 1885b, 659-662v).

Rucabado Hermanos y C^a (1885-1893). The three remaining associates reconstituted the firm under the same name and for identical purposes. Francisco remained a dormant partner; his brother Mateo and Manuel Otero continued managing the firm (Morales, 1885c, 663-667). Tobacco leaf remained a strong component of the house.

Rucabado y C^a (1893-1900). Manuel Otero, Francisco and Mateo Rucabado became dormant partners. Marcial Suárez and Fausto, Francisco's son, changed occupations from clerks to managing partners. The number of clerks is unknown. However, in 1900, Francisco Frade, Joaquín Aponte and Fermín Villar Rucabado worked for the house (Morales, 1893, 367-370v; Muñoz Morales, 1900a, 177-179v).

Rucabado y Portela (1898-1900) was created in San Juan by two pre-existing firms —Rucabado y C^a and Portela y C^a— as dormant partners.² Fausto Rucabado and José Portela became managing partners. Its object was the "tobacco business." It had two assets: an ample stock of tobacco leaf and La Colectiva, a large cigarette factory (Real Sociedad Económica..., 1898, Muñoz Morales, 1900b, 202-203v).

Rucabado y C^a (1900-1901). Manuel Otero did not join the firm because he had difficulties with his former partners (Muñoz Morales, 1900a, 177-179v). Francisco Rucabado became a dormant partner and Marcial Suárez, Mateo and Fausto Rucabado managed the firm. This society occupied itself mainly with the liquidation of previous partnerships (Muñoz Morales, 1900c, 265-272).

A TRADING COMPANY

These firms were primarily commercial establishments where the partners identified themselves consistently as merchants, instead of manufacturers, farmers or proprietors, and their major economic activities were congruent with the merchant identity. However, during the last third of the nineteenth century, the partnerships altered considerably the scope of trade and ventured into agriculture and manufacture. The following analysis of their commercial activities examines the articulation of commerce and leaf tobacco and probes the connection between leaf-trade and tobacco manufacture.

An examination of surviving notarized deeds has been used here to test the hypothesis that these establishments were closely connected to the tobacco trade. The partnerships notarized a considerable part of their business transactions — possibly, the most important ones. Their nota-

² Portela y C^a owned La Ultramarina, a large and well-known tobacco manufactory. This factory appears in the literature since the early 1880s when it was held by Portela and Lomba, a partnership (Baldrich, 1995).

rized deeds allow an appraisal of significant portions their economic activity. These deeds refer to 163 distinct activities between 1868 and 1895.³

Many refer specifically to credits for tobacco planting, purchase of tobacco lands or simply leaf acquisitions. However, the majority have no outright or evident relation to tobacco.⁴ The relation becomes evident if the dealings are not examined piecemeal but as a whole. That is, the annual value of the deeds seen in the wider context of tobacco prices or exports manifests the relation between tobacco and the partnerships.

During the second half of the nineteenth century, Puerto Rican tobacco growers started planting a leaf superior for cigar-filler and wrapper (Aguayo, 1884, 19). Rising export prices suggest the expansion of these types of tobacco. Local growers and merchants consolidated their position in the domestic cigar-filler market by reducing imports of choice Virginia and Cuban leaf (Baldrich, 1995). These firms were part and parcel of this process.

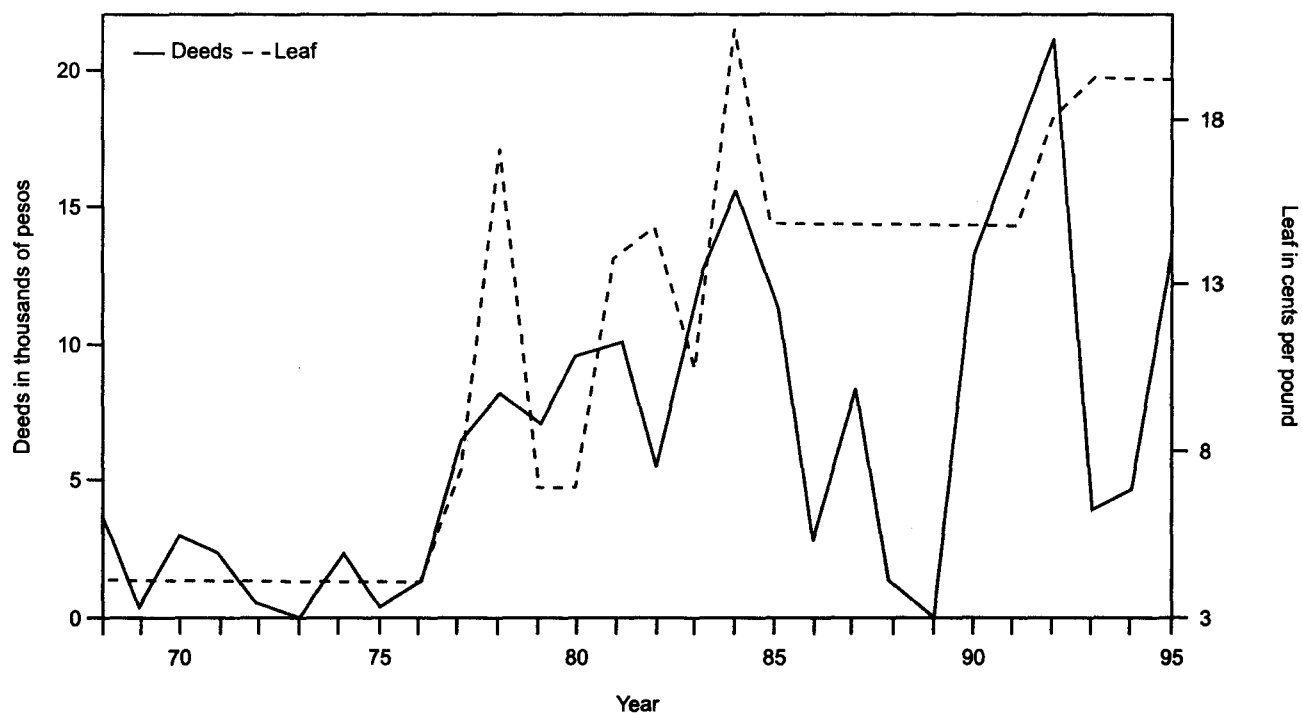
The annual value of the deeds follows closely the expansion of choice leaf. Rucabado economic activity has a positive relation to leaf price. Figure 1 documents the hypothesis. It presents leaf prices for export against the aggregate value of the deeds between 1869 and 1895. The figure clearly shows that Rucabado economic activity was intimately tied to rising leaf prices, that is, to the expansion of high quality leaf. They became one of the two suppliers to Las Dos Antillas, the largest cigar factory of the time (Blanco Fernández, 1930, 252). La Habanera, a major cigar and cigarette enterprise, relied on tobacco from La Plata Valley, where the Rucabados held land and financed production (J. M. Ceballos & Co., 1899, unnumbered). La Flor de Cayey, and later La Colectiva, relied on Rucabado leaf. Business volume had a strong relation to the expansion of high quality cigar-filler and wrapper.

The aggregate volume of the partnerships bears little relation to exported leaf. Instead, the rise of the Rucabados was tied to the expan-

³ These men and their societies left a scant record. Their account ledgers are seemingly lost. They left neither family records nor correspondence known to the author. However, their notarized deeds are a rich source to examine their economic activity. Casimiro Morales prepared most of the deeds and contracts and much of what follows is based on this notary's registry. Lynnette Rivera, my research assistant, and I examined them from 1868 to his retirement in 1895. We identified 179 deeds where the partners engaged in some form of economic activity with other parties, they refer to 163 economic deals. These do not include the charters of the partnerships, nor proxies, testaments or dissolutions.

⁴ Twenty-eight of the 163 deeds refer explicitly to financing tobacco planting, buying leaf or tobacco lands. They amount to 13.5 percent of all deeds.

FIGURE 1. *Puerto Rican export leaf prices and value of Rucabado deeds by year, 1869-1895*



Data from Casimiro Morales, 1868-1895, Archivo General de Puerto Rico, Protocolos Notariales, Serie de Guayama, Pueblo de Cayey, cajas 312-145. Edmundo D. Colón, *Datos sobre la agricultura de Puerto Rico antes de 1898* (San Juan: Cantero Fernández y Co., 1930), pp. 289-291.

sion of top quality leaf. The following equation documents the hypothesis. It presents the regression of leaf prices and the exports of domestic leaf on the aggregate value of the deeds.⁵

$$\begin{array}{rcl} \text{Volume} & = & -1770 + 555 \cdot \text{PricePR} + 0.00034 \cdot \text{ExpoPR} \\ \text{Std. Error} & & (150) \quad (0.00042) \end{array}$$

As in Figure 1, the value of the deeds is directly related to export leaf price. The regression coefficient, 555, is nearly four times its standard error. In other words, the volume of the partnerships was closely tied to choice cigar filler and wrapper and, consequently, to the growth of the domestic leaf market. Aggregate business volume has a weak positive relation to leaf exports from Puerto Rico. Its regression coefficient, 0.00034, is far smaller than the standard error. It shows that the volume of the partnerships has little, if any, relation to the growth of the export market. In summary, the regression lends support to the new type of leaf hypothesis but not to the export model.

An alternative way to probe the specialization of partnerships in the tobacco business is to analyze their assets at two points in time. Table 1 allows an appraisal of three Rucabado partnerships with a 22-years interval between them. The Rucabados of 1877 had abundant cash and were merchandise and foodstuff retailers. These items made up nearly two-thirds of the initial assets of the firm. Tobacco leaf ranked fourth, after cattle. It contributed to 10.45 percent of the capital.

The partnerships of 1899 retained their trading character but differed from earlier ones in other respects. They had sparse amounts of cash and little or no investments in merchandise and foodstuffs. Tobacco leaf was second only to institutional accounts in Rucabado y C^a and the main line in Rucabado y Portela. In a quarter century tobacco leaf became their specialty.

This succession of trading partnerships started their tobacco business by buying leaf from the growers and reselling to larger merchants and exporters. Once they achieved a strong position in trading, the firms ventured into other dimensions of the tobacco business. Table 1 supports the vertical integration hypothesis. Related endeavors gained ground

⁵ Multiple R= 0.60. The number of cases is 27. The deeds were worth 33 510 pesos in 1891. This observation was an outlier in the regression equation. Therefore, I dropped it from the estimates in the text. Leaf prices are in cents per pound, exports in pounds and deed-value in pesos.

TABLE 1. *Selected items of three Rucabado partnerships, in percentages*

	<i>Rucabado Hermanos 1877</i>	<i>Rucabado y C^a 1899</i>	<i>Rucabado y Portela 1899</i>
Manufactured tobacco	0.00	2.25 ^a	30.78 ^b
Tobacco leaf	10.45	26.31	48.50
Cattle	13.80	0.00	0.00
Merchandise & foodstuffs	29.54	3.61	0.00
Cash	35.34	0.86	12.12
Consignments abroad	0.00	4.80	0.00
Land	0.89	5.66	0.00
Institutional accounts	0.00	30.15	0.00
<i>Total assets in pesos</i>	<i>22 449.00</i>	<i>358 798.02</i>	<i>223 673.18</i>

SOURCES: Morales (1877, 807-812); Muñoz Morales (1900, 185-224); Muñoz Morales (1900, 422-438).

NOTE: The list of items is not complete, therefore, the percentages do not add to one hundred vertically. The assets for 1877 refer to the initial capital of the partnership. Those of Rucabado y C^a correspond to the closing of the firm plus the remaining assets of the previous partnerships. Finally, the "assets" for Rucabado y Portela is the net worth in 1899.

^a Consists of the value manufactured tobacco and the factory itself. It excludes trademarks and goodwill.

^b Shares in La Colectiva just sold to the Porto Rican-American Tobacco Company.

when leaf trading became the major economic activity of the societies. From these beginnings in commerce they started a decades-long process of vertical integration into agriculture. They bought tobacco land. Tenants and sharecroppers planted it. Land represented less than 1 percent of the assets in 1877. It increased to 5.66 percent in Rucabado y C^a of 1899.

They expanded into manufacture by establishing first a hand-rolling cigar factory and later a cigarette factory, the latter with another firm. Table 1 shows that manufacture of any kind was absent in 1877 whereas La Flor de Cayey manufactory took in 2.25 percent of Rucabado y C^a. The shares in La Colectiva cigarette-factory were second only to leaf in Rucabado y Portela. The shares represented nearly 31 percent of the assets of Rucabado y Portela in 1899.

CREDIT MERCHANTS

As stated above, specialization in leaf never implied giving up other economic activities. Such activity remained important, but subordinated, to the specialty. Credit became a major endeavor. Table 1 reveals that cash was abundant at the founding of the society in 1877. For 1899, institutional accounts constitute the most important item in Rucabado y C^a. Credit eased or, perhaps, made possible much of their economic activity. It was also a veritable mechanism of economic subordination.

Merchants handled credit in structured ways. Small amounts of credit often carried no guarantee but the debtor's good name and capacity to pay back. Large debts or persons that posed risk obtained credit by encumbering property. There were three common mechanisms of guaranteeing debt. Mortgages and purchases with the redemption covenant were the usual form of credit where collateral was real estate. In tobacco, the leaf comprised the commodity that tied the peasant household to a country or town merchant. A grower solicited several advances in cash or in kind from a merchant to help the sowing and harvesting of the plant. The lender, usually a merchant, supervised the use of the advances, and the care of the crop for tobacco leaf served as collateral to the loan. The merchant retained the exclusive right to sell the leaf and to discount the money advanced.⁶

Between 1868 and 1895, the Rucabados served as mortgage bankers to 12 properties, brought 31 titles with the redemption clause, and notarized tobacco financing 13 times. Five dealings collateralized debt through other means. These 61 settlements made up 37 percent of the 163 transactions notarized by Casimiro Morales.

Mortgages represented 15 percent of the value of all deeds. Titles with the redemption clause stood at 21 percent and leaf financing less than 2 percent. Other mechanisms represented less than 5 percent. Credit represented over two fifths of the value of all dealings.⁷

Of these 61 settlements, five show the loss of 116 cuerdas and a house to the firm. Pedro de Rivera, identified below, suggests these failures. In

⁶ Crop loans went under the name of *refacción*. In the absence of banking institutions, merchants often served as creditors and money lenders (Szászdi, 1962-1963, 149-171; Meléndez Muñoz, 1963, 314-322).

⁷ Ten deeds identify but do not provide the deal's money value. The number of cases with complete data is 153.

1877, he sold the partnership 54 cuerdas for 1 419.90 pesos.⁸ Rivera had four months to return the loan and recover his property. He could also apply the earnings from his coming tobacco harvest to service the debt; however, he lost the land (Morales, 1877a).

Nine percent of debtors lost land; all were titles with the redemption covenant. The small number of failures suggests the credit function instead of a land accumulation interest. Land and leaf served as collateral for debt not as mechanisms for land accumulation. Yield on money lent was 12 percent annually and, occasionally, reached 18 percent. With interest rates running this high, it was probably more lucrative for the bankers to have the debt serviced adequately rather than execute debtors' property.⁹

Uncollateralized debt, against those discussed above, was not a mechanism of land accumulation. Casimiro Morales's registry contains 42 real estate purchases. The partnership brought two in payment of debts. In 1877, Santiago Soliván paid the partnership with 52 cuerdas of land in Cayey. In 1891, Juan Gallart, in representation of Crosas, Blanco y C^a, another partnership, paid with 39.5 cuerdas of land in neighboring Cidra (Morales, 1877b, 374-375v; Morales, 1891, 399-400v). Again, their interest lay in servicing debt instead of land accumulation though payment of debts.

INVESTMENTS, PROFITS AND VERTICAL INTEGRATION

Merchants considered both past and expected profits when they renewed the partnerships and when they branched into agriculture and manufacture. They paid close attention to their sources of economic well-being and to their predicaments. Outlined here are two propositions regarding the vertical integration of the Rucabado firms. The first offers a partial explanation of the variations in capital of the firms; international trading, in particular, and the decline of Havana cigars and Cuban leaf, offer a plausible interpretation.

The second considers the consequences of economic uncertainty, real or imagined. In the face of difficulty, tobacco firms invested less in new

⁸ A cuerda stands for 0.97 acres.

⁹ Picó (1981, 79) makes a similar argument for merchants dealing in coffee elsewhere in Puerto Rico during the same years. Bonnin (1987-1988, 148-150) shows that merchants that became landholders were more likely to fail than those that kept solely to commerce.

partnerships. Their predicament also led them to seek benefits in areas different from but related to their trading specialty. Vertical integration followed into planting and manufacture.

As stated above, volume of business was tied to leaf export prices, and not to volume of leaf export from Puerto Rico. Business volume suggests a relation to the growth of domestic markets. However, investments followed international trends, specifically Havana cigars.¹⁰ Internal turmoil in Cuba disrupted Cuban markets and price structures. Consequently, supplies of leaf, cigars and cigarettes became unpredictable and less readily available. These circumstances created an environment favorable to their substitution with domestic production.

The following regression equation supports this proposition. Havana cigars and the second Cuban war for independence (1895-1898) had a profound impact on capital invested in the partnerships.¹¹

$$\text{Capital} = 39\,876 - 0.000138 \cdot \text{HavaCigar} + 12622 \cdot \text{War} + 0.00014 \cdot \text{ExpoPR}$$

(0.000034) (3846) (0.00067)

Investments in the partnerships increased as Cuban cigar-exports diminished. The regression coefficient shows a strong relation, it is four times its standard error. In a small way, the Rucabados contributed to Cuban deindustrialization with their cigar factory around 1893, and with their cigarette venture in 1898. The second Cuban war for independence (1895-1898) had a powerful influence on capital investments, they were years of high investments. This coefficient is over three times the standard error, it presents, again, a strong relation. In summary, capital investments were intimately tied to the markets for Cuban cigars and had little relation to the export market for Puerto Rican leaf. The last regressor in the equation, exports of Puerto Rican leaf, has a very weak relation to capital. This coefficient is a fraction of its standard error.¹²

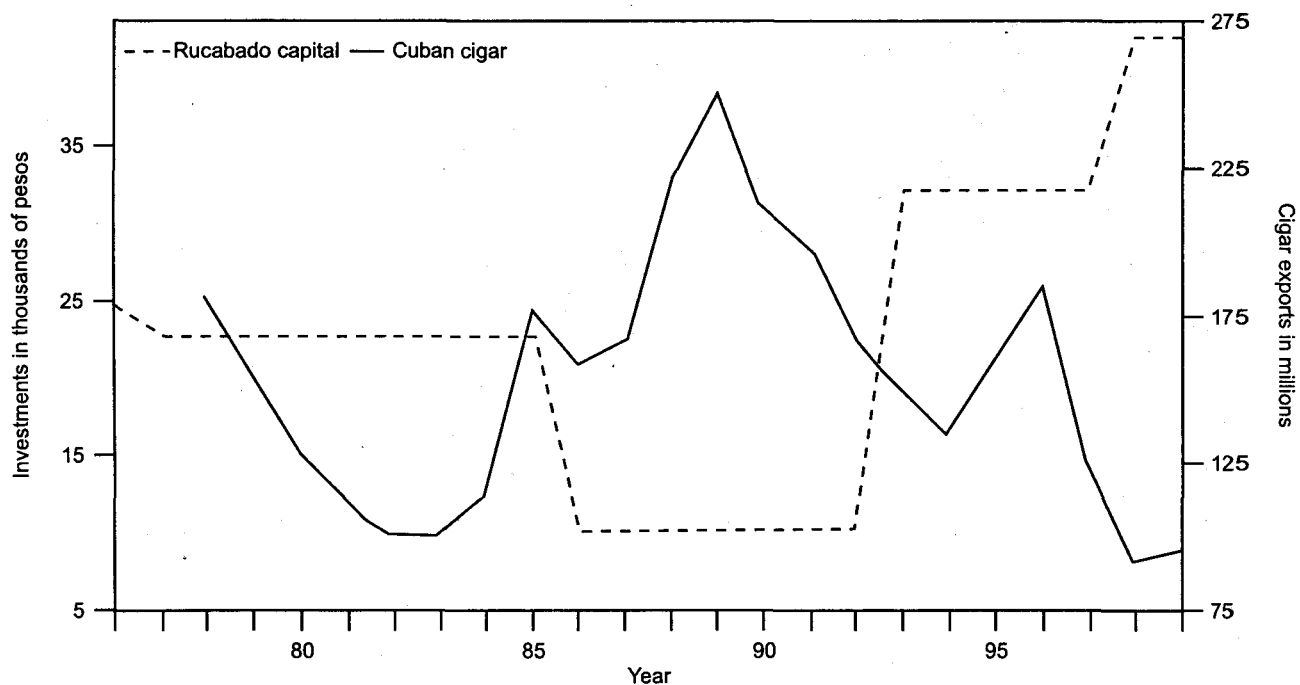
Figure 2 presents investments in the firms and the exports of Cuban cigars from 1876 to 1899. The figure depicts graphically the results of the

¹⁰ This situation is not exceptional; during the early years of the twentieth century, export prices of leaf determined, more than anything else, leaf price in the farm, even if it was for domestic consumption (Serrallés, Jr., and Vélez, Jr., 1941).

¹¹ Multiple R= 0.79. The number of cases is 22. Capital is measured in pesos, Havana cigars in single cigars and leaf exports from Puerto Rico in pounds. "War" is a dummy variable for 1895-1898. The data are available from 1878 to 1899.

¹² Other regression equations posted insignificant relations with tobacco variables from Britain, the United States or Puerto Rico itself thus reinforcing the Cuban connection.

FIGURE 2. *Rucabado capital investments and Cuban cigar exports by year, 1876-1899*



Data from Casimiro Morales, 1868-1895, Archivo General de Puerto Rico, Protocolos Notariales, Serie de Guayama, Pueblo de Cayey, cajas 312-345 and Ángel González del Valle, *Memorándum presentado a la Comisión Nacional de Propaganda y Defensa del Tabaco Habano* (Havana: Imprenta "Siglo XXI," 1929), pp. 370-371.

regression equation, and we may conclude that Cuban markets affected investments. The second Cuban war for independence (1895-1898) eased the substitution of Cuban leaf and manufactures with Puerto Rican ones. In fact, partnerships increased capital in the midst of the second Cuban war for independence. That is, turmoil in Cuba was good for Puerto Rican leaf and the Rucabados. Cuban cigars had a strong recovery during the mid-eighties and early nineties. These years overlapped with the least capitalized Rucabado partnership.

The second proposition holds that economic difficulties led these trading houses to venture beyond commerce. Low profits stimulated other pursuits that were not completely foreign. They were tied to their specialty in leaf trading. Weak leaf operations provided the background for vertical integration into tobacco planting and cigar and cigarette manufacturing.

Table 2 presents the profits, capital and net earnings of five Rucabado partnerships between 1871 and 1899. Profits, remarkable as they were, reached a low during 1877-1885. Information concerning profits is not available for 1885-1893.¹³ Capital fluctuated from a low of 10 000 pesos in 1885-1893 to 42 000 in 1897-1899.

Table 2 shows that the eighties and early nineties were weak years for the Rucabados. During these years, they developed several strategies to handle the downturns of Puerto Rican leaf. The partners invested less in each succeeding firm until 1893. When they invested more, it was but a fraction of the earnings. They reinvested part of the earnings in other economic activity. For example, in 1887, when Francisco Rucabado, served as creditor to the society, he dealt on real estate of his own, and had over 28 000 and 10 000 pesos in the firms of Chavarri and Vijande respectively (Morales, 1887, 599-602v). His brother Mateo owned 3 300 cuerdas in the south coast by 1897. Mateo held shares and became a director of the Banco Territorial y Agrícola by 1896 ("Planillas," 1897-1898; Banco Territorial y Agrícola, 1896).

Despite these individual initiatives, they actively promoted their mainstay. The firm participated in the agricultural and industrial exposition held in the southern port of Ponce in 1883. Their cigar filler obtained a silver medal (Abad, 1884, 60, 68). In 1888 they participated in

¹³ The "net earnings" were divided by the number of days covered by the period and then annualized at 365 days per year. This amount was then divided by the "capital" of the partnership to obtain the "annual profit rate."

TABLE 2. *Profits, capital and net earnings of the Rucabado Partnerships, 1871-1899*

<i>Partnership</i>	<i>Dates^a</i>	<i>Annual profit rate</i>	<i>Capital</i>	<i>Net earnings</i>
Francisco Rucabado	1871-1876	41.27	24 193	51 704.46
Rucabado Hermanos	1877-1885	24.04	22 449	40 816.33
Rucabado Hermanos	1885-1893	unavailable	10 000	unavailable
Rucabado y C ^a	1893-1899	38.52	32 000 ^b	105 370.40
Rucabado y Portela	1898-1899	unavailable	unavailable	223 672.88

NOTE: Profit rates and earnings are estimates from the registries of notaries Casimiro Morales and his nephew Luis Muñoz Morales. Profits stand for the net earnings divided by the capital and then annualized. Capital and earnings are in pesos. "Capital" refers to money, goods, and properties invested in the firms.

^a The dates need not coincide with the duration of the partnership. They refer to the period where the documents allow estimates.

^b Capital increased to 42 000 in 1897. I calculated the profits using this second amount.

the Barcelona Universal Exposition. Las Dos Antillas and Rucabado Hermanos were the only two local enterprises to obtain gold medals for tobacco (Infesta, 1889, 42). Their factory, La Flor de Cayey, entered the 1893 Exposición de Puerto Rico. It obtained gold for cigars and cut tobacco (Infesta, 1895, 206, 214).

Vertical integration into agriculture gained during the low profit years. The Rucabados branched into farming by financing production. The case of Pedro de Rivera, a tobacco grower, illustrates the point. Rivera lost his land to the partnership when his tobacco planting went sour in 1877. During 1878 Rucabado Hermanos financed Rivera's tobacco business which included his crop and some tobacco buying of his own; he lost another 500 pesos. He then became a tenant of the Rucabados for the next two harvests; they provided land, financed and supervised planting and harvesting and, finally, bought the leaf (Morales, 1877a, 1878, 1879, 1880, 1881).

Backward integration continued through tenant farming, crop loans and land acquisitions. By the end of the century there had been little concentration of tobacco land; the "great tobacco field [was still] of rare occurrence except in the Cayey district" (Dinwiddie, 1899, 120). Com-

pare the six cuerdas of land held by the partnership in 1877 to the 789 in 1900 (Morales, 1877c; Muñoz Morales, 1900b, 1900d).

Forward integration started with investments in manufacture. The 1893 charter allowed the establishment of "factories"; the Rucabados started a cigar manufactory around this date. The first clear reference comes from the 1893 exposition held in San Juan where their factory participated (Infiesta, 1895, 214). By 1899, La Flor de Cayey employed 68 workers and 12 apprentices, and had a capacity of 30 000 cigars per week. It manufactured for the domestic market with small amounts exported to Spain and the United States and occasional shipments to Germany and England (Carroll, 1899, 749-750). In time, La Flor de Cayey became a provider to the Royal Spanish house (Villar, Lanza y C^a, 1922).

A two-year period of profound distress began at the end of the second Cuban war for independence and continued after the U. S. invasion and the reorientation of the economy to the United States. The Cuban government enacted a high tariff on tobacco leaf in January of 1898, effectively shutting Puerto Rico off from its major market. Puerto Rican government officials appealed the decision to the monarchy and a commission of the tobacco community went to Havana to seek repeal of the tariff. When both attempts failed, merchants, growers and manufacturers, in retaliation, sought a high tariff against Cuban manufactured tobacco to stimulate the domestic industry (Burgos Malavé, 1989-1990; Coll y Toste, 1921, 57-58).¹⁴ To complicate matters further, U. S. troops invaded the island in July effectively cutting off the Spanish market. The invaders offered no solution to the predicament faced by local tobacco interests, the U. S. government imposed the Dingley tariff that protected U. S. tobacco growers and manufacturers from foreign interests. Merchants and growers found few buyers for the accumulating stocks of depreciated leaf (Valle, 1969, 558). Consequently, in the aftermath of the war, hundreds of desperate merchants, growers and manufacturers wrote the military governor asking for free trade (Davis, 1900, 12). Table 1 documents the plight of Rucabado y Portela. Note that unsold leaf represented nearly half of the assets of the firm.

In the face of considerable adversity, Rucabado y Portela established a cigarette factory in December of 1898, just after July's U. S. invasion. The factory owners must have been aware that while the Dingley tariff

¹⁴ Such was the urgency that a Rucabado brother, Mateo, accompanied the commission (Burgos Malavé, 1989-1990, 183).

severely limited exports to the U. S., it had the advantage of restricting Cuban cigars and cigarettes in particular (Carroll, 1899, 141). However, U. S. manufacturers could enter the domestic market. Rucabado y Portela intended for the cigarette factory to occupy the market lost by the Cubans ahead of U. S. fabricants. La Colectiva would put accumulated leaf stocks to good use.¹⁵ Again, the pursuit of manufacture came in response to weak leaf trading.

La Colectiva manufactured only cigarettes (Real Sociedad Económica, 1898) as cigars remained in the hands of the original partnerships. It operated a steam driven factory with eight Bonsack and several Comas mechanical rollers. A daily output of 400 000 cigarettes represented a fraction of the capacity of the Bonsacks ("Contrato entre Rucabado y Portela", 1899; Carroll, 1899, 141; J. M. Ceballos & Co., 1899, unnumbered). The enabling charter explicitly empowered the partnership to pursue business in the Dominican Republic; moreover, they claimed to own a match factory in Mayagüez (Real Sociedad Económica, 1898; "Portela v. The Porto Rican American Tobacco Co.," 1903, 30-39; J.M. Ceballos & Co., 1899, pages unnumbered).

They sought immediate access to the U. S. market. La Colectiva, La Flor de Cayey and others contracted two adventurers who arrived within a month of the U. S. invasion to market their cigars and cigarettes in New York.¹⁶ Unpaid consignments abroad for Rucabado y C^a amounted to 17 223 pesos in 1900 (Muñoz Morales, 1900b). A major source of economic distress ended with the substantial tariff reduction granted by the U. S. government in May 1900 ("Porto Rican tariff," 1900, 9; Dietz, 1989, 105-106).

Within a month, they were shipping cigars to Jerónimo Menéndez in New York, their consignee for the United States. Soon after, Mateo

¹⁵ A second fully mechanized cigarette factory began operations in the southern port of Ponce around the same date. Leopold Engelhardt and Company, Bremen based, joined Fritze, Lundt and Company, a Puerto Rican-based partnership of German subjects to establish Toro and Company. The two partnerships provided the capital and Luis Toro became the managing partner. Toro and Co. owned two plants, a cigar factory in the city itself and a combined cigar and cigarette factory close to the harbor. They employed over 500 workers (Baldrich, 1995).

¹⁶ Robert Graham, one of them, represented a Tampa based cigar factory. Together with a Serafin Sánchez they sailed for Puerto Rico with 8 000 U.S. flags and other wares to pay for their "search of adventure" (*Tobacco*, Aug. 26, 1898a, 5). They returned to New York with contracts between a few domestic manufacturers and Graham and Sánchez, a firm to be formed in the near future (*Tobacco*, Oct. 28, 1898b, 7). J. M. Ceballos, (1899) identifies the other local firms.

Rucabado and José Portela arrived in New York to promote their cigars ("Current comment," 1900, 5). The *Tobacco* journal considered the best in the shipment to be ("Those cigars," 1900, 1):

so superior to the ordinary cigars hitherto imported from Porto Rico, as to put them practically into another class... these cigars were well made, and quite a good imitation of the fancy styles of Spanish or Cuban works, produced in such perfection that one might believe them made in Havana. And then the wrapper! Perhaps nothing so fine on cigars from Porto Rico had ever been seen in the United States; free from coarse veins, soft and silky in appearance, and light in color.

THE AFTERMATH

By the end of the nineteenth century, the Rucabados were a major force in Puerto Rico's small and expanding cigar and cigarette industrial base. As discussed above, economic difficulties led these leaf merchants to integrate vertically into manufacture and agriculture. In the face of economic problems associated with the reorientation to the U. S. market, the Rucabados abandoned the policy of forward and backward integration successfully employed in other crises.

On October 9, 1899, Rucabado y Portela sold La Colectiva to the Porto Rican-American Tobacco Company (PRATC) for stock and a petty amount of cash; the sale was retroactive to mid-August. At the end of 1899, ATC held \$99 100 of the \$166 000 worth of PRATC while Rucabado y Portela owned the balance,¹⁷ thus becoming minority partners to the "tobacco trust." As part of the deal, Fausto Rucabado and José Portela, former managing partners, entered the service of PRATC for a year and all partners agreed to hold themselves out of the cigarette business for years to come.

Their minority stake in PRATC proved very profitable. It paid dividends of 6 percent of the book value of the stock in 1900 and 1901, 20 percent in 1902, 32 percent in 1905 and 84 percent in 1906 (Huntington, 1907).

The last firm, chartered in 1900, was not an active trading house; it liquidated the assets of previous societies. While earlier charters explicitly forbade dormant partners to engage in any kind of competition with the society and prohibited managing partners from other gainful occu-

¹⁷ On September 1899, men connected to ATC incorporated the Porto Rican-American Tobacco Company in New Jersey ("Contrato entre Rucabado y Portela," 1899; U.S., Bureau of Corporations, 1909, 82-83. Muñoz Morales, 1900b, 201-205.

pation, the ban disappeared in 1900 (Muñoz Morales, 1900c). In practice, there was competition and outside employment. For instance, two Rucabado brothers became dormant partners to Flores y C^a, a commercial establishment, before the expiration of Rucabado y C^a (Muñoz Morales, 1901).

The former associates retained an active interest in the cigar business during the coming years. However, the shared interest failed to find a common enterprise. Fausto Rucabado became deranged after becoming a vice-president of PRATC ("Portela v. The Porto Rican American Tobacco Co.," 1903, 30-39), a court of justice declared him insane in 1908 and he died in Barcelona in 1930 ("Ex Parte Teresa Antoni, 1931, 785-787). His father, Francisco, managed briefly a cigar factory, possibly La Flor de Cayey (Paniagua, 1902), and migrated to San Juan where he died in 1907 (Guzmán Benítez, 1907).

In 1901, Marcial Suárez managed La Industrial cigar-factory where he had an interest (Muñoz Morales, 1902, 109-112). By 1902, he represented a Chicago-based corporation with a cigar factory in Puerto Rico (Porto Rico Export Company, 1902). Manuel Otero remained a merchant (Consejo Municipal de Cayey, 1907, 41-41v), became a landholder, and held a few shares of the Banco de Puerto Rico (Banco de Puerto Rico, 1909, 11). Otero was the only partner to remain close to the trust in which he was a shareholder (Díaz Navarro, 1906) and director of PRATC and another subsidiary of ATC, the Porto Rican Leaf Tobacco Company (Porto Rican American Tobacco Company, 1905-1910. U. S., Bureau of Corporations, 1909, 301). Mateo Rucabado appears managing La Flor de Cayey in 1907 (Corresponsal, 1907, unnumbered) and sold it in 1916 (Fernández García, 1920, 227-228).

Their activity as merchants waned after the dissolution of Rucabado y C^a. By 1910, Mateo Rucabado and Manuel Otero considered themselves farmers instead of merchants (U. S., Bureau of the Census, 1910, 55, 184). In 1910 Mateo was busy in the construction of a sugar mill where he was the vice-president and held a fourth of the shares (Cayey Sugar Company, 1910).

CONCLUSIONS

This study examined the enterprises of the Rucabado family from 1865-1901. With roots in commerce, Rucabado and Company expanded into manufacture, relying on free labor. It transcended artisanal production

and stimulated the development of capitalism in manufacture. This paper has probed the connection between leaf trading and tobacco manufacture to gain an understanding of the development of the tobacco industry, in particular, and, more generally, of industrial capitalism in colonial society.

The paper examined four issues regarding the Rucabado enterprises. First, the origins of the partnerships in commerce. Most of their activity was subservient to a particular line of commerce, leaf-trading. Tobacco manufactures, either cigars or cigarettes, remained subordinated to their paramount trading operations as leaf merchants.

Second, these firms relied principally on credit to conduct their business. The propertied encumbered land and crop to finance their needs. Clients purchased commodities and financed planting on credit. Credit was not a mechanism for accumulation of real estate. The firms had an earnest interest in servicing debt.

Third, the Rucabados successfully integrated their leaf trade specialty to tobacco planting and to a cigar manufactory and a cigarette plant. Two reasons led them to vertical integration, the first consists of a partial explanation for Rucabado investments. They invested less in the firms when the Havana market was in an upswing, that is, large exports of Cuban cigars translated into small investment for the Rucabados. Their share of the domestic market was negatively affected by a strong Cuban presence. Second, the firm ventured into manufacture to compensate the weakness of trade. Planting and manufacturing handled a commodity, tobacco, they knew well.

Fourth, from 1865 to 1899, the Rucabados accomplished considerable vertical integration by controlling additional dimensions of the tobacco business, not because of any particular commitment to manufacture or agriculture but the pursuit of profit. The business opportunities that led to vertical integration brought it to an end. As a consequence of the American invasion, they sold the cigarette plant for shares in a subsidiary of ATC with the expectancy, fulfilled later, of greater success under the aegis of the "tobacco trust."

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ABBREVIATIONS

AGPR	Archivo General de Puerto Rico
ATC	American Tobacco Company
PN	Protocolos Notariales
PRATC	Porto Rican-American Tobacco Company

BIBLIOGRAPHY

- Abad, José Ramón
 1884 *La exposición agrícola e industrial de tabaco realizada en Ponce durante el mes de diciembre de 1883*, Ponce, El Vapor.
- Aguayo, Ricardo C.
 1884 *Manual del cultivo de tabaco*, Ponce, El Comercio.
- Baldrich, Juan José
 1995 "Growth and americanization of the Puerto Rican tobacco industry, 1847-1902," manuscript.
- Banco de Puerto Rico
 1909 *Memoria leída en la junta general ordinaria de accionistas*, n. e., San Juan.
- Banco Territorial y Agrícola
 1896 *Memoria leída en la junta general ordinaria de accionistas celebrada el día 22 de julio de 1896*, San Juan, La Correspondencia.
- Blanco Fernández, Antonio
 1930 *España y Puerto Rico, 1820-1930*, San Juan, Cantero Fernández y Co.
- Bonnin, María Isabel
 1987- "Los contratos de refacción y el decaimiento de la hacienda tradicional
 1988 en Ponce: 1865-1880," *Revista de Estudios Generales*, vol. 3, 148-150.
- Burgos Malavé, Eda M.
 1989- "El conflicto tabacalero entre Cuba y Puerto Rico," *Revista de Estudios
 1990 Generales*, vol. 4, núm. 4, 181-191.
- Carroll, Henry K.
 1899 *Report on the Island of Porto Rico*, Washington, Government Printing Office.
- Cayey Sugar Company
 1910 "Certificate of amendment to articles of incorporation", May 1, 1910. Cayey Sugar Company, "Annual report," 1910, Archivo General de Puerto Rico (hereafter cited as AGPR), San Juan, Departamento de Estado, Corporaciones con fines de lucro, caja 12, exp. 106.
- Cifre de Loubriel, Estela
 1989 *La formación del pueblo puertorriqueño. Contribución de los gallegos, asturianos y santanderinos*, Río Piedras, Universidad de Puerto Rico.

- Coll y Toste, Cayetano
 1921 "El tabaco," *Tobacco*, vol. 79, no. 9: 57-58.
- Consejo Municipal de Cayey
 1907 "Actas," May 27, 1907, AGPR, Fondo Municipal de Cayey, caja 10, exp. 51, fols. 41-41v.
- "Contrato entre Rucabado y Portela *et al.*
 1899 Portela v. The Porto Rican American Tobacco Co., Oct. 9, 1899, Judicial Center of San Juan, Inactive Archive, Dependency: Supreme Court, Civil case no. 58, Document "A".
- Corresponsal,
 1907 "Desde Cayey," *Unión Obrera* (Jun. 19, 1907), unnumbered.
- "Current comment"
 1900 *Tobacco*, vol. 29, no. 5, 5.
- Davis, George W.
 1900 Letter to Elihu Root, Secretary of War, Feb. 14, 1900. In *Free trade between the United States and Puerto Rico*, 56th Congress-First Session, Senate Document Number 195, Government Printing Office, Washington, D. C., pp. 1-2.
- Díaz Navarro, Herminio
 1906 "Poder especial," Jul. 17, 1906, AGPR, PN, Siglo XX, San Juan, caja 286.
- Dietz, James L.
 1989 *Historia económica de Puerto Rico*, Río Piedras, Huracán.
- Dinwiddie, William
 1899 *Puerto Rico, its conditions and possibilities*, New York, Harper & Brothers Publications.
- "Ex Parte Teresa Antoni, peticionaria"
 1931 *Decisiones de Puerto Rico*, vol. 42, 785-787.
- Fernández García, Benigno
 1920 "Confirmación de cesión de marcas de fábrica," May 13, 1920, AGPR, PN, Serie: San Juan, Siglo XX, Pueblo: Cayey, caja 337, fols. 227-228.
- García, Gervasio Luis
 1990 "Las primeras actividades de los honrados hijos del trabajo," *op. cit.*, vol. 5, 179-247.
- Guzmán Benítez, Juan de
 1907 "Acta de protocolación del testamento cerrado de Francisco Rucabado Argumosa," Aug. 13, 1907, AGPR, PN, San Juan, Siglo XX, caja 197, fol. 2 687-2701.
- Huntington, C. C.
 1907 "The dividends, earnings, and surpluses of the American Tobacco Company and its main subsidiary corporations," Washington, D. C., National Archives, Federal Trade Commission (Record Group 122), file 4795.

Infiesta, Alejandro

1889 *La Exposición Universal de Barcelona, 1888*, Boletín Mercantil [San Juan].

1895 *La Exposición de Puerto Rico*, Boletín Mercantil, San Juan.

J. M. Ceballos & Co.

1899 *The importers and exporters pictorial guide and business directory of Porto Rico, 1899*, New York, The Pictorial Guide Publishing Company.

Lewis, William Arthur

1969 *Aspects of tropical agriculture 1883-1965*, Stockholm, Almquist and Wiksell.

Meléndez Muñoz, Miguel

1963 "Desarrollo del crédito en Puerto Rico", in Miguel Meléndez Muñoz, *Una oración en Montebello*, Obras Completas, vol. 3, San Juan, Instituto de Cultura Puertorriqueña.

Morales, Casimiro

1871 "Venta de crédito", Jan. 16, 1871, AGPR, Protocolos Notariales (hereafter cited as PN), Serie: Guayama, Pueblo: Cayey, caja 314, escritura 7, fols. 9v-10v.

1876 "Retroventa", Nov. 21, 1876, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 318, escritura 331, fols. 785-787v.

1877a "Venta de terreno", Mar. 15, 1877, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 319, escritura 70, fols. 153-154v.

1877b "Venta de terreno", Jun. 1, 1877, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 319, escritura 167, fols. 374-375v.

1877c "Sociedad mercantil", Oct. 13, 1877, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 319, escritura 328, fols. 807-812.

1878 "Refacción", Apr. 16, 1878, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 320, escritura 88, fols. 189-190.

1879 "Refacción", Feb. 27, 1879, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 321, escritura 35, fols. 114-115.

1880 "Contrato de refacción", Mar. 4, 1880, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 323, escritura 71, fols. 153-154.

1881 "Confirmación de venta", Dec. 3, 1881, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 325, escritura 251, fols. 857-858v.

1885a "Carta de pago", May 7, 1885, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 329, escritura 92, fols. 286-287v.

1885b "Disolución de sociedad mercantil", Oct. 14, 1885, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 329, escritura 221, fols. 659-662v.

1885c "Sociedad mercantil", Oct. 15 1885, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 329, escritura 222, fols. 663-667.

1887 "Testamento nuncupativo", Nov. 7, 1887, AGPR, Fondo: PN, Serie: Guayama, Pueblo: Cayey, caja 331, escritura 199, fols. 599-602v.

- 1891 "Acta notarial", May 16, 1891, AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 337, escritura 111, fols. 399-400v.
 - 1893 "Sociedad en comandita", Jun. 27, 1893. AGPR, PN, Serie: Guayama, Pueblo: Cayey, caja 341, escritura 123, fols. 367-370v.
- Muñoz Morales, Luis
- 1900a "Venta de frutos pendientes", Mar. 3, 1900. AGPR, PN, Serie: Humacao, Pueblo: Cayey, caja 996, escritura 36, fols. 177-179v.
 - 1900b "Liquidación y disolución de sociedad mercantil", Mar. 6, 1900, AGPR, PN, Serie: Humacao, Pueblo: Cayey, caja 996, escritura 39, fols. 185-224.
 - 1900c "Sociedad mercantil en comandita", Mar. 21, 1900, AGPR, PN, Serie: Humacao, Pueblo: Cayey, caja 996, fols. 265-272.
 - 1900d "División y adjudicación de fincas", May 13, 1900, AGPR, PN, Serie: Humacao, Pueblo: Cayey, caja 996, escritura 85, fols. 422-438.
 - 1901 "Sociedad mercantil en comandita", Feb. 27, 1901, AGPR, PN, Siglo XX, San Juan, caja 747, fols. 67-70.
 - 1902 "Constitución y disolución de sociedad", Apr. 5, 1902, AGPR, PN, Siglo XX, San Juan, caja 748, folios 109-112.
- Paniagua, M.
- 1902 Letter to the honorable William H. Hunt, Governor of Porto Rico, May 2, 1902, AGPR, Fortaleza, caja 103, exp. 2907.
- Picó, Fernando
- 1981 *Amargo café*, Río Piedras, Huracán.
- "Planillas", untitled
- 1897- AGPR, Fondo de Guayama, Serie: Planillas, Pueblo: Salinas.
 - 1898
- "Portela v. The Porto Rican American Tobacco Co."
- 1903 *Decisiones de Puerto Rico*, vol. 4, 30-39.
- Porto Rican American Tobacco Company
- 1905- "Informe anual", 1905-1910, AGPR, Departamento de Estado, Corporaciones foráneas con fines de lucro, caja 2, exp. 37
 - 1910
- "Porto Rican tariff"
- 1900 *Tobacco*, vol. 28, no. 25, 9.
- Porto Rico Export Company of Porto Rico
- 1902 "Certificate of consent to be sued," Jun. 25, 1902, AGPR, Departamento de Estado, Corporaciones foráneas con fines de lucro, caja 4, exp. 69.
- Quintero Rivera, Ángel
- 1988 *Patricios y plebeyos*, Río Piedras, Huracán.
- Real Sociedad Económica de Amigos del País
- 1898 "Expediente sobre marca de fábrica que interesa los Sres. Rucabado y Portela para cigarrillos," Sept. 15, 1898, AGPR, Colecciones Particulares, Junghanns, caja 27, exp. 1111.

Serrallés, Jr., Jorge J., and Martín Vélez, Jr.

- 1941 "Precio del tabaco en rama al agricultor en Puerto Rico del 1907 al 1940,"
Boletín Estación Experimental Agrícola, vol. 60, 142.

Szászdi, Adam

- 1962- "Credit without banking in early nineteenth century Puerto Rico,"
1963 *The Americas*, vol. 19, no. 2, 149-171.

Tobacco

- 1898a *Tobacco*, vol. 25, no. 17, 5.
1898b *Tobacco*, vol. 25, no. 26, 7.

"Those cigars from Porto Rico"

- 1900 *Tobacco*, vol. 29, no. 4, 1.

U. S., Bureau of Corporations

- 1909 *Position of the tobacco combination in the industry*, Report of the Commissioner of Corporations on the tobacco industry, part I, Washington, D. C., Government Printing Office.

U. S., Bureau of the Census

- 1910 *Thirteenth Census: Porto Rico*, manuscript census, vol. 15, Cayey.

U. S., Department of Commerce and Labor

- 1907 *Commercial Porto Rico in 1906*, Washington, D. C., Government Printing Office.

Valle, José F. del

- 1969 "Situación económica de Puerto Rico en 1899," in Eugenio Fernández Méndez (ed.), *Crónicas de Puerto Rico*, Río Piedras, Universidad de Puerto Rico.

Villar, Lanza y C^a

- 1922 *La flor de Cayey*, Colección Efraín Archilla Diez.