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Is It Who You Know? Entrepreneurs and Bankers in São Paulo, Brazil, at the Turn of the Twentieth Century

ANNE HANLEY

This article examines the trust-producing mechanisms investors and financiers used in São Paulo, Brazil, to determine where to invest their money in the late nineteenth and early twentieth centuries. The coffee boom that began in the 1880s spurred bursts of new domestic business development that transformed São Paulo into Brazil's industrial leader. Using shareholder and director data from an array of business sectors, this article demonstrates that early development (1856–1905) of the institutions that provided business finance was accompanied by highly personal relationships between financier and entrepreneur. By the early twentieth century (1906–1920), rapid economic growth and business diversification rendered these personal connections inadequate and hence less important to business finance. Investors and directors concentrated their energies and their money, abandoning the practice of forming broad connections in general—and connections to a bank in particular—and turned to the stock market instead. By providing an alternative to personal forms of trust production, the rise of impersonal intermediation promoted the significantly broadened market for corporate business formation that underwrote São Paulo's economic transformation.

Just over one hundred years ago, Brazil experienced a boom in new business formation that rivaled the Internet boom of the 1990s. New regulatory legislation in 1890 eased the rules for forming corporations and limited the personal liability of investors who bought shares in

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those corporations.¹ Stocks were available for a fraction of their initial public offering price, thanks to a provision in the incorporation law that allowed companies to begin operations with just 10 percent of their capital raised and start trading stock once 20 percent was paid in. The reaction to this legislation was euphoric, as businesses incorporated at a dizzying rate and small investors rushed into the market.² Hundreds of firms incorporated in São Paulo in the 1890s, compared to a couple of dozen in the decade before. Demand for their stocks overwhelmed brokerage firms, which were accustomed to sporadic and low-volume trading activity, prompting the formation of the São Paulo stock exchange. Newspapers, reflecting the infectious exuberance of the boom, published daily stock tables listing thousands of shares exchanging hands each day.³

Like the boom of the 1990s, this bubble financed real innovation and structural change in the Brazilian economy, as well as substantial speculative and even fraudulent behavior. The burst, less than two years later, was followed by a prolonged recession and, mercifully, a return to expansion. This cycle of bubble, bust, and recovery occurred in an era of incipient urbanization and industrial formation and of limited capital market institutions. São Paulo's entrepreneurs and investors had the challenge of simultaneously identifying new opportunities and inventing the institutions to finance them, guessing all the while which bets were sound. They needed some mechanisms of determining whom to trust. The very possibility of economic growth and diversification rested on getting it right.

This article investigates the trust-producing mechanisms São Paulo investors and financiers used to gather information on and allocate financial capital to new businesses from 1856, when São

1. *Coleção de Leis e Decretos*. Decree 164, 17 Jan. 1890.

2. Research on the Encilhamento in Rio de Janeiro dates its beginning with late-Empire banking reforms that eased credit, introduced substantial liquidity into the economy, and produced phenomenal returns for Rio banks and their shareholders. The ensuing speculation spilled over to all stock market transactions, sparking new business formations. This earlier jump in incorporations was no doubt facilitated by the existence of a formal stock and bond exchange in Rio de Janeiro. São Paulo experienced no equivalent boom before the commercial legislation reform of January 1890. On Rio, see Maria Bárbara Levy, "O Encilhamento," in *Economia Brasileira: Uma Visão Histórica*, ed. Paulo Neuhaus (Rio de Janeiro, 1980), 191–255; and Steven Topik, "Brazil's Bourgeois Revolution?" *Americas* 48 (Oct. 1991): 245–71.

3. Maria Bárbara Levy makes the point that the Encilhamento was not the first time Brazilians engaged in speculative activity. In fact, insiders had speculated on the currency and commodity markets long before the Encilhamento took place. The difference was that these types of speculative activities "had not involved the less informed public." The Encilhamento, in contrast, drew thousands of individual investors into the market for the first time. Levy, "O Encilhamento," 192.

Paulo's first bank was formed to service a handful of planters in a sleepy agricultural backwater, to 1920, when São Paulo had claimed the title of Brazil's industrial leader.⁴ Trust production refers to a spectrum of mechanisms that range from the personal to the institutional, depending on the size of the economic community and the pace of change. Sudden change will strain traditional personal relationships as barometers of trust and typically will replace personal with formal institutional relationships. Because institutional mechanisms of trust eliminate the need to know the right people, increasing reliance on institutional trust marks an important moment in market formation.

This pattern holds for the case of São Paulo. Early development (1856–1905) of the institutions that provided business finance was accompanied by highly personal relationships between financier and entrepreneur. By the early twentieth century (1906–1920), rapid economic growth and diversification—accompanied by the consolidation and maturation of financial institutions—rendered these personal connections inadequate and hence less important to business finance. The evidence on personal ties between bank and nonbank companies demonstrates that São Paulo's financial sector made the important transition from reliance on personal trust to faith in institutional trust in an era of profound economic diversification.

The Production of Trust

Literature from the field of economic sociology, a field that examines social forces and their impact on the structure of the economy and economic exchange, argues that investors and entrepreneurs alike rely on trust-producing structures to make their decisions. These structures help businesses, their investors, and their clients navigate periods of business formation, expansion, and change.⁵ Because each individual or organization faces the problem of whom it can trust in any given transaction, and because acquiring the information to make that judgment can be very costly, parties to a transaction rely

4. Wilson Cano, *Raízes da concentração industrial em São Paulo* (São Paulo, 1981). Two important English-language studies of this dynamic period in São Paulo's history are Joseph L. Love, *São Paulo in the Brazilian Federation, 1889–1937* (Stanford, Calif., 1980); and Warren Dean, *The Industrialization of São Paulo* (Austin, Texas, 1969).

5. Lynne Zucker was among the first to investigate economic exchange through the lens of sociology in the 1980s. Her research categorized mechanisms for the production of trust that ranged from the highly personal to the impersonal institutional, and forms the basis for the discussion presented here. Lynne Zucker, "Production of Trust: Institutional Sources of Economic Structure, 1840–1920," *Research in Organizational Behavior* 8 (1986): 53–111.

on indicators to assess trustworthiness and economize on information costs.⁶

Several types of indicators, ranging from the personal to the institutional, are used to assess trust. The most personal indicator is derived from some shared characteristic, such as neighborhood associations; family ties; or shared cultural background, ethnicity, or gender.⁷ In this scenario an individual might trust the neighborhood dry-cleaner because the immediacy of the owner-client relationship would force an inept drycleaner out of business. Another way trust is indicated or generated is through process-based trust, in which satisfactory prior exchanges provide information on the exchange process and create confidence that future exchanges will have a similar outcome. In process-based trust, the parties do not need to know one another, because reputation or brand name act as a substitutes for firsthand knowledge. The third way trust is generated is institutionally. Institutional trust does not rest on personal characteristics or on past experiences of exchange. Instead, institutional trust is tied to formal structures that transcend an individual or brand. One common example is a regulatory body that enforces product standards.

These types of trust-producing mechanisms are considered to be neither evolutionary nor mutually exclusive. In fact, we rely on several categories of mechanism every day. We can rest assured that our bank accounts are secure, thanks to Federal Deposit Insurance and the oversight of the Federal Deposit Insurance Commission. We also trust that the neighborhood drycleaner will not ruin our clothing. Each type of trust production, however, has an important influence on the possibilities of economic exchange in a society. The more important the personal tie is to the exchange, the smaller the effective

6. Investigation into the question of markets and trust has generated a growing literature from the fields of both economics and sociology. Two recent collections of essays on the topic are Karen S. Cook, ed., *Trust in Society* (New York, 2001); and James E. Rauch and Alessandra Casella, eds., *Networks and Markets* (New York, 2001). Zucker's categorization of trust-producing mechanisms, particularly the distinctions she draws among various personal and institutional forms of trust, provides a good framework for broadly approaching the various trust-production conundrums examined in this new research.

7. Zucker argues "many background understandings will be held in common, smoothing or eliminating the negotiation over terms of exchange and making it more likely that the outcome of the exchange will be satisfactory to both parties." See Zucker, "Production of Trust," 61. These findings are echoed by Victor Nee and Jimmy Sanders, "Trust in Ethnic Ties: Social Capital and Immigrants," in *Trust in Society*, ed. Karen S. Cook (New York, 2001), 374–92. On the importance of shared cultural background among Korean retail merchants, and the weak networks of African American merchants, in Brooklyn, see James E. Rauch, "Black Ties Only? Ethnic Business Networks, Intermediaries, and African American Retail Entrepreneurship," in *Networks and Markets*, ed. James E. Rauch and Alessandra Cassella (New York, 2001), 270–309.

size of the market will be. Take, for example, business finance. If access to business finance depends on personal connections, and a potential entrepreneur lacks such connections, the possibilities for business formation or expansion are circumscribed. If access to business finance depends on something else, like expertise or a sound business plan, business formation or expansion is more likely to be promoted.

For some transactions, then, the question of whether trust production is based on “who you know” or “what you know” bears an important influence on the possibilities for economic growth and diversification. The ramifications of this answer for an economy such as Brazil’s, where wealth has historically been highly concentrated in the hands of a small elite, are profound. The emergence of impersonal forms of financial intermediation that reward entrepreneurs for their business concepts and entrepreneurial abilities—what you know—provides an important alternative to the forms of intermediation based on personal ties of who you know. Impersonal trust production that provides finance free of such ties creates the possibility of business formation unbound by the potentially narrow economic goals of the elite.

Although much of the research into trust and exchange examines the durability of personal types of trust production, like shared cultural or spatial ties, it is when relationships are interrupted that we can best see how trust-producing mechanisms behave. Shocks to society can disrupt accepted forms of trust production and require substitution of other mechanisms. Characteristic-based trust or process-based trust are especially vulnerable to shocks because they are ascribed in so limited a fashion to an ethnic group, kin group, neighborhood, or brand. Any shock that disrupts the ability to count on these more personal forms of trust production, such as large-scale population movements, economic booms, or widespread business failures, can unhinge economic relationships. When this happens, institutional forms of trust can facilitate economic exchange by providing some “objective” measure to substitute for personal connections to signal the trustworthiness of an individual or organization.⁸

8. Zucker’s work focuses specifically on the large-scale immigration to the United States at the turn of the twentieth century that forced personal forms of information gathering and trust production to be replaced by institutional forms of trust. She attributes much economic growth to this shock and reorientation. We can recall a more immediate shock in the Tylenol poisoning scandal. In the 1980s, when tainted Tylenol sickened consumers, fears almost drove its manufacturer out of business and seriously disrupted consumption of over-the-counter medications across the board. The presence of a governing body, the Food and Drug Administration, calmed fears and restored trust by requiring new “tamper proof” packaging. The presence of an institutional indicator restored consumer confidence.

São Paulo's business world offers the perfect case for examining trust production because the region underwent significant social and economic change in the last two decades of the nineteenth century that seriously tested existing methods of business exchange. Older methods, modeled on the commercial transactions of the export sector, were standardized in the 1850 Commercial Code, the first comprehensive business regulatory legislation written in Brazil.⁹ This code, and changes made to it, ensured that businesses formed at a cautious pace and interacted with great care. Joint-stock companies had to petition the national legislature for permission to incorporate. Once permission was granted, investors in these companies were saddled with unlimited liability. Although businesses did incorporate under these provisions, both the difficulties and liabilities of incorporation effectively limited the attractiveness of the joint-stock format. The types of companies that incorporated in this environment, regulated by what historians have termed the "Law of Impediments," were typically closely held corporations like banks, railroads, or public utilities that enjoyed some *de facto* or *de jure* support from the imperial government.¹⁰ São Paulo's urban commercial and industrial expansion beyond this narrow band of businesses was fairly small in scale. Almanacs show that almost all businesses in the capital city of São Paulo in the 1850s to 1870s were single-proprietor operations catering to the everyday requirements of urban consumers.¹¹ Larger companies financed through the sale of stock were rare.

Changes in business regulatory legislation in 1890 that simplified the process of forming a joint-stock company, a process begun in 1882 and accelerated by a regime change that replaced the centralized Empire with a federal republic, significantly improved the environment for domestic business formation. These changes, which in 1882 eliminated the requirement of a government charter, and in 1890 guaranteed investors limited liability for company debts, wiped away the risk aversion that had restricted business formation in São Paulo to single proprietorship and the occasional corporation.¹² The flood of new business formations that resulted in this era, known as

9. *Coleção de Leis e Decretos*. Law 556, 25 June 1850. For a fuller treatment of the code's regulatory characteristics, see Anne G. Hanley, "Capital Markets in the Coffee Economy: Financial Institutions and Economic Change in São Paulo, Brazil, 1850–1905" (Ph.D. diss., Stanford University, 1995), chap. 3.

10. Carlos Manuel Pelaez and Wilson Suzigan, *História monetária do Brasil: Análise da política, comportamento e instituições monetárias* (Rio de Janeiro, 1976), 119; Hanley, "Capital Markets," chap. 3.

11. *Almanak Administrativo, Mercantil e Industrial da Província de São Paulo*, 1858; and *Almanak da Província de São Paulo para 1873*.

12. *Coleção de Leis e Decretos*. Decree 164, 17 Jan. 1890; Decree 165, 17 Jan. 1890.

the “Encilhamento,” turned every butcher, baker, and tailor into an investor. Editorials lamented that it was impossible to have simple services fulfilled because of the widespread preoccupation with the stock market.¹³

An important part of this business boom was the expansion of the financial services sector. Dozens of new banks, many with very specific mission statements and targeted clientele, formed in the wake of the 1890 regulatory reforms. Most were commercial banks that lent money at short term, but universal banks also formed in response to government incentives to promote more long-term lending to fund economic development. And a stock and bond exchange organized for the first time. The stocks of the few corporations formed under the old regime had been traded by licensed brokers, but the reforms had sparked such a rash of new company formations and such unfettered interest on the part of investors that brokers came together under a new institutional umbrella, the São Paulo Bolsa.¹⁴

These new financial institutions were organized in response to the promise of new business development and the profits to be made from investing in it. The new regulatory laws made it easier to form companies and absolved shareholders of unlimited liability, but investors still faced the possibility of losing the money they invested in stock. In fact, the butchers and tailors who had neglected their own businesses to play the stock market were back in their shops in less than a year. By April 1891, all stock trading had ceased. Substantial fraud had burst the bubble. Companies failed in spite of the fact that regulators quickly recognized the perils of the eased regulations and acted to stem fraud and protect investors.¹⁵ Because of this uncertainty, bankers and entrepreneurs needed some mechanism to determine in which companies they might invest.

The new laws did not alter the fact that banks might make bad loans, so bankers faced the same challenge of determining which debtors were reliable as they had under the old regulatory regime. The brief euphoria of the bubble drove this message home, as it was followed by a decade of gloomy economic times plagued by inflation, currency devaluation, falling international coffee prices, and

13. “São Paulo e o Jogo,” *Diário Popular*, 14 Feb. 1891.

14. The Bolsa was disbanded in 1892 when the bubble bursted, for lack of trading activity, but was reorganized in 1895 and has operated continuously ever since. The São Paulo Bolsa, now known as BOVESPA (Bolsa de Valores do Estado de São Paulo), is Brazil’s most important exchange.

15. Nine months after the January 1890 reform was passed, the new decree raised the minimum level of paid-in capital necessary for operations from 10% to 30%, and the level of paid-in capital necessary for trading went from 20% to 40%. *Coleção de Leis e Decretos*. Decree 850, 13 Oct. 1890.

collapsing domestic incomes. Many Encilhamento-era companies nonetheless survived, and new ones formed even in the recessionary years at the turn of the twentieth century. But some banks carried bad loans made in the heady days of 1890 for the rest of the decade.¹⁶ Many banks succumbed to the recession in 1900 under the weight of loans made to companies long since bankrupt. For both investors and financiers, then, the promise and possibility presented by new business formation was tempered by the problems of gathering information to determine where to invest, and to whom to make loans.

We know from a variety of historical cases that this problem was ameliorated elsewhere by forging personal ties between banks and nonbank businesses through interlocking directorates. From small community banks in the northeastern United States to large universal banks in Germany, bank managers and directors commonly held an investment or managerial stake in nonbank firms.¹⁷ This investment and management involvement allowed bankers to gather information about their investments, provide guidance to their clients, signal the market worthiness of their client firm to outside investors, and even act as a dedicated financial arm. The personal involvement of a banker, then, helped new businesses secure access to the finance they needed and produced an indicator of trust to the rest of the investment community.

We can look at the historical relationships between São Paulo's bank and nonbank companies to see whether they, too, used personal relationships to gather information, signal market worthiness, or lend or borrow capital. These relationships can be glimpsed from the financial statements and rare annual reports published in newspapers, as well as from monographs on São Paulo's economic development.¹⁸ These sources routinely gave the names of company

16. Gail D. Triner, *Banking and Economic Development: Brazil, 1889–1930* (New York, 2001), 72–73.

17. A sampling of the literature on bank-company connections includes Naomi Lamoreaux, *Insider Lending: Banks, Personal Connections, and Economic Development in Industrial New England* (New York, 1994); Charles W. Calomiris, "Universal Banking and the Financing of Industrial Development," in *Reforming Financial Systems: Historical Implications for Policy*, ed. Gerard Caprio, Jr., and Dimitri Vittas (New York, 1997), 113–27; and Richard Tilly, "An Overview on the Role of the Large German Banks up to 1914," in *Finance and Financiers in European History, 1880–1960*, ed. Youssef Cassis (New York, 1992), 93–112.

18. Published financial statements, stock price quotes, and advertisements were found in major newspapers from 1856–1920. These included *Correio Paulistano*, *Diário Popular*, *O Estado de São Paulo*, *Diário Oficial do Estado de São Paulo*, and *A Província de São Paulo*. Annual reports were found in these same newspapers, as well as in company documents housed in the Arquivo do Estado de São Paulo, particularly for the railroad companies and public utilities companies. Finally, company, director, and shareholder information was gleaned from published monographs on São Paulo's development. Principal among these

directors, occasionally printed lists of shareholders, and in passing references tied particular names to particular companies as either directors or shareholders. I compiled references to investors and entrepreneurs with the goal of forming a picture of intercompany relationships.

This approach is necessarily limited by the availability of documentation. The majority of companies in São Paulo, the privately owned single proprietorships mentioned in almanacs, left little direct documentation about their existence, much less about their finances, and therefore do not figure in this study. The companies most likely to have left a historical mark were those that sold stocks to investors. In the part of the nineteenth century when corporations formed via congressional decree, all joint-stock companies were required to file financial statements with the provincial government. This requirement was eliminated in 1882, but joint-stock companies typically included a provision in their own statutes that required them to hold regular shareholders meetings and to publish semi-annual financial reports, so there is a better record of their directors, investors, and bankers than there is for privately owned firms.

From these public records and from several scholarly monographs on São Paulo's economic development, I identified 519 individual shareholders and directors linked to 88 separate companies in the period from 1856 to 1905. Approximately one-third (26) of these businesses date to the period before the reforms of 1890, and two-thirds (62) were founded between 1890 and 1905. I identified 1,276 shareholders and directors invested in 149 separate companies for the period from 1906 to 1920, some of which appeared in the 1856–1905 data and most of whom were new to the post-1906 period. The types of companies captured in these two periods, and therefore the types that sought intercompany ties, reflected the pace of growth of the economy and the business development it promoted.

Although the problem of documentation leaves private firms out of the sample, it captures those companies most dependent on institutional forms of finance. This is because, although the hundreds of

were the following: Dean, *The Industrialization of São Paulo*; Darrell Levi, *The Prados of São Paulo, Brazil: An Elite Family and Social Change, 1840–1930* (Athens, Ga., 1987); Zélia Maria Cardoso de Mello, *Metamorfoses da riqueza: São Paulo, 1845–1895* (São Paulo, 1985); Eul-Soo Pang, *In Pursuit of Honor and Power: Noblemen of the Southern Cross in Nineteenth-Century Brazil* (Tuscaloosa, Ala., 1988); Flávio Azevedo Marques de Saes, *Crédito e bancos no desenvolvimento da economia paulista: 1850–1930* (São Paulo, 1986); and Flávio Azevedo Marques de Saes, *A grande empresa de serviços públicos na economia cafeeira* (São Paulo, 1986). Any reference to a director or shareholder went into a database, where it was sorted by company and by individual.

joint-stock companies that formed between 1856 and 1920 were just a small percentage of the thousands of firms in business in São Paulo, they were among the largest.¹⁹ If we look at the amount of capital invested in all Brazilian industrial firms in 1912, for example, we find that the median capitalization of joint-stock industrial companies in São Paulo was one thousand times greater than the median capitalization of all Brazilian industrial companies, public or private.²⁰ The joint-stock format, then, was used for funding the very big companies that were beyond the financial reach of just about any family or kin network.

The reliance of these big firms on institutional finance brings the issue of “who you know” versus “what you know” to the forefront of the discussion on São Paulo’s business development. A relatively high initial degree of connection between joint-stock companies and banks in the bubble years shows that new business formation, even when funded through impersonal channels such as the sale of equity to the public, relied on personal forms of trust in the early years of São Paulo’s economic diversification. Profound disruption to these personal ties at the turn of the century, generated by deep recession and a bank panic, caused entrepreneurs to turn to more institutional forms of trust in their business transactions. This shift allowed for a significant expansion in both the type and size of businesses operating in São Paulo by World War I and generated an industrial base capitalized at values far higher than those of the average Brazilian firm.

São Paulo Business Relationships, 1856–1905

Evidence from São Paulo company financial statements and annual reports shows that nineteenth-century investors managed risk by directly involving themselves in the fates of several companies at once. These personal ties were pervasive and extended back to the earliest days of business formation. Coffee planters, bank directors, and presidents and shareholders of railroads, were often one in the same

19. The industrial companies listed on the stock exchange in 1919, for example, accounted for 52% of industrial capital invested in São Paulo but comprised just 3% of all industrial companies in the state. Anne G. Hanley, “Business Finance and the São Paulo Bolsa, 1886–1917,” in *Latin America and the World Economy Since 1800*, ed. John H. Coatsworth and Alan M. Taylor (Cambridge, Mass., 1998), 115–38.

20. The average capitalization of all Brazilian industrial firms in 1912 was 51 contos (about U.S.\$16,000), while the median was somewhere around one conto (U.S.\$320). São Paulo’s sixty-four joint-stock companies that year averaged 1,324 contos of capital (U.S.\$424,000), while the median was around 1,000 contos (U.S.\$320,000). Cano, *Raízes da concentração industrial em São Paulo*, 306; “Bolsa Summary Page,” *O Estado de São Paulo*, Jan. 1913.

person, and wealth, over time, was invested in diversified portfolios. Family names and variations on these names, suggesting blood ties and extended kin groups, were woven together on the boards and the shareholder lists of hundreds of corporations formed between 1856 and 1905.

The expansion of the 1890s was fueled by the growing use of the joint-stock corporation for new business formation, and included broadened pools of investor and entrepreneurs. The newness of the types of businesses using this format, however, gave personal connections a continued importance for information gathering or signaling purposes. The trend from 1856 to 1905, then, is one of strong ties between São Paulo businesses and of an expanding entrepreneurial base beyond the original planter-merchant economic elite.

One of the earliest examples of elite personal financial intermediation comes from the Prado clan. The Prados were one of São Paulo province's most prominent planter families, having made money in tax collecting, sugar farming, mule driving, and money lending, which they then invested in coffee plantations. The Prados protected their wealth by intermarrying, a common practice of the Brazilian elite, and hedged their investment in coffee production by lending money at very high rates to other planters.²¹ Their profits from money-lending at midcentury comprised as much as one-quarter of their income.²²

The Prado clan formalized this credit business in 1856 by founding, along with other prominent planters like the Baron of Itapetininga and the Baron of Tieté, the first bank in São Paulo. The Caixa Filial do Banco do Brasil was an affiliate branch of the Rio de Janeiro-based Banco do Brasil but behaved purely as a regional bank for regional interests. Under the direction of Antônio Prado, the Baron of Iguape, the branch was run by and for a small group of coffee barons known to, or related to, the Prado family. By 1858 almost half of the bank's stock was in the hands of the extended Prado family.²³ The restricted

21. Levi, *The Prados of São Paulo*; Pang, *In Pursuit of Honor and Power*; Diana Balmori, Stuart F. Voss, and Miles Wortman, eds., *Notable Family Networks in Latin America* (Chicago, 1984). A typical case of intermarriage is that of the Paes de Barros clan in the sugar-growing regions of Itú and Piracicaba. Two brothers, the Baron of Itú and the Baron of Piracicaba, each married off a son to their brother's daughter. Pang, *In Pursuit of Honor and Power*, 116.

22. The Prados profited from the absence of financial institutions in São Paulo before 1850, which allowed them to charge high rates of interest. Levi writes that the Prados charged rates between 12% and 18% on the money they lent. The highest recorded discount rate charged by banks in the same period was 10%. Levi, *The Prados of São Paulo*, 67–70; "Caixa Filial de São Paulo do Banco do Brasil," *Correio Paulistano*, 11 Sept. 1866.

23. Levi, *The Prados of São Paulo*, 69.

scope of lending activity that resulted is illustrated in an exchange among the directors of the São Paulo affiliate of the Banco do Brasil: “When the directors would meet, one would say to another: ‘You, Baron Such-and-so, do you need money?’ And Baron Such-and-so would always respond: ‘No.’ The directors would close the meeting without deciding anything further, because they did not lend money to outsiders.”²⁴ This tight control of the province’s lone credit institution assured that the available pool of funds would remain close to the interests of this extended family.

Although a few other banks formed in the 1870s and 1880s, loosening the hold of this one clan on credit, all were fairly small and conservative and therefore not particularly conducive to business finance. Credit was almost exclusively extended at the very short term, precluding its use for investment purposes, and most loans were tied to business transactions in the form of discounts. Banks required multiple signatures for a loan and only lent money to men of good standing in the “praça” or local economy. They did not, according to their statutes and balance statements, provide investment capital to new businesses. São Paulo’s early business development, therefore, rested on personal forms of finance even when that personal finance came from what appeared to be a formal capital market institution.

Aside from banks, the other institutional form of business finance available to entrepreneurs was capital raised through the sale of stock to the public. Business laws passed after midcentury authorized the formation of joint-stock corporations, whose shares were traded by officially sanctioned and regulated brokers, under the restrictive conditions described earlier. Because of the high risk associated with unlimited liability for a company’s debts, very few types of businesses were able to use this format to capitalize their operations. Those that did included banks, railroads, and utilities.²⁵ As already mentioned, banks were closely held operations that managed risk through careful vetting of clientele and by practicing conservative, short-term banking. Railroads and utilities were able to attract investors in spite of the risk, because they carried either explicit profit guarantees, in the case of railroads, or monopoly arrangements with government support, in the case of utilities. The joint-stock form of business finance, then, offered a more formal, impersonal avenue of business, but was used in a limited fashion.

24. Quoted in Levi, *The Prados of São Paulo*, 69. His source was an anecdote from undated notes for an oral history of the Prado family, found in the Instituto de Estudos Brasileiros at the University of São Paulo.

25. I identified 26 joint-stock companies formed before the 1890 reforms. Twenty-one of these 26 were in these three sectors. They represented, then, the principal investment options of the era.

Given the de facto government involvement in joint-stock companies before 1890, it is not surprising to find that they were formed largely by high-profile men of great economic wealth and prominence. Planter families like the Prados owned stock and sat on the boards of the banks and railroads that comprised the earliest joint-stock companies. In fact, the railroad shareholder and director lists read like the *Who's Who* of São Paulo planter families. The Prados were prominent on the lists of both the Paulista Railway and Mogiana Railway boards. A fellow Banco do Brasil founding board member, the Baron of Itapetininga, was an original creditor of the Ituana Railway.²⁶ The fourth largest railroad company in São Paulo, the Sorocabana, was less tightly tied to the Prados and their cohort but had several direct links to the boards of the other three railroads, themselves directly linked to the few banks in São Paulo.²⁷

Early webbing was pronounced among the banks, railroads, and utilities that comprised the majority of corporations (twenty-one of twenty-six) identified before 1890. The boards of two domestic banks operating in São Paulo—Banco do Brasil and Banco Mercantil de Santos—each had multiple connections to the railroad joint-stock companies and to each other. To select just a few examples, the 1870s Banco do Brasil director Joaquim José Santos Silva, the Baron of Itapetininga, was an investor in the Banco Mercantil de Santos and held shares in the Paulista, Ituana, and Mogiana railroads, as well. Banco do Brasil manager (1870s) Antônio Proost Rodovalho was a major shareholder in the Paulista railway and also invested in the Mogiana. Banco do Brasil investor Fidencio Nepomuceno Prates (1880s) held shares of the Banco Mercantil de Santos, and in the Sorocabana and Mogiana railroads, and sat on the board of the Paulista. His brother, Fidelis, was an investor in the Banco Mercantil de Santos and the Paulista, Mogiana, and Sorocabana railroads. Banco Mercantil de Santos director Joaquim Egydio de Souza Aranha, head of a clan that rivaled the Prados for its economic prominence, was director of the Ituana, Mogiana, and Paulista railroads.

26. This was the Baron of Itapetininga. *Relatório da Companhia Ituana Estrada de Ferro*, 10 Nov. 1878.

27. An extensive database of board members and investors shows that these joint-stock companies were overwhelmingly owned and run by São Paulo residents. The one important exception that appears here is Francisco de Paula Mayrink, a wealthy and well-connected entrepreneur from Rio de Janeiro, who had business interests throughout Brazil. He became an important force in the São Paulo business world, particularly in rail and urban transportation. On Mayrink see Steven Topik, "Francisco de Paula Mayrink of Brazil: A Bourgeois Aristocrat," in *The Human Tradition in Latin America: The Nineteenth Century*, ed. Judith Ewell and William H. Beezley (Wilmington, Del., 1989), 249–68.

Railways and banks were likewise tied to the first public utilities companies organized in São Paulo. The Companhia Cantareira e Esgotos (CCE) water and sewer company listed among its shareholders Luíz Antônio de Souza Barros, a huge shareholder in the Paulista railroad and investor in the Ituana railroad, whose brother was a founding director of the Banco do Brasil affiliate.²⁸ CCE fiscal council member Elias Pacheco Chaves was a director in the Paulista and a shareholder in the Ituana railways. CCE shareholder Luíz de Oliveira Lins de Vasconcellos owned stock in the Paulista railroad and was on the fiscal council of the Companhia Carris de Ferro de São Paulo, an urban trolley company. Two directors of the Carris de Ferro, in turn, had served as president of the Banco de Crédito Real and were shareholders in the Mogiana Railway.²⁹ One of them, Antônio Proost Rodovalho, had also served as manager of the Banco do Brasil affiliate.³⁰

Although these examples represent but a fraction of the interconnections between companies of different business sectors, the repetitive pattern shows that the boards of the handful of joint-stock companies in the 1870s and 1880s overlapped many times over. Historians have interpreted these interconnections as unusually entrepreneurial behavior on the part of São Paulo's planters, compared to the landed elite elsewhere in Brazil and Latin America. These prominent planter families sought to diversify their wealth by investing in the principal commercial opportunities of the day. Research by scholars such as Warren Dean, Darrell Levi, Eul Soo Pang, and Steven Topik on the extraordinary entrepreneurship of the merchant-planter elite has found that once the agricultural or merchant fortune (sometimes one in the same as in the Prado case) was assured, the trend was for families to diversify their business interests into new commercial ventures or new geographic regions.³¹ Interestingly, this trend was not limited to the elite, as Zélia Cardoso de Mello has shown in her research on investment

28. His brother was Francisco Antônio de Souza Quieroz, the Baron de Souza Quieroz. Mello, *Metamorfoses da riqueza*, 132.

29. These were Francisco A. Dutra Rodrigues and Antônio Proost Rodovalho. For Rodrigues see *Correio Paulistano*, 21 March 1884, 31 March 1886; and *Diário Popular*, 13 Nov. 1886. For Rodovalho see *Correio Paulistano*, 8 July 1883, 21 March 1884; and *A Província de São Paulo*, 19 Aug. 1888.

30. *Correio Paulistano*, 28 April 1875.

31. For most of the directors and investors I studied, geographical diversification consisted of engaging in economic activities in a region of São Paulo outside of their native region. Again, the one important outsider identified in the database was Francisco de Paula Mayrink.

and wealth holding in nineteenth-century São Paulo.³² Mello found that the tendency at all income levels, not just among the elite, was to invest an increasing portion of one's assets in joint-stock companies. Still, the social level of those on the boards of these companies was rarified; elite directors and shareholders encountered each other in a variety of settings, perhaps for want of any other investment outlets, reinforcing the personal nature of business relations before 1890.

Although the planters had great control over early business diversification from the 1850s to the 1880s, as the principal shareholders in the banks, the railroads, and the utilities companies, their own prosperity and the consumption habits of their imported laborers introduced new forms of demand to be met by São Paulo businesses. The explosion of new business formation from 1890 to 1892 was beyond the planters' control, at the same time that the permissive regulatory environment fed the desires of a growing entrepreneurial class. The "old economy" joint-stock businesses—banks, railroads, and utilities—were quickly joined by "new economy" corporations like glassworks, distilleries, textile manufactures, food processors, and leisure and entertainment services. Businesses that were previously run on a small scale as single proprietorships were incorporating and raising capital from complete strangers through the sale of stock, now easily bought and sold on the newly formed São Paulo Bolsa.

This proliferation of business enterprises after 1890 strained the very small and conservative bank sector by introducing a new set of information problems. The sheer quantity of firms founded after 1890, the newness of the businesses they represented, and often the newness of the entrepreneurs at their helm, made it difficult to gather the information that potential shareholders and bankers needed to determine where to invest money and extend credit. Moreover, government monetary policies affecting domestic economic development shifted from expansionary in the early 1890s to recessionary in the late 1890s, making it difficult to predict which companies would survive. Investors and bankers required more than ever some means to determine whom they could trust.

Banks themselves were part of this problem, as most were brand new businesses. São Paulo was in the process of creating the capital market institutions at the same time that its investors had to place their bets. Dozens of new banks formed after 1890 and had to attract a clientele, although they were headed by financial entrepreneurs whose names no longer clearly identified them as merchants or

32. Mello, *Metamorfoses da riqueza*.

planters.³³ The newly organized stock exchange listed the newly formed joint-stock companies, weakening the traditional need to demonstrate an established reputation in the community. Bankers in the post-1890 economy, however, responded to these problems in much the same way as the bankers in the pre-1890 economy: they broadened their web of personal and business relationships with the nonbank companies, primarily by serving on the boards of directors of these new firms.³⁴

The older banks, as we have seen, were very strongly tied to the railroads and somewhat less connected to the utilities companies. They did not have broad connections beyond these sectors, primarily because the regulatory environment before 1890 did not encourage large-scale business formation. The banks that incorporated after the 1890 reform, in response to the new opportunities created by the new joint-stock laws, developed new and sometimes extraordinarily broad ties to the São Paulo economy. This was true whether “new economy” entrepreneurs or “old economy” planters ran banks. Both maintained ties to railroads, and both established ties to businesses that were not related to the agricultural sector, still by far the dominant sector of São Paulo’s economy.

Although the annual reports of São Paulo companies show that bank and nonbank companies maintained personal or social relationship through shared members of their boards of directors, the nature of that relationship—whether it resulted in funding for the nonbank company—is less easy to determine. Far more loans were made by banks, judging from the money they earned on the loans, than show up on nonbank financial statements. Loan accounts reveal that some companies had a financial relationship with banks to which they were connected through their boards of directors, but also reveal that companies were just as likely to receive loans from banks to which they had no connections at all. In short, we can establish only a very loose tie between the social connections and business transactions of firms and their banks. Clearer is the fact

33. Steven Topik identifies the rise of a financier class distinct from the planters and the merchants in Rio de Janeiro in the 1880s. There is less evidence of a similarly independent financier class in São Paulo prior to 1890, where the effective size of the banking world was much smaller and the economic prosperity of the region much more recent and more tightly tied to agriculture. On Rio, see Topik, “Brazil’s Bourgeois Revolution?”

34. The trend toward specialization took place after 1890, particularly among newly formed banks. For example, the Banco Construtor e Agrícola and the Banco Melhoramentos de São Paulo announced their intention to finance businesses involved in the construction of physical infrastructure, while the Banco dos Operários and the Banco Ítalo-Brasileiro chose to lend money to small businesses and make small mortgage loans.

that the business connections evident during the Empire continued under the Republic and drew the new companies into social networks.

Two of the new banks provide good examples of the types of networks that developed after 1890. The first, the Banco Predial, was founded by men who had ties to the urban industrial and commercial economy but no ties whatsoever to the agricultural sector. One of its founders had served as the director of the Sorocabana railroad in the 1880s, and so brought experience from one of São Paulo's few large joint-stock companies with him to this new bank. Several of the other founders and directors served on the boards of an importing firm, a distilled spirits manufacturer, the land bank, and an urban development firm. The second bank, Banco dos Lavradores, was run by major coffee planters and was tied to railroads and coffee exporting firms, but it was also related to companies engaged in urban real estate development, urban transportation and utilities, and textiles and machinery manufacturing.³⁵ These same businesses figured among the connections forged by board members of the Banco do Comércio e Indústria de São Paulo, the Banco de São Paulo, and the Banco União de São Paulo. These banks were among São Paulo's most successful. Each had on its board representatives from São Paulo's most important coffee-based clans, each had ties to coffee-related businesses, and each had ties to the urban and industrial businesses that were rapidly transforming São Paulo into Brazil's industrial leader.

These banks had extensive ties to nonbank companies because of the prominence of their own directors on the boards and shareholder lists of many São Paulo firms. The surnames and noble titles of many of these prominent men indicated their places in the imperial planter elite.³⁶ Prado, Souza Aranha, Souza Queiroz, and Paes de Barros were a few of the clans represented among the directors and shareholders of a number of companies. Other names, like Nothmann, Mayrink, Rodovalho, Sertório, and Dias Silva, represented the merchant and entrepreneurial elite that straddled the old and new

35. Two board members, the Baron of Ataliba and the Baron Geraldo de Rezende, were major coffee planters in the Campinas area and directors or shareholders of the Mogiana railroad, the Mac Hardy machinery manufacturer, and the Fiação e Tecelagem textile firm. Other board members and important shareholders were directors or shareholders of the Mogiana and Paulista railroads, the Cia Industrial de São Paulo textile firms, the Lupton import/export firm, the Mac Hardy machinery manufacturer, the Industrial Rodovalho urban real estate development firm, and the Carris de Ferro de São Paulo urban transportation firm.

36. Noble titles were abolished with the proclamation of the Republic. They had always been limited to a single lifetime, rather than being hereditary, so the title stayed with and died with its bearer.

Table 1 All Connections between Directors/Shareholders and Joint-Stock Companies, 1856–1905

	Individuals Linked to Companies	Total (%)	Individuals Linked to a Bank	Of All Multiple References (%)
Total singles	382	68		
Total multiples	167	32	105	63
Total directors and shareholders	519			

Sources: Primary sources include *Correio Paulistano*, *Diário Popular*, *O Estado de São Paulo*, *Diário Oficial do Estado de São Paulo*, *A Província de São Paulo*; *Coleção de Leis e Decretos*; *Relatórios da Companhia Ituana Estrada de Ferro*, 1871–1874, 1877–1879, 1886, 1889–1890; *Relatórios da Companhia Mogiana Estrada de Ferro*, 1873, 1878, 1883, 1887, 1889, 1891, 1893–1894, 1896, 1899, 1905; *Relatórios da Estrada de Ferro da Companhia Paulista*, 1869, 1872, 1876, 1878, 1880–1881, 1883–1889, 1893, 1895–1897, 1901–1902, 1905; *Relatórios da Estrada de Ferro da Companhia Sorocabana*, 1872–1874, 1876, 1882; *Relatórios da Estrada de Ferro da Companhia União Sorocabana-Ituana*, 10 Feb. 1897; *Estatutos da Companhia Viação Paulista*, 1891; and *Relatório da Diretoria da Companhia Viação Paulista apresentado à Assembléia Geral de Acionistas em 26 de abril de 1897*. Secondary sources include Warren Dean, *The Industrialization of São Paulo, 1880–1945* (Austin, 1969), 45, 57, 62, 74; Darrell Levi, *The Prados of São Paulo, Brazil: An Elite Family and Social Change, 1840–1930* (Athens, Ga., 1987), 83–85, 144, 146–48, 151; Zélia Cardoso de Mello, *Metamorfoses da riqueza: São Paulo, 1845–1895* (São Paulo, 1985), 128, 132–136, 142–143; Eul-Soo Pang, *In Pursuit of Honor and Power: Noblemen of the Southern Cross in Nineteenth-Century Brazil* (Tuscaloosa, 1988), 114, 116, 121–122, 124, 136–138; Flávio Saes, *Crédito e bancos no desenvolvimento da economia paulista: 1850–1930* (São Paulo, 1986), 72–75, 78, 87–88, 133–137; and Flávio Saes, *A grande empresa de serviços públicos na economia cafeeira* (São Paulo, 1986), 82–88.

economies.³⁷ The direct ties forged by these planters and entrepreneurs were reinforced by indirect ties through their fellow board members, who were linked to yet other companies. These men lent their names and their oversight to São Paulo's businesses, which allowed them to gather information on their investments while allowing the companies to signal their soundness to the investing public.

Webbing was not the dominant trend, as the majority of shareholders and directors had ties to just one company. Those that were tied to 2 or more companies, however, were very likely to have a tie to a bank. Table 1 shows that almost two-thirds of individuals linked to multiple companies had a tie to a bank. Moreover, those that were connected had developed rather extensive ties in the business world. Table 2 shows that about half of the directors and shareholders linked

37. Steven Topik's biography of Francisco de Paula Mayrink offers a detailed view into the world of these prominent "new" economy entrepreneurs. Topik makes the often overlooked point that not all wealth and prominence derived from agriculture. Mayrink offers the perfect example of an urban entrepreneur who was an important part of Brazil's economic elite. Topik, "Francisco de Paula Mayrink."

Table 2 Degrees of Webbing: Multicompany Links, 1856–1905

	Linked to 2 Companies	Linked to 3 Companies	Linked to 4 Companies	Linked to 5 Companies	Super Directors (>5)	Total Multiple Links
Individuals	89	30	15	13	20	167
Total (%)	53	18	9	8	12	

Sources: Primary sources include *Correio Paulistano*, *Diário Popular*, *O Estado de São Paulo*, *Diário Oficial do Estado de São Paulo*, *A Província de São Paulo*; *Coleção de Leis e Decretos*; *Relatórios da Companhia Ituana Estrada de Ferro*, 1871–1874, 1877–1879, 1886, 1889–1890; *Relatórios da Companhia Mogiana Estrada de Ferro*, 1873, 1878, 1883, 1887, 1889, 1891, 1893–1894, 1896, 1899, 1905; *Relatórios da Estrada de Ferro da Companhia Paulista*, 1869, 1872, 1876, 1878, 1880–1881, 1883–1889, 1893, 1895–1897, 1901–1902, 1905; *Relatórios da Estrada de Ferro da Companhia Sorocabana*, 1872–1874, 1876, 1882; *Relatórios da Estrada de Ferro da Companhia União Sorocabana-Ituana*, 10 Feb. 1897; *Estatutos da Companhia Viação Paulista*, 1891; and *Relatório da Diretoria da Companhia Viação Paulista apresentado à Assembléia Geral de Acionistas em 26 de abril de 1897*. Secondary sources include Warren Dean, *The Industrialization of São Paulo, 1880–1945* (Austin, 1969), 45, 57, 62, 74; Darrell Levi, *The Prados of São Paulo, Brazil: An Elite Family and Social Change, 1840–1930* (Athens, Ga., 1987), 83–85, 144, 146–48, 151; Zélia Cardoso de Mello, *Metamorfoses da riqueza: São Paulo, 1845–1895* (São Paulo, 1985), 128, 132–36, 142–43; Eul-Soo Pang, *In Pursuit of Honor and Power: Noblemen of the Southern Cross in Nineteenth-Century Brazil* (Tuscaloosa, 1988), 114, 116, 121–22, 124, 136–38; Flávio Saes, *Crédito e bancos no desenvolvimento da economia paulista: 1850–1930* (São Paulo, 1986), 72–75, 78, 87–88, 133–37; and Flávio Saes, *A grande empresa de serviços públicos na economia cafeeira* (São Paulo, 1986), 82–88.

to multiple companies had ties to 2 companies, while the other half had links to 3 or more companies. The most striking characteristic of the multiple company links is that one in 8 of these individuals was linked to more than 5 companies, either as shareholder or director, or as some combination of both. These men and women, who might be called super directors, had their hands in every type of enterprise existent in São Paulo from the most traditional to the newest form. There were 20 of these super directors in São Paulo, some of whom invested in or sat on the boards of between 6 and 12 corporations and one of whom was connected to 19 different companies (see Tables 3 and 4).

Two men from prominent planter clans, Joaquim Egydio de Souza Aranha (Marquês de Tres Rios) and Antônio Paes de Barros, figure among the planter elite listed among the super directors. Joaquim Egydio de Souza Aranha was one of the biggest planters in Campinas and is credited with introducing coffee cultivation to the region, an area formally dedicated to sugar production in the early nineteenth century.³⁸ By the time of his death in 1893, he had served as director of a utilities company and a bank in his hometown of Campinas in

38. Pang, *In Pursuit of Honor and Power*, 114.

Table 3 Super Directors and Investors, 1856–1905 (Linked to More than Five Companies)

	B	RR	U	T	I	O	Total
Directors and shareholders							
Joaquim Egydio de Souza Aranha ^a	6	4	1			1	12
Joaquim Timoteo Araújo	4	2					6
João Ataliba Nogueira ^a	1	2		1	1	1	6
Antônio Paes de Barros ^a	4	2		1	1	2	10
Rafael Paes de Barros		4	1	1		3	9
Carlos Teixeira Carvalho	1		3		1	2	7
Manoel Joaquim de Albuquerque Lins	2	1	1		1	1	6
Victor Nothmann			4		2	1	7
João Baptista de Mello e Oliveira ^a	1	3	1		2		7
Antônio Prado	1	2			1	3	7
Fidelis Nepomuceno Prates	3	3					6
Francisco Antônio de Souza Queiroz ^a	3	1				2	6
Antônio Proost Rodovalho	5	4	3	2	1	4	19
Domingos Sertório	2	1	3		1		7
Gabriel Dias Silva	2	2		1	2	2	9
Ismael Dias Silva	3	3	1	1	1	3	12
Joaquim José Santos Silva ^a	2	4					6
Luís de Oliveira Lins de Vasconcellos	3	3	3			2	11
Shareholders only							
Maria Tereza Monteiro de Barros	2	2		1		2	7
Wife of Gabriel Dias Silva	1	1	1	1	2	3	9
Total observations	46	44	22	11	16	32	171

Notes: Abbreviations at head of columns indicate the following: B = banks, RR = railroads, U = utilities, T = textiles, I = industrial companies except textiles, O = all other nonindustrial companies. Observations represent the number of unique companies for each individual, but total tallies represent multiple references to a given company. The forty-four observations for railroads, for example, are multiple references to the four major railway joint-stock companies in São Paulo.

Sources: Primary sources include *Correio Paulistano*, *Diário Popular*, *O Estado de São Paulo*, *Diário Oficial do Estado de São Paulo*, *A Província de São Paulo*; *Relatórios da Companhia Ituana Estrada de Ferro*, 1873, 1878, 1886, 1889–1890; *Relatórios da Companhia Mogiana Estrada de Ferro*, 1873, 1878, 1883, 1891, 1893–1894, 1899; *Relatórios da Estrada de Ferro da Companhia Paulista*, 1869, 1872, 1876, 1878, 1880–1881, 1883, 1886, 1888–1889, 1893, 1895, 1897, 1901–1902. Secondary sources include Darrell Levi, *The Prados of São Paulo, Brazil: An Elite Family and Social Change, 1840–1930* (Athens, Ga., 1987), 144, 146–48; Zélia Cardoso de Mello, *Metamorfoses da riqueza: São Paulo, 1845–1895* (São Paulo, 1985), 134–36, 142–43; Flávio Saes, *Crédito e bancos no desenvolvimento da economia paulista: 1850–1930* (São Paulo, 1986), 72, 77, 78, 134–36; and Flávio Saes, *A grande empresa de serviços públicos na economia cafeeira* (São Paulo, 1986), 87–88.

^aTitle of nobility.

the 1870s, and was a founding partner in the Ituana railway.³⁹ In the 1880s he and a group of prominent planters founded the Casa Bancária da Província de São Paulo, a private banking house that was incorporated in 1890 as the Banco do Comércio e Indústria de São Paulo, on whose board he served. In addition, he was a large shareholder and

39. Mello, *Metamorfoses da riqueza*, 134; Saes, *Crédito e bancos*, 77, 87.

Table 4 Directors and Shareholders Linked to Two Companies, 1856–1905

Individuals linked to two companies/total multiple links	89/167
Links within same sector, excluding banks	30%
Links between two sectors, excluding banks	22%
Links between one bank and one nonbank	39%
Links between two banks	9%

Sources: Primary sources include *Correio Paulistano*, *Diário Popular*, *O Estado de São Paulo*, *Diário Oficial do Estado de São Paulo*, *A Província de São Paulo*; *Coleção de Leis e Decretos*; *Relatórios da Companhia Ituana Estrada de Ferro*, 1871–1874, 1877–1879, 1886, 1889–1890; *Relatórios da Companhia Mogiana Estrada de Ferro*, 1873, 1878, 1883, 1887, 1889, 1891, 1893–1894, 1896, 1899, 1905; *Relatórios da Estrada de Ferro da Companhia Paulista*, 1869, 1872, 1876, 1878, 1880–1881, 1883–1889, 1893, 1895–1897, 1901–1902, 1905; *Relatórios da Estrada de Ferro da Companhia Sorocabana*, 1872–1874, 1876, 1882; *Relatórios da Estrada de Ferro da Companhia União Sorocabana-Ituana*, 10 Feb. 1897; *Estatutos da Companhia Viação Paulista*, 1891; and *Relatório da Diretoria da Companhia Viação Paulista apresentado à Assembléia Geral de Acionistas em 26 de abril de 1897*. Secondary sources include Warren Dean, *The Industrialization of São Paulo, 1880–1945* (Austin, 1969), 45, 57, 62, 74; Darrell Levi, *The Prados of São Paulo, Brazil: An Elite Family and Social Change, 1840–1930* (Athens, Ga., 1987), 83–85, 144, 146–48, 151; Zélia Cardoso de Mello, *Metamorfoses da riqueza: São Paulo, 1845–1895* (São Paulo, 1985), 128, 132–36, 142–43; Eul-Soo Pang, *In Pursuit of Honor and Power: Noblemen of the Southern Cross in Nineteenth-Century Brazil* (Tuscaloosa, 1988), 114, 116, 121–22, 124, 136–38; Flávio Saes, *Crédito e bancos no desenvolvimento da economia paulista: 1850–1930* (São Paulo, 1986), 72–75, 78, 87–88, 133–37; and Flávio Saes, *A grande empresa de serviços públicos na economia cafeeira* (São Paulo, 1986), 82–88.

a director of the Mogiana and Paulista railways, and a director of three other large banks.⁴⁰ Finally, he served as director of the Companhia Central Paulista, a coffee-processing firm incorporated during the Encilhamento.

Antônio Paes de Barros, related to Souza Aranha by marriage, was the coffee-planter son of the wealthy sugar planter Baron of Itú.⁴¹ Like Souza Aranha, Paes de Barros was one of the original creditors and director of the Ituana railway in the 1870s, held shares in the Paulista railway, and was a founding partner in the same private banking house as Souza Aranha in the 1880s. He, too, was named director of the Banco do Comércio e Indústria upon its incorporation. Souza Aranha's death in 1893 ended his business activity before the new economy was fully formed, but Paes de Barros' post-1890 business activity shows that the old planter elite plunged into the new

40. The banks were the Banco de São Paulo, the Banco de Crédito Real, and the Banco Mercantil de Santos.

41. Pang, *In Pursuit of Honor and Power*, 116, 192. This man may have held the noble title Baron of Piracicaba, but the sources are not clear. That a man named Antônio Paes de Barros was Baron of Piracicaba is not in dispute, but he was a grown man in 1821 when he traveled to Portugal to represent Brazil in the Portuguese Cortes. The Antônio Paes de Barros captured in my data was an active planter, investor, and director from the 1870s to the turn of the twentieth century. Either he was an exceptionally long-lived man, or the individual I write of was a son or a nephew. No secondary source, however, mentions a relative with the same name.

business environment. As soon as the business boom began in 1890, Paes de Barros appeared on the lists of several newly founded companies. This planter managed the Construction and Industrial portfolio of one of São Paulo's few universal banks, the Banco União de São Paulo, and was a director of the Banco de São Paulo and the Banco do Comércio e Indústria de São Paulo. These were three of the four most important banks in São Paulo. In the 1890s he became a director of the Companhia Melhoramentos de São Paulo (paper manufacture), a director of the Companhia Central Paulista (coffee processing), and a shareholder in the São Luís textile factory.⁴² Planters like these two men held similar portfolios that included strong ties to agriculture-based companies yet some ties to new urban industrial companies.

Still, urban banker-entrepreneurs were more firmly invested in the modern, urban-based companies than were the planters that made the transition to the post-1890s business world. Banco dos Lavradores director Ismael Dias da Silva held shares in the traditional types of companies such as Paulista and Mogiana railroads, and the Companhia Carris de Ferro de São Paulo (urban transport). After the reforms, however, he substantially broadened his portfolio to include investments in the Companhia Industrial Rodovalho (urban real estate development), the Companhia Mac Hardy (agricultural machinery, steam engines, transport equipment), the Companhia Lupton (import/export), and the Companhia Industrial de São Paulo (cotton textiles).⁴³ His brother, Gabriel Dias da Silva, also a director in the Banco dos Lavradores, was the president of the Companhia Industrial de São Paulo, a director of Mac Hardy, and investor in the Companhia Paulista railroad, the Companhia Lupton, and the Companhia Industrial Rodovalho.⁴⁴ Banco de São Paulo director Carlos Teixeira Carvalho, another of the super directors, sat on the board of three public utilities companies, an industrial company that manufactured matches, the Companhia Impressora Paulista press, and the

42. *Relatório da Companhia Ituana Estrada de Ferro*, 10 Nov. 1878, 28 April 1889; *Correio Paulistano*, 24 Jan. 1890; *Relatório da Estrada de Ferro da Companhia Paulista*, 27 Feb. 1881, 30 April 1893, 30 June 1901; Mello, *Metamorfozes da riqueza*, 132; Saes, *Crédito e bancos*, 134.

43. *Relatório da Estrada de Ferro da Companhia Paulista*, 30 Sept. 1888, 30 June 1897; *Relatório da Companhia Mogiana Estrada de Ferro*, 25 Oct. 1891, 23 June 1899; Mello, *Metamorfozes da riqueza*, 142; *Diário Oficial do Estado*, 31 Jan. 1892, 9 March 1900, 18 April 1903; Wilson Suzigan, *Indústria Brasileira: Origem e desenvolvimento* (São Paulo, 1986), 138, 236–37.

44. *Correio Paulistano*, 3 March 1895; *Diário Oficial do Estado*, 31 Jan. 1892, 9 March 1900, 21 March 1903; *Relatório da Estrada de Ferro da Companhia Paulista*, 27 Oct. 1889, 30 June 1897.

Companhia Mercantil and Industrial, a sugar and distilled spirits company.⁴⁵

The most impressive of all the super directors was Antônio Proost Rodovalho, who forged ties to nineteen separate companies. The mortgage bank Banco de Crédito Real's second president (1884), Rodovalho first appeared in the historical record in the 1870s as a shareholder in the Paulista Railroad Company and the Mogiana railroad, as manager of the São Paulo Affiliate of the Banco do Brasil, and as the agent for the Banco Comercial de Braga, a Portuguese bank. He was the Banco Comercial's founder and president in 1886. At the same time, he continued his duties as manager of the Banco do Brasil and became a director of the Ituana Railroad in 1886. By 1891 Rodovalho had founded two joint-stock companies: the Companhia Melhoramentos de São Paulo, a paper manufacturer, and the Companhia Industrial Rodovalho, Brazil's first cement manufacturer. In that same year he held the presidency of the Companhia Cantareira e Esgotos, which had monopoly rights on the city of São Paulo's water and sewer business.⁴⁶ By the mid-1890s, Rodovalho was a director of a textile factory, the Companhia de Tecidos Anhaia Fabril.⁴⁷

These super directors show how dominant the economic elite was in the pre-1905 period. If the spectacular webbing suggests that planter-bankers did indeed keep an eye on their nonbank companies, however, its very flashy nature diverts our focus from the broader importance of bank and nonbank connections forged by the "average" investor or banker. If we focus instead on the most common type of multiple connection, that of links between just two companies (see

45. The public utilities were Luz Elétrica de São Paulo, Água e Luz do Estado de São Paulo, and the Viação Paulista. The match company was the Phosphoros de Segurança. On Luz Elétrica de São Paulo, see *Diario Popular*, 28 Feb. 1889; on Água e Luz do Estado de São Paulo, see *Diario Popular*, 15 Jan. 1891; on Viação Paulista, see *O Estado de São Paulo*, 23 April 1897; on Phosphoros de Segurança, see *A Província de São Paulo*, 19 June 1889; on Impressora Paulista, see *O Estado de São Paulo*, 13 Jan. 1892; and on Mercantil e Industrial, see *Correio Paulistano*, 4 April 1894.

46. The sources chronicling Rodovalho's career are as follows. For Cia Paulista see *Relatório da Estrada de Ferro da Companhia Paulista*, 28 Jan. 1872, 29 Aug. 1880; and Saes, *Crédito e bancos*, 88, 135. For Cia Mogiana see *Relatório da Companhia Mogiana Estrada de Ferro*, 28 Sept. 1873, 25 Oct. 1891, 20 May 1894. For Banco do Brasil see *Correio Paulistano*, 28 April 1875, 8 July 1883. For Banco de Crédito Real see *Correio Paulistano*, 21 March 1884, 1 April 1890; and *Diário Oficial do Estado*, 16 April, 1901. For Cia Ituana see *Relatório da Companhia Ituana Estrada de Ferro*, 4 April 1886, 27 April 1890. For Banco Comercial de São Paulo see *Correio Paulistano*, 12 July 1886, 18 Jan. 1890. For Cia Melhoramentos de São Paulo see Saes, *Crédito e bancos*, 88. For Cia Industrial Rodovalho see *Correio Paulistano*, 15 March 1891. For Cia Cantareira e Esgotos see *Correio Paulistano*, 12 April 1891.

47. Saes, *Crédito e bancos*, 135; Suzigan, *Indústria Brasileira*, 250.

Table 2), we get a better picture of the importance of bank links to nonbank companies. Of the eighty-nine directors and shareholders who forged connections to just two companies from 1856 to 1905, more show a link to a bank and a nonbank company than show any other combination (see Table 4). There was some sectoral specialization; 30 percent of these double links took place within a nonbank sector, with the overwhelming majority of these same-sector links in the railroad business. But fully 39 percent of the two-company links in the period from 1856 to 1905 were between a bank and a nonbank business.

That São Paulo bankers were as interested in the tactic of interlocking directors as their German or northeastern U.S. counterparts is suggested by the fact that the most common type of link between any two businesses was between a bank and a nonbank business. The scarcity of direct lending evidence strongly suggests that banks did not act as dedicated financial arms to specific businesses. Rather, webbing most likely served to protect the investments of the directors and their friends and relatives, which in turn signaled faith in the companies to other investors in this period of fledgling capital market development and great social and economic change. As immigration, urbanization, and industrialization generated a bigger universe of joint-stock companies, members of the economic elite broadened their reach by involving themselves in nontraditional business ventures. The dominant three sectors of the pre-1890 era accounted for less than half (23 of 62) of firms founded after the 1890 regulatory reform. Far more firms (39) were founded in “new” areas like textiles, other manufacturing, and service businesses that served the new diversifying domestic economy. Investors and bankers consistently forged personal ties in both the pre- and post-1890 periods, sometimes multi-layered through interlocking directorates. This tactic provided them with access to company operating and financial records that allowed them to monitor the performance of their investments.

São Paulo Business Relationships, 1906–1920

The post-1905 period bears a marked contrast to the period before 1905. The web of connections between companies in general and between nonbank and bank companies in particular became much less pronounced. The reduced incidence of webbing suggests that the institutional basis of trust replaced the personal basis of trust after the turn of the century. Three things explain this shift. First, São Paulo’s population almost doubled between 1886 and 1900, from 1.2 to 2.3 million inhabitants, while the capital city’s population more

than quintupled from 47,000 to almost 240,000 in the same period, thereby increasing the pool of economic agents.⁴⁸ Second, a serious shock to the economy produced bankruptcies and bank failures that severely disrupted established business relationships. Third, São Paulo's formal capital markets had matured by a decade and had generated some seasoned institutions with track records of successful financial intermediation.

All three were important contributing factors to the shift from personal to impersonal forms of trust production. The first and second had the effect of diluting the power of old-style personal relationships in the larger business community. Rapid population growth in São Paulo created more consumers, but also generated more entrepreneurs.⁴⁹ This expansion of the economic elite, combined with the disruption of business ties during the downturn, rendered personal forms of trust production untenable. The resurgent Bolsa was perhaps the most important of the three factors in moving intermediation to an institutional setting. Founded for a second time in 1895 and operating continuously ever since, the São Paulo Bolsa was the principal domestic source of investment capital for new businesses after the turn of the century. As a result, São Paulo businesses shifted from forming ties with prominent bankers to forming ties with entrepreneurs in their own field. Professional specialization replaced wide net-casting as the predominant trend in business relationships. Only among immigrant entrepreneurs was broad webbing pursued.

A profound recession at the turn of the twentieth century, which introduced great uncertainty into the São Paulo business world by provoking widespread business failures, disrupted the personal mechanisms on which São Paulo businesses relied to regulate exchange. This recession was the product of government deflationary policies between 1898 and 1902 implemented to curb inflation and revalue Brazil's currency. The deflation cut national money supply by about one-third. Although this contraction did not show up immediately in São Paulo, which actually experienced a modest increase in bank equity and deposits, banks tightened their belts. Short-term loans and bank investments in company stocks and bonds declined between 1898 and 1901, at the same time that the recession reduced consumer demand. São Paulo's companies struggled to hold on, making mention in their annual reports of the dire macroeconomic conditions. By 1905 many businesses failed, as did most of the banks with which they had formed relationships.

48. José Francisco de Camargo, *Crescimento da população no estado de São Paulo e seus aspectos econômicos*, vol. 1 (Sao Paulo, 1981), 81–85.

49. Dean, *The Industrialization of São Paulo*.

The depth and duration of the recession, in large part caused by rampant coffee overproduction that led to a precipitous slide in international prices, was curbed by São Paulo state's intervention program to buy up excess coffee stocks.⁵⁰ The state of São Paulo forbade new plantings in order to curb future supply and raised loans to buy coffee and warehouse until prices improved, paying for the program by means of a gold tax on every bag exported. This 1906 program to support coffee prices, and therefore São Paulo incomes, sparked an economic recovery that ran uninterrupted until the eve of World War I.

The return to prosperity was so robust that São Paulo's economy fundamentally transformed itself from Brazil's wealthiest agricultural producer to Brazil's most important industrial center. By the 1910s, thousands of individuals had invested in hundreds of joint-stock companies that electrified the capital city and the regional urban centers; that installed water and sewer networks; that laid track for urban trolleys; that processed livestock and agricultural goods; that warehoused those goods at the newly renovated port in Santos; that milled paper; that printed news dailies, journals, and books on that paper; that manufactured building materials; that used those materials to construct neighborhoods; that wove textiles and cured leather that clothed and shod São Paulo residents; that brewed beer and distilled spirits; that brought cinematic entertainment to the capital city; that and developed luxurious spa retreats outside of the city.

This expansion is captured in the explosion of new listings on the São Paulo Bolsa. Where just 28 joint-stock companies were listed on the Bolsa in 1905, the number grew to 73 in 1909 and to 185 by 1913. Capitalization grew apace. In real terms, the capital invested in public utilities companies almost tripled from 1909 to 1913, while the capital of the industrial sector doubled. Nonindustrial companies saw a three-and-a-half times growth in real equity investment. The disruptions of World War I stopped the expansion in its tracks, but

50. A crisis of overproduction, fueled by booming demand and improved transportation systems, prompted São Paulo planters to expand coffee production from 1886 to 1896. During this period, the amount of coffee planted in São Paulo almost tripled from 141 million to 386 million trees. The São Paulo crop of 1896 contributed to a record world production of almost 14 million bags of coffee, compared to 10 million bags in 1895, and provoked a 33% drop in the international price of coffee. An agreement between São Paulo and two smaller coffee growing states—Minas Gerais and Rio de Janeiro—was struck in 1906 to purchase excess stocks in order to bolster coffee prices. The agreement, known as the Taubaté Agreement, never went into effect as written, because the two junior partners to the agreement pulled out, but the state of São Paulo pursued the intervention program on its own. See Thomas Holloway, *The Brazilian Coffee Valorization of 1906: Regional Politics and Economic Dependence* (Madison, Wisc., 1975).

the business contraction primarily affected smaller companies. São Paulo's stock and bond exchange listed 158 companies in 1917, including some of Brazil's largest industrial ventures.

The one sector that did not participate in this expansion was banking. Domestic banks had succumbed to the poor domestic economic conditions of the late 1890s, failing one by one from the turn of the century through 1906. Eight domestic banks were listed on the Bolsa in 1905, but 3 were about to exit banking and 2 were small regional banks. Just 3 large banks served the state after 1905, compared to more than 20 a decade earlier. Two of these 3 large banks survived through 1920, and the one that failed was replaced by a new bank, but São Paulo never had more than 3 competing domestic banks for the remainder of the period. The only growth in the sector was through a couple of small banks located in interior cities. This much smaller bank sector held but a fraction of the market share it had controlled in the 1890s, ceding millions of dollars of business to existing and newly formed foreign banks.⁵¹

The economic sociology literature argues that the introduction of stress into an established economic order will disrupt the flow of information and undermine the ability of personal networks to provide the information necessary for the smooth functioning of transactions. Indeed, the nearly total collapse of domestic banking made the model of personal ties of the pre-1905 period impossible to replicate. When personal connections no longer work, according to theory, economic actors will turn to some other means of trust production. In a setting of rapid growth, where personal ties cannot feasibly be formed to keep up with the larger business expansion, this new form is likely to have an institutional character.⁵²

Research on São Paulo's business formation after 1906 finds, in fact, that personal ties between companies, and between nonbank and bank companies in particular, were no longer as thick as they had been in the late nineteenth century. Only 212 of the 1,276 shareholders and directors identified in the post-1906 period had links to 2 or more

51. Flávio Azevedo Marques de Saes and Tamas Szmrecsányi, "El Papel de Los Bancos Extranjeros en la Industrialización Inicial de São Paulo," in *Las Inversiones Extranjeras en América Latina, 1850-1930: Nuevos debates y problemas en historia económica comparada*, ed. Carlos Marichal (Mexico City, 1995), 230-43.

52. The shift does not necessarily have to be in the direction of institutional trust. The shift to a highly personal form of trust production is likely in small markets where impersonal exchanges led to economic losses because of the absence of personal accountability. In eras of rapid growth, however, the dominant trend is toward institutional forms of trust. Zucker's work found that in the U.S. it was indeed institutional arrangements that replaced the more personal forms of trust production that had been the norm. Naomi Lamoreaux's work on banking in New England revealed a similar process at work in the early twentieth century.

Table 5 All Connections between Directors/Shareholders and Joint-Stock Companies, 1906–1920

	Individuals Linked to Companies	Total(%)	Individuals Linked to a Bank	Of All Multiple References (%)
Total singles	1,064	83		
Total multiples	212	17	36	17
Total directors and shareholders	1,276			

Sources: *Correio Paulistano*, *O Estado de São Paulo*, *Diário Oficial do Estado de São Paulo*, various dates. *Relatórios da Companhia Mogiana Estrada de Ferro*, 1907, 1915, 1920. *Relatórios da Estrada de Ferro da Companhia Paulista*, 1911, 1922. Warren Dean, *The Industrialization of São Paulo, 1880–1945* (Austin, 1969), 57–60, 62, 102; Darrell Levi, *The Prados of São Paulo, Brazil: An Elite Family and Social Change, 1840–1930* (Athens, Ga., 1987), 154–55, 157; Flávio Saes, *A grande empresa de serviços públicos na economia cafeeira* (São Paulo, 1986), 177–78.

companies (see Table 5). This represented a sharp decline from the earlier period, in which about 170 of 500 shareholders and directors were linked to 2 or more companies. In relative terms, the proportion of webbed entrepreneurs and investors went from about one in 3 to one in 6 of the director and investor population. Moreover, those that did have ties to multiple companies were overwhelmingly tied to just 2 companies (see Table 6). Three-quarters of webbed directors and shareholders belonged to this category, limiting their ability to wield broad personal influence in the post-1906 business world.

Along with this reduced incidence of webbing came a reduction in ties between bank and nonbank companies. Entrepreneurs and bankers appeared to very consciously seek out some direct, personal connection to one another in the first period from 1856 to 1905, when links between banks and nonbank companies had been the single most common type of connection between any two companies.

Table 6 Degree of Webbing: Multicompany Links, 1906–1920

	Linked to 2 Companies	Linked to 3 Companies	Linked to 4 Companies	Linked to 5 Companies	Super Directors (>5)	Total Multiple Links
Individuals	159	28	12	8	5	212
Total (%)	75	13	6	4	2	

Sources: *Correio Paulistano*, *O Estado de São Paulo*, *Diário Oficial do Estado de São Paulo*, various dates. *Relatórios da Companhia Mogiana Estrada de Ferro*, 1907, 1915, 1920. *Relatórios da Estrada de Ferro da Companhia Paulista*, 1911, 1922. Warren Dean, *The Industrialization of São Paulo, 1880–1945* (Austin, 1969), 57–60, 62, 102; Darrell Levi, *The Prados of São Paulo, Brazil: An Elite Family and Social Change, 1840–1930* (Athens, Ga., 1987), 154–55, 157; Flávio Saes, *A grande empresa de serviços públicos na economia cafeeira* (São Paulo, 1986), 177–78.

In the period from 1906 to 1920, by way of contrast, very few individuals with multiple connections were tied to a bank, and the most common type of link between any two companies was likely to occur within one sector, loosely defined: if you were on the board of directors of an industrial firm, you were far more likely to be linked to another industrial firm than to any other kind of firm (see Table 7). Utilities directors sat on the boards of other utilities, and directors of commercial and service firms were likely to forge ties to other commercial or service firms. What directors and shareholders of nonbank companies were *least* likely to do was to have a tie to a bank. The lowest percentage of links between any two companies were between nonbank and bank companies. Just 17 percent of all intercompany links (36 of 212) involved a bank, and just 11 percent of the links between two companies (17 of 159) were between a bank and a nonbank company (see Tables 5 and 8).

The much lower incidence of webbing among bank and nonbank companies suggests that the São Paulo business community had moved away from reliance on personal forms of trust in the post-1905 period and replaced them with some other form of trust production.⁵³ The shakeout of the bank sector and the survival of only a few of its members made it all but impractical for bankers to continue their personal oversight of a rapidly growing number of nonbank companies. And the rise in activity on the stock market indicates that the use of joint-stock format was the large entrepreneur's first choice for business finance. The pattern of webbing after 1906 suggests that trust was now earned through specialization and expertise, rather than personal connections to a bank and its prominent members of the board. Investors and board members sought out connections to individuals who could help them run their business, not to individuals who could potentially provide them with access to capital or serve as a signal of worth.

53. Gail D. Triner argues that the consolidation of impersonal trust-producing mechanisms in both banking and nonbank business finance was enhanced by the Banco do Brasil, reorganized in 1905 as a profit-seeking commercial bank that also performed central banking functions. This does not appear to have been the impetus behind the shift to impersonal financial intermediation in São Paulo captured here, however. The rise of impersonal trust in São Paulo predates the dominance of the Banco do Brasil in national capital markets, which Triner links to its establishment of branches throughout the country in the 1910s, and the beginning of its rediscounting facilities in 1915. And though the Banco do Brasil was the only bank chartered to operate nationwide, transfers from the Federal District to other markets accounted for a small fraction of total bank credit and had the greatest impact on regions that had little or no established banking services. Gail Triner, "Banks and Brazilian Economic Development: 1906–1930" (Ph.D. diss., Columbia University, 1994), chap. 3.

Table 7 Comparing Degrees of Webbing between Two Periods

	Linked to 2 Companies	Linked to 3 Companies	Linked to 4 Companies	Linked to 5 Companies	Super Directors (>5)	Total Multiple Links
1856–1905	89	30	15	13	20	167
Total (%)	53	18	9	8	12	
1906–1920	159	28	12	9	4	212
Total (%)	75	13	6	4	2	

Sources: Primary sources include *Correio Paulistano*, *Diário Popular*, *O Estado de São Paulo*, *Diário Oficial do Estado de São Paulo*, *A Província de São Paulo*; *Coleção de Leis e Decretos*; *Relatórios da Companhia Ituana Estrada de Ferro*, 1871–74, 1877–79, 1886, 1889–1890; *Relatórios da Companhia Mogiana Estrada de Ferro*, 1873, 1878, 1883, 1887, 1889, 1891, 1893–1894, 1896, 1899, 1905, 1907, 1915, 1920; *Relatórios da Estrada de Ferro da Companhia Paulista*, 1869, 1872, 1876, 1878, 1880–81, 1883–89, 1893, 1895–97, 1901–02, 1905, 1911, 1922; *Relatórios da Estrada de Ferro da Companhia Sorocabana*, 1872–1874, 1876, 1882; *Relatórios da Estrada de Ferro da Companhia União Sorocabana-Ituana*, 10 Feb. 1897; *Estatutos da Companhia Viação Paulista*, 1891; and *Relatório da Diretoria da Companhia Viação Paulista apresentado à Assembléia Geral de Acionistas em 26 de abril de 1897*. Secondary sources include Warren Dean, *The Industrialization of São Paulo, 1880–1945* (Austin, 1969), 45, 57–60, 62, 74, 102; Darrell Levi, *The Prados of São Paulo, Brazil: An Elite Family and Social Change, 1840–1930* (Athens, Ga., 1987), 83–85, 144, 146–48, 151, 154–55, 157; Zélia Cardoso de Mello, *Metamorfoses da riqueza: São Paulo, 1845–1895* (São Paulo, 1985), 128, 132–36, 142–43; Eul-Soo Pang, *In Pursuit of Honor and Power: Noblemen of the Southern Cross in Nineteenth-Century Brazil* (Tuscaloosa, 1988), 114, 116, 121–22, 124, 136–38; Flávio Saes, *Crédito e bancos no desenvolvimento da economia paulista: 1850–1930* (São Paulo, 1986), 72–75, 78, 87–88, 133–37; and Flávio Saes, *A grande empresa de serviços públicos na economia cafeeira* (São Paulo, 1986), 82–88, 177–78.

The significance of this institutionalization of finance and transformation of trust production in São Paulo's business community is brought into sharp relief by the one exception to this otherwise robust trend. This exception was the continued high degree of webbing practiced by foreign entrepreneurs. The English, Italians, and Germans continued to work in these more personal, process-based relationships. Their communities were smaller and more clearly defined than the amorphous Brazilian business community. If modern experiences are any guide, this recently arrived immigrant population found security in ethnic contacts and shared cultural practices.⁵⁴ This contributed to high degrees of webbing among immigrant entrepreneurs in São Paulo in the early twentieth century, ironic in light of the traditional development story that has held up Europeans, and their impersonal institutions, as exemplary modernizers for personal Latin Americans to emulate.

This personal mode of trust production among immigrants was most strongly evident among the Italian entrepreneurs in São Paulo. Just as the majority of Brazilian investors were moving away from the

54. For essays on the community phenomenon in the late twentieth century see Rauch and Casella, *Networks and Markets*.

Table 8 Directors and Shareholders Linked to Only Two Companies (%)

Links between Companies	1856–1905	1906–1920
Links within same sector, excluding banks	30	60
Links between two banks	9	1
Links between two sectors, excluding banks	22	28
Links between one bank and one nonbank	39	11

Sources: Primary sources include *Correio Paulistano*, *Diário Popular*, *O Estado de São Paulo*, *Diário Oficial do Estado de São Paulo*, *A Província de São Paulo*; *Coleção de Leis e Decretos*; *Relatórios da Companhia Ituana Estrada de Ferro*, 1871–74, 1877–79, 1886, 1889–1890; *Relatórios da Companhia Mogiana Estrada de Ferro*, 1873, 1878, 1883, 1887, 1889, 1891, 1893–1894, 1896, 1899, 1905, 1907, 1915, 1920; *Relatórios da Estrada de Ferro da Companhia Paulista*, 1869, 1872, 1876, 1878, 1880–81, 1883–89, 1893, 1895–97, 1901–02, 1905, 1911, 1922; *Relatórios da Estrada de Ferro da Companhia Sorocabana*, 1872–1874, 1876, 1882; *Relatórios da Estrada de Ferro da Companhia União Sorocabana-Ituana*, 10 Feb. 1897; *Estatutos da Companhia Viação Paulista*, 1891; and *Relatório da Diretoria da Companhia Viação Paulista apresentado à Assembléia Geral de Acionistas em 26 de abril de 1897*. Secondary sources include Warren Dean, *The Industrialization of São Paulo, 1880–1945* (Austin, 1969), 45, 57–60, 62, 74, 102; Darrell Levi, *The Prados of São Paulo, Brazil: An Elite Family and Social Change, 1840–1930* (Athens, Ga., 1987), 83–85, 144, 146–48, 151, 154–55, 157; Zélia Cardoso de Mello, *Metamorfoses da riqueza: São Paulo, 1845–1895* (São Paulo, 1985), 128, 132–36, 142–43; Eul-Soo Pang, *In Pursuit of Honor and Power: Noblemen of the Southern Cross in Nineteenth-Century Brazil* (Tuscaloosa, 1988), 114, 116, 121–22, 124, 136–38; Flávio Saes, *Crédito e bancos no desenvolvimento da economia paulista: 1850–1930* (São Paulo, 1986), 72–75, 78, 87–88, 133–37; and Flávio Saes, *A grande empresa de serviços públicos na economia cafeeira* (São Paulo, 1986), 82–88, 177–78.

layered interconnections between companies, this newest entrepreneurial group was generating them. The Italians reproduced the layered boards of directors that had been so typical in São Paulo before the turn of the century in spite of, or because of, a new business growth rate that strained Brazilian webs to the breaking point. Their entrepreneurial community was apparently still small enough for the personal means of trust production to function well.

This striking difference is evident when we separate the Italians and Italian-led or financed joint-stock companies, out from the general data pool for the 1906–1920 time period to examine the incidence of broad webbing and webbing between banks and nonbank companies. Some 18 of the 149 companies identified in this period had a significant Italian presence on their boards of directors. Twelve of those 18 companies were directly tied to one or more of the 5 Italian banks operating in São Paulo.⁵⁵ A full two-thirds of the companies funded or run by Italian investors and entrepreneurs, then, demonstrated the sort of webbing previously seen in the pre-1905 period. This incidence is far higher than the general incidence of bank-to-nonbank webbing in the 1905–1920 period, in which a total of 31 nonbank companies, or

55. These were the Banco Commerciale Italiano di S. Paulo, Banco Commerciale Ítalo-Brasileiro, Banca Francese e Italiana per l'America del Sud, Banca Italiana di Sconto, and Banco Italiano del Brasile.

about one-fifth, were directly linked to a bank. In other words, the connection that was least likely among the entire business community was actively forged in the Italian business community. Here most companies were linked to a bank, specifically an Italian bank.

The great decline in overall webbing and the strength of Italian webbing are even more striking when we look at the super directors in the post-1905 period. Between 1856 and 1905 there had been 20 super directors and investors, individuals with more than five companies to their name, out of a total universe of 519 shareholders and directors in this period. This number declined in both absolute and relative terms between 1906 and 1920. Just 4 of the 1,276 directors and shareholders identified in the second period were super directors (see Table 9). Significantly, 3 of those 4 super directors were prominent Italian entrepreneurs. José Puglisi Carbone, Nicola Puglisi Carbone, and Rodolpho Crespi were each directly involved in a number of companies, most of them predominantly Italian-run, and overlapped one another in these companies. Like Souza Aranha and Paes de Barros in the early period, these men encountered each other repeatedly at the board meetings of the five companies they ran in common (see Table 10).

At the same time that the Italians were intensively forging ties to one another, they were also establishing a limited number of webbed connections to Brazilian entrepreneurs. Table 10 illustrates two such connections between Italian super directors José Carbone and Rodolpho Crespi and Brazilian super director Asdrubal do Nascimento. Connections like these were not common, but in the few cases in which they appeared, Italians sat on the boards with the most prominent

Table 9 Super Directors and Investors, 1906–1920

	B	RR	U	T	I	O	Total
Italian							
José Puglisi Carbone					3	6	9
Nicola Puglisi Carbone				1	4	2	7
Rodolpho Crespi			1	1	2	4	8
Brazilian							
Asdrubal Augusto do Nascimento			1	1	3	2	7
Total observations	1	0	1	3	12	14	31

Notes: Abbreviations at head of columns indicate the following: B = banks, RR = railroads, U = utilities, T = textiles, I = industrial companies except textiles, O = all other nonindustrial companies.

Sources: *O Estado de São Paulo, Diário Oficial do Estado de São Paulo; Coleção de Leis e Decretos*; Warren Dean, *The Industrialization of São Paulo, 1880–1945* (Austin, 1969), 57–60; Flávio Saes, *A grande empresa de serviços públicos na economia cafeeira* (São Paulo, 1986), 177.

Table 10 Webbing among Super Directors, 1906–1920

José Puglisi Carbone	Nicola Puglisi Carbone	Rodolpho Crespi	Asdrubal A. do Nascimento
Refinadora Paulista	Refinadora Paulista	Refinadora Paulista	Refinadora Paulista
Moinho Santista	Moinho Santista	Moinho Santista	
Cia Puglisi	Cia Puglisi	Cia Puglisi	
União dos Refinadores	União dos Refinadores		
Int'l de Armazens Gerais	Int'l de Armazens Gerais		
	Tecelagem de Seda Ítalo Brasileira	Tecelagem de Seda Ítalo Brasileira	
Paulista Seguros Marítimos e Terrestes		Paulista Seguros Marítimos e Terrestes	Paulista Seguros Marítimos e Terrestes

Sources: *O Estado de São Paulo, Diário Oficial do Estado de São Paulo; Coleção de Leis e Decretos*; Warren Dean, *The Industrialization of São Paulo, 1880–1945* (Austin, 1969), 57–60; Flávio Saes, *A grande empresa de serviços públicos na economia cafeeira* (São Paulo, 1986), 177.

names in São Paulo.⁵⁶ The purpose of these ties was, presumably, to break into the entrepreneurial elite but also probably to signal to the larger investing community that the Italian entrepreneurs were worthy of their trust and, of course, their spare change for investment finance.

Tables 9 and 10 highlight an important characteristic of the world of super directors between 1906 and 1920: they were well connected, but banks no longer figured prominently among those connections as they had previously in the super director portfolios of the 1856–1905 period (see Table 3). Banks and railroads taken together accounted for more than half of all the observations for the super directors. Table 9 shows that banks barely figured among the companies these men oversaw in the 1906–1920 period, and railroads not at all, even though these stocks continued to be the blue chips of the São Paulo Bolsa.⁵⁷ Instead, industrial and “other” companies showed up most regularly in the super directors’ portfolios. For these few highly connected individuals, the most attractive investments were the urban industrial, commercial, and service firms that thrived after the 1906 Taubaté Convention.

56. Warren Dean first identified the business ties between immigrant and Brazilian economic interests in *The Industrialization of São Paulo*.

57. Railroad stocks continued to be a very important investment vehicle in the later period, but were no longer the centers of entrepreneurial power. Rather, they represented wealth and figured in many a trust fund. The children, notably many daughters, of São Paulo’s prominent families populated the post-1906 shareholder lists.

Not surprisingly, warehousing firms were among these interests, since the state needed to store the excess coffee stocks it was committed to buying. But food processing companies like the Moinho Santista and the Refinadora Paulista, sugar and flour concerns, and the Frigorífica Pastoral, a chilled beef company, complemented the warehousing business, as did textiles and hat making. The Brazilian super director invested in the beer to wash down the beef and in the glass company that made the bottles for the beer. Financial concerns like a bank, a mutual aid company, and insurance companies were in the portfolios, but so were a hot springs venture and an automobile rental business.⁵⁸ These entrepreneurs catered to the São Paulo consumer by investing in the necessary, the practical, and the luxurious.

Conclusion

This shareholder and director data, particularly the substantially reduced incidence of multiple company links and super directors in the second period, suggests that after 1906 the majority of the entrepreneurial and financial community in São Paulo was moving away from the highly personal connections that had been so prevalent between companies before. The rapid pace of expansion, coupled with the demise of São Paulo's domestic bank sector, had made personal forms of trust production untenable. No individual could master the direction or depth of the expansion fueled by the coffee price support program, so expertise in a given field became critical. Investors and directors specialized their energies and their money, abandoning the practice of forming broad connections in general and connections to a bank in particular.

The exception was the Italian community, which was behaving just as Brazilian entrepreneurs had in the 1880s and 1890s. These entrepreneurs spread their investment capital and lent their names to other entrepreneurs of their cultural and ethnic group. This population, recently arrived and relatively small, presented a manageable subset of the larger economic boom over which Italian super directors

58. Table 10 shows only the companies that 2 or more super directors had in common. The remaining interests for each of the 4 were as follows. José Puglisi Carbone (Cia Frigorífica e Pastoral, Cia Cerâmica Villa Prudente, and Caixa de Liquidação de S. Paulo); Nicola Puglisi Carbone (Cooperativas das Fábricas de Chapeus and Cia Thermal Poços de Caldas); Rodolpho Crespi (Cia de Automóveis Garagens Reunidas, Caixa Mutua de Pensões Vitalícias, and Banca Francese e Italiana per l'America del Sud); Asdrubal Augusto do Nascimento (Votorantim, Cia Antártica, Vidraria Santa Marina, Cia Brasileira de Seguros, and Cia Telefônica de S. Paulo).

and their kin could reign. Although there were far fewer directors with their fingers in every pie in the later period than in the earlier period, the fact that three out of four of these super directors were Italian indicates the importance of cultural ties in creating personal business networks. It also demonstrates that the Brazilian-born business community had abandoned the practice of extensive webbing by this second period, replacing personal ties, whether for signaling or access to finance, with institutional ties that sought sector-specific expertise.

This strong webbing among immigrant entrepreneurs is ironic, since the literature on economic development typically views Brazilians as bound by relationships of patronage and reciprocity, and therefore constrained in their business pursuits, and broader ability to develop, by the tether of personal ties. Successful European industrialization and economic diversification, on the other hand, is usually credited to modern, institution-based relationships of economic exchange.

The exceptional case of the Italian entrepreneurial community brings into sharp relief the extent of institutionalization achieved in São Paulo business finance in just a few decades. From a handful of firms numbering little more than two dozen in the 1880s, joint-stock companies became increasingly common over time and experienced a veritable boom up to World War I. At the same time, the possibility of personally knowing a banker was receding because of the 1900 bank crisis and resulting consolidation of, and loss of market share by, domestic banks after 1905.⁵⁹ Their failure all but eliminated personal connections to bank boards as a means of signaling trustworthiness, causing the shift to the Bolsa as the major signal of trust

59. Links to bankers were often beneficial, of course, because they generally provided access to bank capital. This was the case in both Germany and Mexico around the time under study. But research has shown that the strong ties between banks and industry can condition industrial development in ways that are not always beneficial. In Germany, the classic universal banks with close ties to non-bank companies tended to finance the very largest corporations. This did not hinder broader diversification, because of the existence of complementary financial institutions that lent to small and medium-sized firms. In Mexico, however, the ties between banks and industry benefited a very small range of companies, and led to industrial concentration and reduced industrial efficiency. On Germany, see Richard Tilly, "German Banking, 1850–1914: Development Assistance for the Strong," *Journal of European Economic History* 15 (Spring 1986): 113–52. On Mexico, see Stephen Haber, "Financial Markets and Industrial Development: A Comparative Study of Governmental Regulation, Financial Innovation, and Industrial Structure in Brazil and Mexico, 1840–1930," in *How Latin America Fell Behind: Essays on the Economic Histories of Brazil and Mexico, 1800–1914*, ed. Stephen Haber (Stanford, Calif., 1997), 146–78.

and opening up the joint-stock format to a new group of unconnected entrepreneurs.

This phenomenon is confirmed by the data on the interconnections between boards of directors, where webbing declined from one-third of all investors before 1905 to just one-sixth after 1906. Moreover, the links between companies qualitatively changed after 1906. In the first period up to 1905, the most common type of connection was between a bank and a nonbank company. After 1906, the most common type of connection was between two companies in the same sector, while the *least* likely type of connection was to a bank. In comparison with the earlier period, and with the Italian community in the second period, then, the native Brazilian community had made the transition to market-determined financial transactions, perhaps attributable to the stress of rapid economic growth, and reserved the personal ties for acquisition of specific business expertise.

The force behind this transition from personal to institutional trust in the larger business community was the product, ironically, of two of the most significant crises the São Paulo economy faced. The crisis of coffee overproduction had driven prices down and undermined the wealth base on which the economic (and political) power of São Paulo rested. The inflation and exchange rate devaluation of the 1890s had caused the federal government to pursue a deflationary policy that reversed many of the gains made by domestic entrepreneurs since the relaxation of joint-stock laws. These two interrelated crises knocked out banks and businesses, effectively disrupting the trust producing mechanisms that had generated much economic diversification. When the economy recovered after 1906, entrepreneurs turned to new forms of trust production that broke the effective-market-size constraints imposed by reliance on personal networks.

In the early twentieth century, “who you know” was replaced by “what you know” for most of São Paulo’s entrepreneurs. This transition was critical for a developing economy with a relatively small but rapidly growing economic elite in this dynamic state. São Paulo’s statewide population growth and booming capital city generated a much bigger consumer population and stimulated new entrepreneurship to meet the demand. By providing an alternative to the highly personal forms of trust production, the rise of impersonal intermediation allowed for a significantly broadened market for corporate business formation. The institutionalization of trust, expressed in the resurgence of the stock market and reinforced by the expansionary economic conditions of the post-1906 period, marked a fundamental shift in São Paulo’s business formation and paved the way for the economic diversification that became its twentieth-century hallmark.

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