# Banking and Economic Development
## *Brazil, 1889–1930*

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palgrave

# Chapter 4

# The Business of Banking

Building responsive entities to conduct the ongoing activities of everyday life commanded as much effort as the struggle to construct new forms of governance during the First Republic. In this regard, banks developed increasingly dynamic activities within the private sector at the same time that they responded to the opportunities and constraints presented by monetary policies. The evolution of the banking business served two purposes. From the perspective of the banks, the need to establish their credibility and profitability after the widespread failures in the first years of the Republic required that they incorporate remedies to the early problems into their business practices. From a broader perspective, the demand for a banking system that could accommodate the needs of a changing economy provided the incentive for banks to evolve. At the end of the Republic, the business of banking was very different than it had been in 1889. Institutions and businesses had changed in nature. In restructured form, they were more solid, more mature, and more responsive to their environment than they had previously been. Their stability and responsiveness to a wider array of circumstances signified the transition from an early system of narrow reach to a more modern one that functioned much as both late-twentieth-century banking analysts would expect and as many Brazilians wanted. This chapter focuses on the business of banks and its evolution during the First Republic by assessing the financial structure of the banking system. Subsequent chapters will explore the motivations and actions of individual banks and the means by which they affected economic development.

Banks suffered extreme disruption and massive failure during the financial and monetary chaos of the first years of the Republic. The sharp break in monetary and banking history at the end of 1905 marked the beginning of modern banking in Brazil. While monetary history defined this transition, changes in the business of banking were also important. Bankers adjusted their business practices in response both to the prior experiences of the sector and to their ongoing circumstance. Despite the heavily politicized nature of the monetary superstructure, banks consolidated their emphases in specific business activities and maintained conditions for organizations to operate on more solid ground. Conservative business practices enhanced the capacity for growth and dynamism among banks in support of private-sector development. These changes occurred within the context of a political economy that increasingly relied upon banking for developing domestic markets for goods and services. In this sense, the modernization of banking reflected its politicized importance.

The business of banking evolved with its role in the economy. However, because of their visibility in the political economy, banks as business enterprises often receive little attention. Though the State became an important investor in the largest bank in order to meet political goals, other economic agents also committed capital to these endeavors. In the First Republic, the Federal Treasury committed capital only to the Banco do Brasil (and its predecessor, the Banco da República). State governments also invested in the major banks in their states. However, these organizations derived much of their capital from private investors; most banks were fully owned by private entities. Two objectives for banks motivated their owners: to earn profits and to establish mechanisms of financial intermediation.

The types of financial transactions that banks undertook and their business structures demonstrate their evolution. The data available for this analysis change during the period in a manner that paralleled the shift in the business of banking. Prior to the reorganization of the banking system at the end of 1905, estimates of the size of the entire banking system provide the only data available. Problems with the comparability of business structures and short-lived organizations mitigated the value of aggregating firm-level data. However, with the banking system's reorganization, financial data reported by individual banks appeared consistently in terms of the regularity of publication, the duration of bank existence, and the reporting of balance sheets in standardly defined categories and comparable structure. Financial data from bank balance sheets and income statements trace the nature of the banking system from 1906, providing systematic standards for assessing the nature of banking. (The Data Appendix explains this information.) Using data from individual firms, rather than previously published estimated and summarized data, allows for aggregation of the total banking system,[1] and of relevant groupings of organizations, to trace the consistent trends by which it became increasingly modern.



## *EARLY REPUBLICAN FAILURE*

The financial chaos of the first years of the Republic, the Encilhamento and its "crack," was the most obvious result of the State's attempts to use banking in response to multiple needs simultaneously. Its monetary characteristics have been the focus of scholarship on the Encilhamento.[2] Although the issue remains underexplored, some historians have alluded to the effects of the Encilhamento on industrial development and restructuring of business organization for the productive sectors of the economy.[3] Banks were the locus combining the monetary and real characteristics of the Encilhamento. The detriment to banking was among the most notable features of the Encilhamento.

The disruption caused to the development of the banking system occurred in three stages. The Encilhamento, a bubble of bank-led corporate formation, preceded two stages of banking collapse before economic recovery and organizational reform supported fundamental banking growth. Chapter 3 considered the growth of the banking system in conjunction with monetary policy and regime changes, and it documented a massive expansion of banking from 1888 to 1891, followed by an equally massive collapse in 1892 (Figures 3.2 and 3.3). The attempts to enforce economic and monetary orthodoxy did not permit an immediate recovery. The deflationary conditions enforced by the Funding Loan of 1898 are often held responsible for a second collapse of banking in 1900-01. At its trough in 1901, the volume of bank deposits (in real, price-adjusted terms) and their contribution to the money supply were about half the level they had reached at the beginning of the Republic. The number of banks whose equity shares traded on the Rio de Janeiro Bolsa de Valores increased from 13 in 1888 to 21, 43, and 68 in 1889, 1890, and 1891 respectively. In 1892, the shares of 14 banks were traded, and of 10 in 1905.[4] These numbers dramatically illustrate the collapse of banking; they do not address the questions of what banks did during these years, or of whether banking addressed the financial needs of the private sector. Did the nature of the banking business exacerbate or ameliorate its problems deriving from public policy?

Commercial code and bank reform in 1890 supported the increase in banking at the beginning of the Republic, when Brazilians expected economic growth to require a quantum increase in financial services. The ability to form limited-liability corporations, without legislative approval for individual firms and with some steps toward financial "transparency," enhanced corporate formation in all sectors.[5] Published statements allowed shareholders and potential shareholders to monitor the financial positions of firms and made information on their financial conditions more accessible to the public. Changes in laws affecting banks moved to constrain bank note-issuance rights (though not volume) but otherwise did not impose constraints on their business activity.[6] Loans to banks by the Treasury also encouraged their expansion. The eased ability to form limited-liability corporations, combined with the encouragement of banking, had strongly encouraged the opening of new banks in these years. Certainly, the business press conveyed the perception that banks accumulated capital in advance of the identification of investment opportunities:

> In view of the excessive growth of banks, there was an immediate need for support from the managers, and they naturally responded to all classes of individuals, those without the necessary means and even to adventurers, without hesitating to take on operations beyond their means.
>
> The madness in the market had only one lucid moment . . . before relapsing to excitation and mind-numbing expansion. . . .[7]

Without constraints on the nature of their investments, bankers committed their funding from capital, deposits, and Treasury loans to a variety of activities. They extended credit for commercial transactions, some financed real estate development through mortgages, and they made long-term investments by purchasing corporate bonds and equity shares.[8] Their traditional reluctance to extend long-term credit (in excess of a year, or often as short as six months) had not prevented banks from making significant investments in the stocks and debentures (bonds) of corporations—often of dubious financial worth. With otherwise unused funds, they bought large volumes of Treasury apólices (domestic debt issued by the federal and state treasuries).[9] Foreign exchange trading was also an integral part of banking. Banks used their funds in order to arbitrage currencies, buying and selling foreign exchange to exploit price differentials in various marketplaces.[10]

The Encilhamento cracked during 1891-92, when the value of the mil-réis collapsed.[11] Since the value of apólices and many of the other securities relied on the value of the mil-réis, and since banks were also speculating in the value of the mil-réis through their foreign exchange operations, currency decline generated massive bank failures. As their



investments lost value, banks could not meet the obligation to redeem deposits. Investors lost the capital that they had committed to acquire bank shares. Partially paid-in capital for subscribed shares was a common arrangement that affected bank safety and the extent of investors' losses.[12] To prevent failure, banks called in additional portions of the unpaid capital subscriptions from their shareholders. The success of capital calls depended on the perceived viability of the bank and the ability of shareholders to meet their capital obligations.[13]

Failed banks used a variety of mechanisms to close their business obligations. Some unscrupulous banks, usually founded with purely speculative motives, simply defaulted on their obligations and did not redeem deposits.[14] One possible case resulted in the forced liquidation of remaining assets of the Banco de Crédito Commercial.[15] More often, extended families and groups of close associates had combined their capital to establish organizations in order to take advantage of investment opportunities and to attract still further resources from depositors, perhaps to capitalize new business ventures, as well as to speculate in foreign exchange and corporate securities. Built upon the combined resources of family and social groups, these banks were less inclined to unscrupulous activity and more concerned with minimizing their losses while maintaining their social and commercial reputations. Simultaneously meeting their legal obligations and failing, banks had two avenues they could pursue. They could liquidate their investments to the extent possible, use capital to redeem deposits, and sell any remaining illiquid assets to the Banco da República.[16] Alternatively, stronger private organizations could acquire failing ones.

The major regulatory change affecting the businesses of banks following the Encilhamento's crack was that, from 1893, foreign exchange trading by banks (other than the Banco da República) that did not support underlying business transactions was illegal. Brokers on the securities exchange successfully interpreted the law regulating their activities to impede banks from engaging in speculative foreign exchange transactions.[17] This regulation was a clear response to the Encilhamento. Many believed its severest effects to have been speculative frenzy that depreciated the mil-réis through excessive currency speculation.[18] The regulation did not prohibit licensed brokers on the securities exchange from trading currencies.[19]

Banks received no ongoing support from the Treasury during the years that it attempted monetary orthodoxy subsequent to the crack of the Encilhamento.[20] Deflation served to keep the volume of money, and therefore bank deposits, low. Surviving banks operated at a low level of activity and within very narrow confines. With coffee prices in secular decline (Table A.10), however, the demand for banking in support of either international trade transactions or domestic endeavor was also low. The economic activities that might have required banking were, themselves, in long-term decline. While banks remained in a weakened position, the Funding Loan of 1898 triggered the second round of deflation. The Treasury, under the Ministry of Joaquim Murtinho, assumed strong antiprotectionist positions.[21] Formulating policy based, in part, on the conviction that banking should rely on a "real bills doctrine" that supported existing economic activity,[22] the Treasury was sympathetic to maintaining a weak banking system at this time and was not inclined to help banks survive further pressure. These became the most sustained and effective deflationary policies for the duration of the Republic.

The Banco da República (and Banco Hypothecário[23]) failed in 1900, as an immediate result of one of the periodic foreign exchange speculation crises that Brazil had suffered throughout the second half of the nineteenth century. The bank had been in increasing difficulty for about eight months prior to the Treasury assuming control of it, and supplemental funding advanced from the Treasury postponed the bank's closing for four months.[24] Analysts have attributed the failure of the Banco da República to either a lack of liquidity during the foreign exchange crisis, or the withdrawal of Treasury support during the crisis.[25] Both conclusions can be supported in limited senses. A shortage of immediately available cash was the event that triggered the failure.[26] The refusal of the Treasury to increase its special funding of the bank determined the timing of the failure. In the political efforts of assigning responsibility for the failure, supporters of the bank noted that it had purchased large volumes of federal apólices in the past, leaving it with an inflated balance sheet that had served the Treasury's financing needs, rather than the bank's interests.[27]

Beyond the immediate crisis, the detritus of the Encilhamento left many banks holding in their portfolios worthless loans to, and the shares and debentures of, failed enterprises.[28] The Banco da República held assets from the time of its formation that had declined substantially in market value during the eight years since the Encilhamento.[29] These were the remaining assets of the two original banks that had merged in 1892 and those acquired from other failing banks in the early 1890s. The Banco da República held these investments because they could not sell them.[30] A substantive weakness of accounting practice accentuated the 1900 crisis. The bank's balance sheet reported all assets at their original (par) value and did not restate them to reflect changes in their value in the current market. This practice masked the significant decline in the value of the assets that the bank had owned since the 1890s. As a result, its financial statements substantially overstated the value of the bank's assets. In the face of rapidly deteriorating currency values, the bank could not liquidate its assets for amounts approximating their stated value in order to meet its obligations. At the time that the Banco da República closed, the market value of major categories of the bank's assets was only slightly more than half of their stated value.[31] The Board of Directors represented to its shareholders that these assets were a major factor in the failure.[32] Sustained Treasury support could have continued to mask this problem. However, the prevailing orthodox and antiprotectionist ideology of policy makers and the perceptions of capital markets mitigated against such support. In the ensuing failure, the Treasury assumed administrative control of the bank and disbanded its commercial operations for approximately five years.[33]



By 1903, with severe inconvenience to its commercial transactions, the business community had begun to anticipate a new banking system.[34] Ideas for the restructuring of banking arose in conjunction with concerns about the effects of credit shortages and problems encountered by coffee producers:

> Some proclaim the re-creation of banks in new form, supported by large official favor, that furnish abundant resources, others want indirect support, such as tax exemptions and rate reductions for railroads, other services, and goods necessary for farming. The coffee planter complains of the lack of credit and monetary resources . . .[35]

The more flexible orientation of Treasury Minister Leopoldo de Bulhões supported the more expansive commercial community. He identified a need for a "central bank" that would rediscount the notes of other banks in order to improve the circulation of resources through the economy and to meet the needs of economic agents while avoiding the conditions of the 1890s.[36] Without following a directly expansionary monetary policy to subsidize its constituency of coffee planters in São Paulo, the presidential administration of Campos Sales,[37] with Bulhões, put in place a policy that maintained monetary orthodoxy, while providing for the rejuvenation of financial flows and private banking facilities. Attempts to arrange for coffee valorization highlighted the need for an organization with resources greater than existing banks in order to place the notes that the price-support program would issue. Restructuring the Banco da República offered a solution to the note-circulation challenge of the coffee valorization program as well as the administrative problems of implementing the gold standard (in the Conversion Office). It established the basis for restructuring private-sector banking. Ambitious plans for a new organization to contribute to stable financial markets and serve as a central bank indicated a role for the emerging bank larger than administering foreign exchange transactions and coffee notes.[38]

At the time of the reorganization, the nominal value of capital invested in the banking system had fallen to one-ninth its peak level in 1891.[39]

## *THE EMERGENCE OF MODERN BANKING*

The monetary reforms of 1905 encouraged the emergence of the banking system after the financial chaos and the slow recovery that characterized the first sixteen years of the Republic. The establishment of the (fourth) Banco do Brasil supported the development of banks' businesses in a dynamic and logical manner. For the first time, a system began to coalesce in which relationships among banks, and between banks and other economic agents, experienced self-sustaining growth. The increased importance of banking in the money supply clearly identified this turnaround, initiating a dynamic banking system (Figure 3.3). Although indications arose of structural characteristics that sometimes weakened the long-term effectiveness of the system, banking proceeded successfully by historical standards. The business structure of banks also needed to evolve to sustain the potential of the restructuring.

The construction of a responsive banking system was slow and difficult; in many ways, it did not completely succeed. Certainly, complaints about the inadequacy and conservatism of banking came from a wide range of economic interest groups, and they did not stop throughout the period. In 1917, the *Retrospecto Comercial* (which usually articulated mercantile interests) complained that "[i]n matters of banking organization, it is incontestable that our situation compares unfavorably to that of neighboring countries. In Brazil, agricultural credit does not exist, notwithstanding the irony of being primarily an agricultural country."[40] In 1923, Treasury Minister Sampaio Vidal, while promoting further reform to open a central bank facility and reintroducing restrictive monetary policy, emphasized, "What most impresses those who study the financial situation of Brazil is the malfunctioning of its financial machinery. Our financial organization leaves much to be desired . . ."[41] And, as late as 1930, Roberto Simonsen, Brazil's most influential industrialist, both echoed complaints from the late nineteenth century and anticipated those later in the twentieth:



> [W]e do not have stable or elastic money. We do not have an efficient organization of credit . . . So, how can we create the productive apparatus to augment Brazilian acquisitive capacity when the monetary disorder and credit shortages create anarchy for production . . . ?
>
> We do not have sufficient circulating [working] capital, which our improvidence and the permanent cycles of successive inflations and deflations that we have lived with have destroyed.[42]

Even accepting these complaints, the transitions during the early twentieth century were significant. The change in banking did not occur suddenly in 1905 and 1906. Rather, the banks that survived the crises of the 1890s and 1900 were the ones that had, or adopted, both responsive and cautious portfolios. As new banks incorporated, they embraced similar practices. The structure of the banking system that emerged and its evolution for the remaining twenty-five years of the First Republic demonstrated that, although uneven, difficult, and contentious, by 1930, a relatively stable banking system began to serve the Brazilian economy.

For domestic banking, the opening of the Banco do Brasil in December 1905 marked the significant change of the 1905-06 financial restructuring. The size and special functions of the Banco do Brasil became central to shaping the banking system. Enhancing the State's financial interests (in particular, to maintain stable exchange rates) and providing a financial agent to execute the Treasury's business transactions motivated the resurrection of the failed Banco da República into the Banco do Brasil. The bank also quickly became the largest bank serving the private business community, while it simultaneously served as a "national" bank by implementing monetary policy and opening a national network. The structure and role of the Banco do Brasil enhanced institutional stability and provided a model for the operations of the entire banking system.

Private-sector banking also became more dynamic and responsive to economic change. To many, its progress was one component of the widespread modernization that was improving Brazil: "One of the large indices of the modernization of our commercial practices is the expansion of banking."[43] Progress, modernization, and growth took place within narrowly defined constraints; prudence and conservatism accompanied dynamism. Bankers engaged in more constricted activities than they had prior to the two decades of crisis. Organizations limited their activities to commercial banking and left merchant (or investment) banking to private, unchartered parties.[44] Practices that had been common at the beginning of the Republic had been abandoned as they proved unsound or as regulation required. In particular, banks no longer issued notes on their own creditworthiness, arbitraged foreign exchange, or undertook unsubsidized and unfunded long-term investment. For the banks entirely in the domain of the private sector, these constraints remained firmly in place through the last twenty-five years of the First Republic.

The prohibition against long-term investment was the most fundamental constraint on the banking business that resulted from the financial crises of the 1890s.[45] Their experiences in these years reinforced bankers' well-established aversion to long-term credit.[46] By 1906, renovated operating statutes codified banks' prior reluctance to extend credit on a long-term basis, typically establishing six months as the maximum duration for loans and four months for discounted notes.[47] However, the practice of continually renewing credit as it matured could effectively transform short-term instruments into long-term investments, while maintaining some flexibility for the bank.[48] Because banks reevaluated credit at each renewal (reflecting current market value at the time of renewal), they were able to minimize the accounting problem of reflecting the current market value of its business on its balance sheets. Bankers' knowledge of the current real value of their business reflected a more fundamental benefit of short-term lending. They retained the option to change the allocation of their assets according to prevailing conditions (or any criteria they chose). Bank statutes also now routinely prohibited banks from purchasing the stocks or debentures of business concerns, as a new and strong limitation on the long-term commitment of resources. The conservative response of adopting strict commercial banking constraints against holding such securities prohibited banks from directly investing in productive enterprises.

Their specific business concerns justified banks' prohibitions against long-term investments. However, bankers also responded to pressure imposed by the Banco do Brasil. The bank's short-term orientation was explicit; its statutes prohibited it from accepting long-term notes from other banks.[49] As a result, banks required short-term notes in order to take advantage of the Banco do Brasil's facilities. With the Banco do Brasil serving as *de facto* central banker, other organizations could only rediscount the notes structured to conform with the bank's short-term orientation. The incentive to manage their portfolios by selling notes to the Banco do Brasil diminished the willingness of banks to accept long-term credit exposure. The organizers of the Banco do Brasil and private-sector bankers clearly understood the inhibition this constraint created on long-term credit. Indeed, it was one of the goals of the Treasury to structure a short-term commercial banking system: "The regulatory action of our new credit institution will not be felt only in the exchange market, but equally and with extraordinary result in the market for discounted bills."[50]



The other significant business constraint, restrictions against foreign exchange trading from 1893, remained a constant source of tension between bankers and securities brokers and between domestic and foreign bankers. In addition to concentrating the foreign exchange business with brokers on the Bolsa de Valores and the Banco do Brasil (in transactions for the Treasury, primarily to manage the exchange rate), it created a division between foreign and domestic banks. Foreign banks could, and actively did, engage in currency trading (including obviously speculative trading for their own profits or losses). Their businesses in Brazil were directly tied to the international trading activities of merchants of their home nationalities. Thus foreign banks routinely had commercial transactions that underpinned currency trades, and regulators could not distinguish the nature of specific currency exchanges. Further, regulating currency trading of foreign organizations was simply not feasible, since the banks could conduct foreign exchange transactions in their country of origin, rather than in Brazil. In particular, British banks actively arbitraged differentials in currency values between the London and Brazilian exchange markets with continual trading.[51] They routinely earned a sizable portion of their revenues through currency trading.[52]

Foreign banks were among the major dissidents to protest the monopoly that the newly chartered Banco do Brasil had on conducting the foreign exchange transactions for the Treasury, despite capabilities more expansive than their local counterparts.[53] This monopoly was also an important component of federal monetary policy, since it was the mechanism by which the Treasury managed the value of the mil-réis foreign exchange markets (when policy mandated). The function was sufficiently important that the bank's director of foreign exchange remained an appointee of the president of Brazil.[54] Substantial currency transactions to manage the exchange rate and to effect international debt payments and state-subsidized trade translated this privilege into a profitable business for the bank.[55] By regulating foreign exchange transactions, the Banco do Brasil had a large protected monopoly. Other financial intermediaries could invoke their ongoing business to engage in currency trading. Only domestic banks were prohibited from a type of business that proved profitable to its competitors.

The constraints against long-term investment, foreign currency transactions, and issuing debt to raise funds for extending credit left banks with a narrowly defined range of business transactions. Banks financed commercial transactions undertaken by merchants, extended short-term loans that could be plentifully protected with secure collateral or personal wealth, and often bought and sold ("rediscounted") among themselves credit extended to commercial borrowers.[56] Many large and prominent borrowers did not appreciate this conservatism. Roberto Simonsen's complaint, quoted above, about banks' rigorous commitment to short-term credit based on deposit taking reflected this sentiment.[57]

From the perspective of the banks, however, the narrowed and better-defined focus of business was attractive.[58] Commercial banks responded to their economic environment and constraints in constructive manners. The conservatism of banking from 1905 enhanced its stability and allowed its growth. Bankers and regulators remained sensitive to their earlier experience with massive and disruptive failures. The changes in the business of banking after the 1890s responded to the perceived sources of inordinate risk that had contributed to the instability and losses during the monarchy and the early years of the Republic.

## *THE COMPOSITION OF THE BANKING SYSTEM FROM 1906*

Its increased conservatism, maturity, and intricately interrelated public and private business structure became obvious in the banking system's financial characteristics after 1905. Banks varied widely in their business structures, reflecting the peculiarities of each organization and of local markets. However, their aggregate financial structure reflected the development of banks into a cohesive banking system. The characteristics of broadly defined categories of banks revealed consistent patterns. Ownership status most usefully categorized banks for these purposes: privately owned banks of domestic and foreign ownership,[59] banks subsidized and accorded privileges by state governments,[60] and the Banco do Brasil. Aggregating the financial data of individual banks into these groups illustrates the evolution of the banking system through patterns of concentration, growth, liquidity, and interest rates.

### *Participation and Concentration*

Increasing stability supported the gradual opening of new privately owned banks. They opened in a fairly smooth progression, with at least ten domestic and nine foreign entrants into the formal banking system between 1906 and the end of the Republic in 1930. As a result, the sector became progressively less concentrated. An index of market concentration,[61] based on deposits, reveals that the increasing dispersion of banking activity was most marked among privately owned domestic banks (Figure 4.1). For these organizations, declining concentration occurred fairly steadily from 1908, after the consolidation of banking reforms, through the remainder of the First Republic.[62] For the entire banking system, the reversal of monetary policy and expansion of public-sector banking resulted in the sharp disruption of the early 1920s. Not only did concentration decline, but the identity of the five largest banks (excluding the Banco do Brasil) changed regularly, signifying an emerging dynamism among organizations (Table A.7).

With its opening, the Banco do Brasil quickly became the largest bank serving the private sector of the economy. After its first year, it held more than 10 percent of the banking system's deposits (from the private sector); during the years when the Rediscount Office was open, the bank's market share reached one-third (Table A.6). Along with structural reforms to address concerns about previous weaknesses and failure, both the Treasury and the bank strongly highlighted the importance of the revamped organization in order to establish its credibility in the financial community.[63] The federally financed policies that affected the availability of credit at the Banco do Brasil encouraged many business endeavors of substantial size to use the bank as their financial intermediary. Its geographic scope and size allowed for a range and volume of transactions that exceeded other organizations.[64] However, its market position was not an aspect of its business upon which the Banco do Brasil could rely. The bank was usually—but not always—the largest holder of private deposits. For example, in 1918 and 1919, it ranked second in size of deposit base after a major organization for trade finance and immigrant remittances, the Banco Nacional Ultramarino. The combined share of deposits in the five largest banks other than the Banco do Brasil fluctuated inversely with the share of deposits held by the bank.[65] Other large banks offset the Banco do Brasil's counter-cyclical policies with significant results for both mitigating monetary policy and tempering the bank's position in the commercial community.

The last twenty-five years of the Republic also saw a significant change in the composition of foreign banking. The commercial banking businesses operated by foreign and Brazilian organizations were very similar in nature, and they responded to similar dynamics. Nevertheless, the share of total deposits in foreign banks declined from 30 percent in 1907 to 19 percent in 1930[66] (Table A.6). The indigenization of banking occurred exclusively in the growth of public-sector banks, the Banco do Brasil, and the state-subsidized organizations. Foreign banks retained their overall share of private-sector deposits, with 37 percent in 1907 and 39 percent in 1930.[67] This apparent stability masks an important shift among foreign banks.

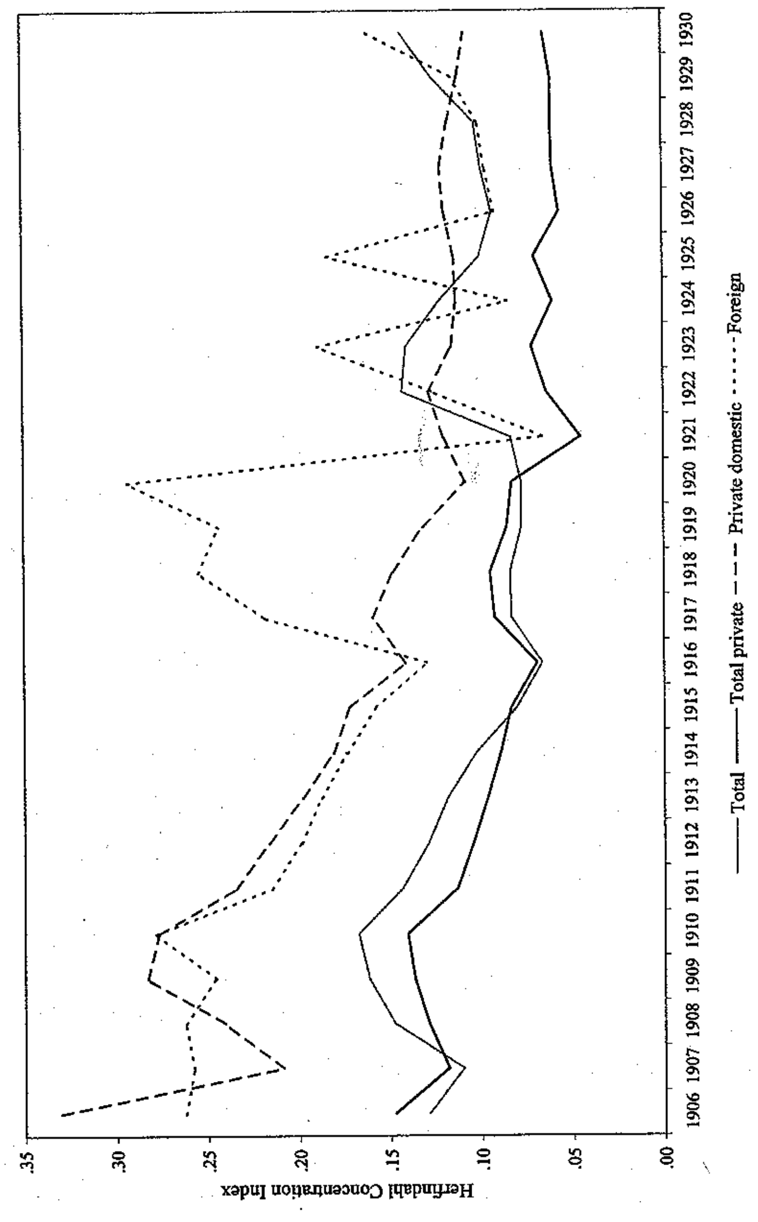


*Figure 4.1* Market Concentration Index



British organizations lost their predominant position, with their market share declining by about half over these years. The changing market share reflected specific organizational dynamics.[68] By the early 1930s, the Bank of London and South America (the major British bank) assessed its weakening position in the Brazilian market and emphasized a need to shift its business focus to offering local credit and lessening its reliance on foreign exchange transactions.[69] The shift in the composition of the foreign banking community reflected the increasing ease and interest with which these organizations could do business in Brazil.

*Growth*

After the earlier years of stagnation, the restructured banking system quickly realized very rapid growth. In 1930, the banking system was about thirteen times the size it had been in 1906, measured by real (price-adjusted) deposits (Figure 4.2 and Table A.11). Organizations receiving public sector support—the Banco do Brasil and state-subsidized banks—fueled the expansion at rates greatly in excess of the private-sector organizations (Table 4.1).

The periods of exceptional growth for the Banco do Brasil's private-sector deposits—its early "start-up" years prior to World War I and the expansionary period from 1921 to 1923, when the Treasury funded large rediscount operations—paralleled federal monetary policy. Monetary policy and Treasury action motivated the bank's growth during both periods. Among private organizations, quite different dynamics characterized each of these periods. During the first period, until 1912, policies that simultaneously stabilized the value of the mil-réis and promoted domestic expansion also supported strong growth among all components of the banking system. In contrast, from 1921 to 1923, the Banco do Brasil's growth, rooted in its rediscounting function, resulted in a shift toward the bank and away from other organizations, rather than overall growth. During the course of 1921 both private domestic and state-subsidized banks contracted their real (price-adjusted) deposit bases, while the Banco do Brasil's nearly doubled. (Table A.2 shows the annual growth indices depicted in Figure 4.2.)

The exponential increase of state-subsidized banks after 1926 was the result of an injection of capital and assumption of ownership by its state government in the Banco do Estado de São Paulo (Banespa). Although the political economy of this move was important (and it is explored in Chapter 7), Figure 4.2 demonstrates that its short-term impact on overall growth remained relatively small. Beyond the strong shift that this event generated,

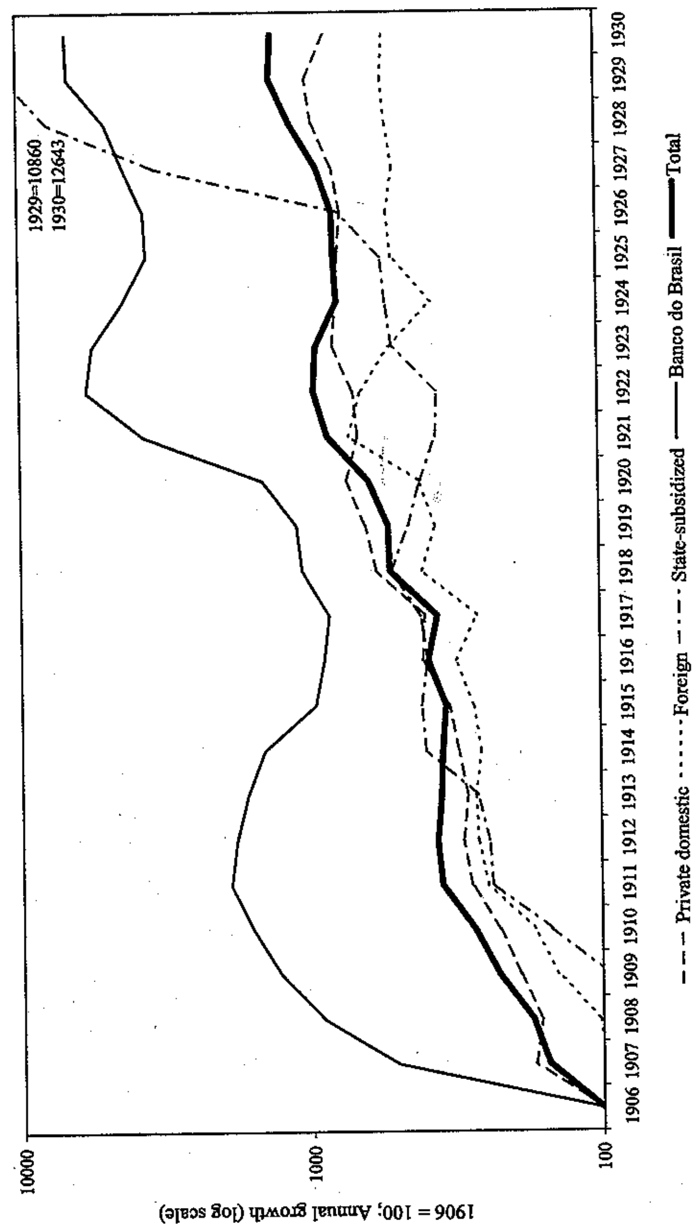


*Figure 4.2* Deposit Growth Index, by Type of Bank (1906 = 100)



the state-subsidized banks tended to grow in a pattern that countered the growth of privately owned organizations. The dichotomized growth rates between public and private organizations clearly demonstrated the beginning of the similarly bifurcated banking system.

Privately owned domestic banks grew at significantly lower rates than the public-sector-related organizations. Nevertheless, they still experienced average, price-adjusted growth of almost 9 percent per year for the entire twenty-five years. In 1930, domestic banks' real deposits had increased eight and a half times from their 1906 base; foreign banks had grown almost five-fold (on a price-adjusted basis). By contrast, according to the best measures available, the real national product increased at a rate of about 4.8 percent annually for the same period; so that, by 1930, the economy was only about two and a half times its size in 1906 (Table A.10). The privately owned banks experienced significantly smoother growth than did the public-sector organizations (as evidenced visually in Figure 4.2 and by their lower standard deviation of the annual growth rates in Table 4.1). The banking system advanced consistently in its importance in the economy with its high and fairly steady growth. Nevertheless, at the end of the 1920s, the recapitalization of Banespa and the counter-cyclical actions of the Banco do Brasil with the onset of the Depression resulted in a strong shift of source of growth toward the public-sector organizations.

### *Liquidity and Leverage*

While the banking system was expanding rapidly, its overall business structure reflected enhanced stability and confidence, simultaneously with conservative attitudes toward risk. One of the most consistent indicators of

**Table 4.1 1906-1930 Deposit Growth Experience**

| *Type of bank:* | *Annual growth* (*% per annum*) | *Standard deviation* |
|---|---|---|
| Private domestic | 8.9 | 14.8 |
| Foreign | 7.0 | 20.7 |
| State-subsidized | 20.2 | 35.2 |
| Banco do Brasil | 17.5 | 41.2 |
| Average of total banking system | 10.7 | 14.7 |
| Total production | 4.0 | 4.5 |

**Source:** Derived from Tables A.2 and A.11.
**Note:** Growth rates based on real, price-adjusted annual average deposits.

banks' increased stability through the period was declining liquidity, as measured by the reserve ratio (of cash as a proportion of deposits, Figure 4.3 and Table A.1). Safely declining reserves indicated that banks could allocate an increasing proportion of their funds to productive and profitable lending, rather than holding cash in reserve, without jeopardizing their ability to redeem deposits. As important, depositors did not perceive an increased risk to their deposits. This trend clearly signified both improved risk management on the part of banks and the increasing confidence of the public. Contemporary concern and existing historiography have emphasized the high levels of cash held by banks and their constraint to credit availability,[70] despite the sustained declining trend of the reserve ratio. Measured by late-twentieth-century standards, banks did hold high levels of cash. However, assessed against the perception of a liquidity crisis as the cause of banking failures from 1900 to 1905, and thin capital markets at the time, it is possible to conclude that the banks were behaving in a manner that was rational for them and for the economy.[71]

The reserve ratio history yields three significant findings. First, in the aggregate, between 1906 and 1930, reserve ratios increased only during three short periods, when economic contraction magnified the risk attendant to banking. The economic contractions that severely constrained private productive activities—in 1914, 1920, and 1927 to 1929—quickly caused banks to increase cash balances relative to their deposits. These respective contractions were due to the decline of international trade at the beginning of World War I, the collapse of international commodities markets in 1920, and the severe domestic recession that preceded the 1929 global depression. During these periods, rapid declines in economic activity severely limited investment opportunities for banks.[72] However, each contraction saw a successively smaller increase in the reserve ratios; after these periods, reserve ratios immediately fell below the levels preceding the contractions.

The reserve ratio history's second important finding is the similarity in the experience of foreign and domestic privately owned banks.[73] During World War I, the liquidity of foreign banks increased more sharply than did that of domestic banks, in reaction to European capital controls and the freezing of German assets imposed by the Brazilian government. More important, foreign bank liquidity increased again during 1921 and 1922, the years that the Rediscount Office was in operation. Because their capital resided in their home countries, foreign banks did not meet the capital requirements to access the Rediscount Office. The rapid deterioration of the exchange rate (from 9.72 pence/mil-réis to 6.28 pence/mil-réis



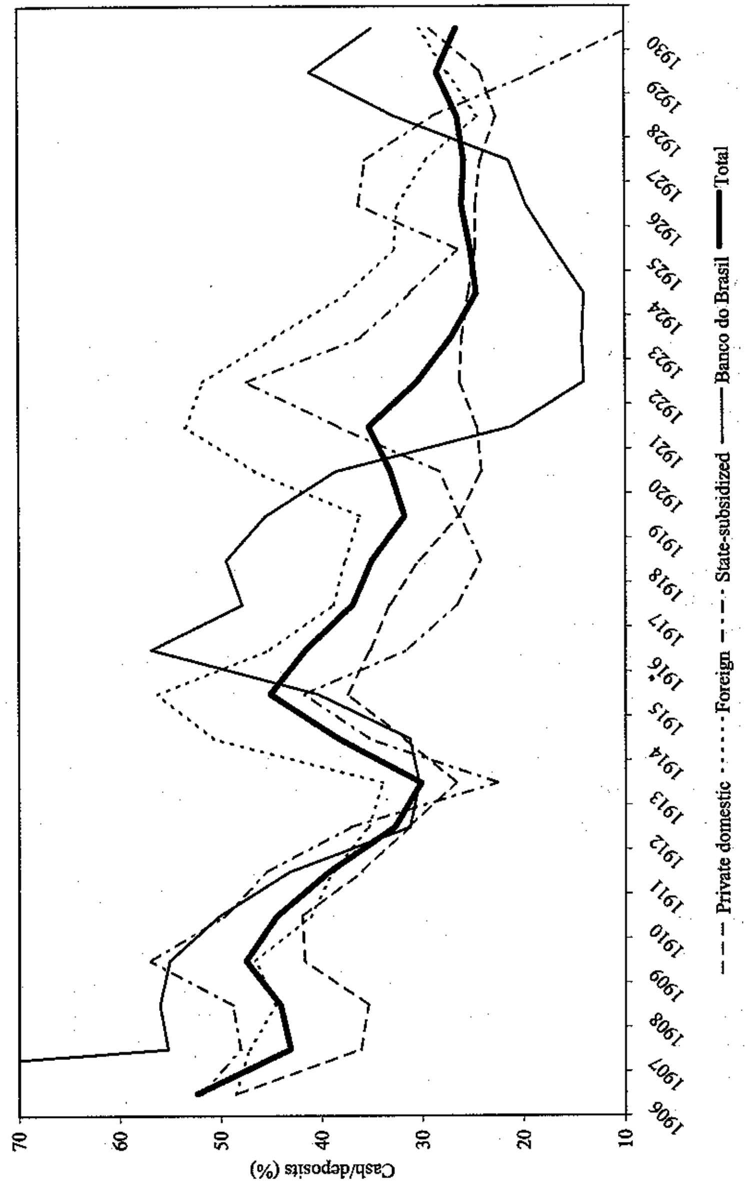


*Figure 4.3* Reserve Ratio, by Type of Bank

between January 1921 and December 1923[74]) also decreased the value of profits, denominated in the home currency. These two periods interrupted the longer trend only briefly. The persistent, though declining, increment of the average foreign bank reserve ratio served to offset the risks that foreigners often felt they incurred by undertaking operations in an unfamiliar legal, business, and cultural environment. However, the similarity of the trend testifies that the ongoing business activities and concerns of foreign banks, in taking deposits and extending credit, did not differ fundamentally from their domestic counterparts.

Third, despite espousing the expansion of private-sector credit and declining liquidity as rhetorical goals of the Rediscount Office,[75] the privately owned banks grew (in real terms) only slightly during these years (1921-23). During the first year of the office's activities, their reserve ratios actually increased. In order to use the rediscount facility, banks shifted the type of credit they extended from loans to discounts, and they decreased their liquidity very slightly, as demonstrated by increased reserve ratios (Table A.1).[76] This experience suggests a conclusion that countered one aspect of the policy's rhetoric. The funding was a move to finance State expenditure. Banks' balance sheets reflected behavior that was decreasingly responsive to policy through the remainder of the 1920s.

Just as the Rediscount Office had stronger effects on price levels and financing federal expenses than it did on domestic banking, the closing of the office in 1923 and the official designation of the Banco do Brasil as the "Central Bank" had little immediate impact for banks. As a mixed public- and private-sector organization, the Banco do Brasil was able to circumvent Treasury controls rather easily in 1923-24.[77] Then in 1927, without direct public-sector responsibilities, the Banco do Brasil's reserve ratio increased and quickly became among the highest in the system. At the same time, other banks decreased their reserves. The shift was also in opposition to expectations generated by the return to more expansive monetary policy. Without financial support from the Treasury, the Banco do Brasil became even more conservative than its smaller competitors.

The secular decline of cash holdings, relative to the volume of deposits, was not a reflection of relatively more aggressive credit policies by the banking system. The conservative attitude that banks displayed in their insistence on short-term credit exposure mirrored their approach to creating credit. Banks in many economies commonly leverage their liabilities in order to create credit. That is, banks can extend credit to an amount in excess of their deposits, on the presumption that they could meet their responsibility to redeem their liabilities while maintaining lower amounts in reserve for potential losses.[78] During the last twenty-five years of the First Republic, banks did not aggressively expand their liabilities in order to create credit. Bankers could have chosen to increase credit by aggressively soliciting deposits or by extending the risk to which they submitted their capital.[79] Instead, banks lent only against their deposit bases. The relatively steady and low leverage experience of the private-sector banks reinforces the suggestion of Chapter 3 that they actively served as note-distribution agents for the Treasury during periods of expansive domestic monetary policy.



Indicating their conservative credit practices, the ratio of short-term credit to deposits remained fairly steady, and close to 100 percent, for the entire period (Figure 4.4). The two brief periods when short-term credit reached beyond 105 percent of deposits were from 1913 to 1914 and again in 1924. Both were periods of contraction in banking and in the economy, following periods of strong growth, discussed above. The banks with public-sector orientation led the leverage experience during these years. Counter-cyclical lending of the Banco do Brasil or the state-subsidized banks partially offset the contractionary economic periods. Monetary policy discouraged banks from expanding their credit during either contractionary period. Especially in 1924, the Treasury worked hard to induce a contraction of the money supply (and therefore of deposits).[80] Further, at these times, bank deposits in private organizations could decline more rapidly than credit, reflecting the banks' inability to reduce credit as rapidly as depositors withdrew their funds.[81] Nevertheless, the stability and non-expansive relationship between bank credit and deposits among privately owned organizations through expansive periods as well as contractions suggests that either the demand for, or the structural conditions to support, more expansive and risky lending did not exist. An alternative perspective could emphasize, however, that the volume of credit increased at about the same—substantial—rate as deposits. Therefore, although it did not create incremental financial resources by leveraging deposits, the banking system executed an increasing share of the transactions undertaken by the economy and actively managed its risk exposure.

*Cost of Money—Interest Rates*

One succinct indication of a dynamic and increasingly responsive banking system would be found in the trend of the cost of money—interest rates. Banking theory expects that, abstracting from the short-term fluctuations of economic cycles, as banking becomes more efficient at attracting and allocating funds and managing risk, and as banks become more competi-

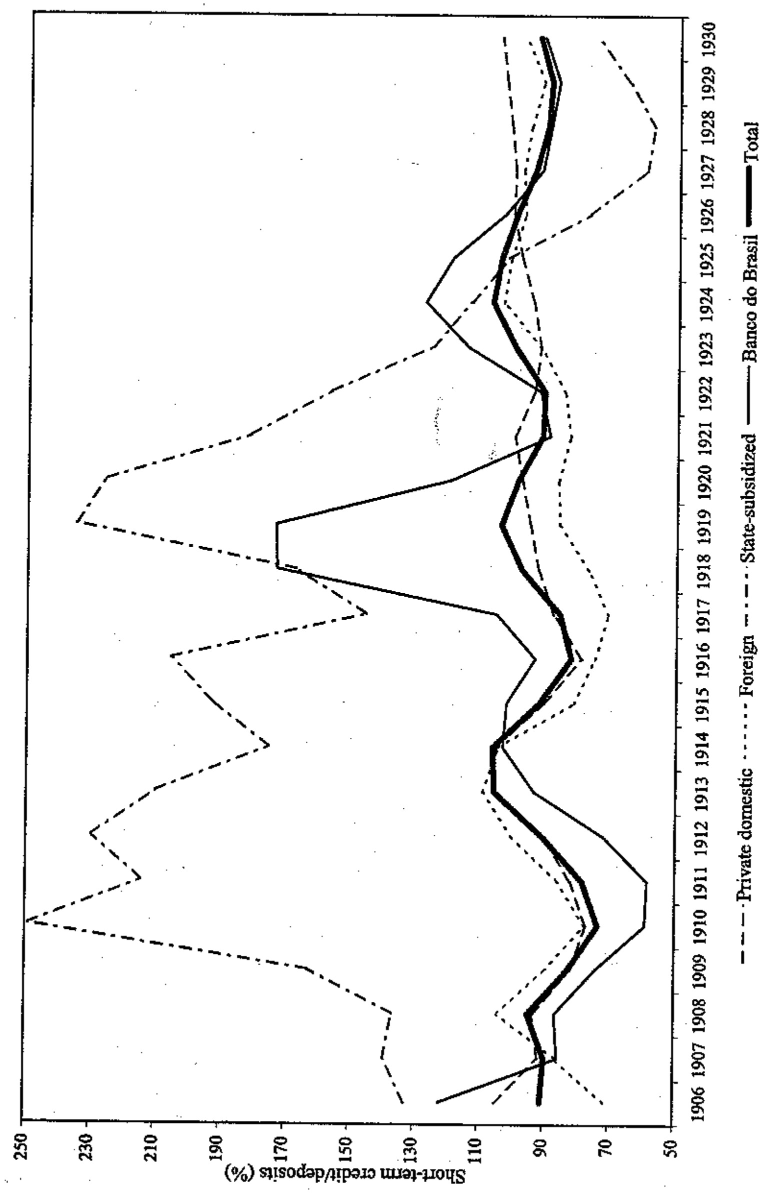


*Figure 4.4* Short-term Credit to Deposits Ratio, by Type of Bank



tive among themselves, the interest rates they charge on credit should decline. In the absence of a direct measure of interest rates that banks charged on loans, a proxy rate, based on the net profitability of banks' earning assets, traces the average return on bank investments. This proxy interest rate assesses the perspective of banks, rather than the cost of credit incurred by their borrowers.[82] These data also include only a subset of banks from the entire sample; complete data are available for the private domestic banks in Rio de Janeiro and São Paulo, the state-subsidized banks, and the Banco do Brasil. (Details and a discussion of constraints on the data and the measure of the proxy interest rate are in the Data Appendix.) Figure 4.5 presents the trend of proxy interest rates for private domestic and state-subsidized banks, as well as the Banco do Brasil, from 1906 to 1930. The data and methodological constraints of these trends suggest caution. Nevertheless, their results are unambiguous.

Proxy interest rates varied for each type of bank. Their relative ordering conformed with expectations. With only short exceptions, the private domestic banks extended credit more profitably than did others. Investors with solely private-sector interests required higher returns than would be acceptable for organizations with public mandates and subsidies and with goals additional to profitability. From 1906 until 1918, the private domestic banks also experienced higher degrees of fluctuation. The secular decline of proxy interest rates at both the privately owned domestic banks and the Banco do Brasil were firmly entrenched by the 1920s. These results should be representative of the entire banking system. From its reopening, the private domestic organizations and the Banco do Brasil never accounted for less than half of the banking system. Their combined market share usually ranged between 65 percent and 75 percent of the entire system (Table A.6).[83] The sharp and apparently permanent decline in the rates that privately owned domestic banks earned from the mid-1910s offered the most dramatic evidence of the successful banking development, from the perspective of nonbank economic agents (if not from the perspective of diminished bank returns, Figure 4.5). Strong cyclical fluctuation did not interrupt the trend of declining interest rates for the private domestic banks and the Banco do Brasil, as the correlation coefficients of the proxy interest rates with an index of time demonstrate (Table 4.2). These results reflect a system of increasing volume and maturity that eased the flow of money from its sources of supply to uses of greater productivity and security.

The tumultuous credit and money circumstances of World War I that had prompted reversals of monetary policy also generated the very sharp

*Figure 4.5* Proxy Interest Rates; Net Profitability Rates, based on Earning Assets (Annualized), by Type of Bank

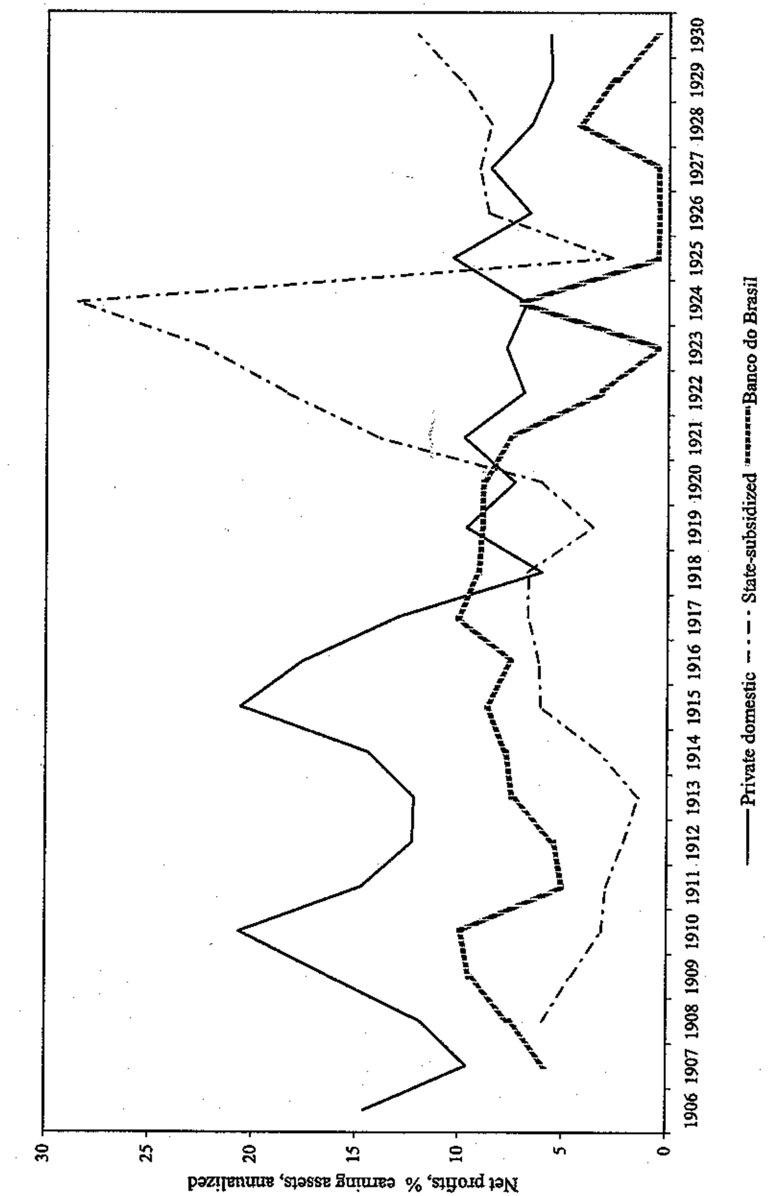




**Table 4.2 Bi-variate Correlation Coefficient**

| *Proxy interest rates of:* | *Time correlation with* |
|---|---|
| Private domestic banks | -.70** |
| State-subsidized banks | .51* |
| Banco do Brasil | -.66** |

**Source:** Derived from Table A.5.
**Notes:** Time is a trend variable, with its value set equal to the entry number of the observation. Correlation (2-tailed) is significant at:
** 1% level.
* 5% level.

turnaround of declining private-bank interest rates from 1914. The increased risk premium on sovereign debt and the plummeting exchange rate due to shocks in international capital and money markets at the beginning of World War I (as examined in Chapter 3) were transmitted to domestic money markets through interest rates in the banking system. Anecdotal evidence and contemporary complaints of diminished credit availability were other expressions of this experience.[84] This disruption of the longer-term rate decline was short-lived. The lower interest rate scenario returned by 1917, as both monetary and bank credit policies adjusted to the sharp change in financial circumstance.

Rates also reversed their pattern of fluctuation simultaneously with their sharp declines from the mid-1910s. The rate trends at domestically owned private banks became more stable, while fluctuations increased at the Banco do Brasil. Proxy interest rates at the Banco do Brasil in the 1920s directly mirrored its role in monetary policy. Rates fell dramatically during domestic monetary expansion, with only short increases during the 1924 attempt to induce contraction and when the bank was without any formal or informal monetary responsibility in 1927-28. As monetary policy more aggressively pursued domestic monetary expansion, the effects of economic fluctuation shifted from the domestic financial system to exchange rates and capital flows. Given such dramatic monetary changes through the 1920s as the Rediscount and Stabilization Offices, the comparatively small changes in proxy interest rates for domestically owned private banks signified their emerging stability. A combination of increasingly dynamic competition among the private banks and the post-World War I trend of expansive monetary policy resulted in lower proxy interest rates.[85]

The extreme fluctuations of interest rates for the state-subsidized banks resulted from the aggressive expansion of public-sector banking among states, as explored in Chapter 7. The increased rates of state-subsidized banks and the apparent inverse relation between these organizations and the Treasury-supported Banco do Brasil will provide much of the evidence for that argument. However, these two state-subsidized banks only accounted for 1-2 percent of the banking system prior to 1926. Their small size constrained their impact on the average cost of credit.

The Banco do Brasil's impressive set of privileges and responsibilities gave the bank a role that transcended its private-sector credit and deposit-taking activities and was at odds with the profit-maximizing and risk-minimizing goals of (at least some) shareholders. From its beginning, its public and private orientations conflicted with the bank's commercial operations, as interest rates lower than those of the private banks demonstrated. The experience of the Rediscount Office made this most evident. Although the funding and the financial management of the Rediscount Office were separate from the bank's commercial activities, the separation was never complete. In June 1921, the president of the Banco do Brasil, José Maria Whitaker, negotiated directly with the president of Brazil, Epitácio Pessoa, in an unsuccessful attempt to reverse a reduction in the rediscount rate from 6 percent to 5 percent. The interest rate that banks paid to attract (interest-bearing) deposits ranged from 3 percent to 6 percent at the time.[86] The bank argued for the higher discount rate in order to protect shareholder interests and to maintain a positive differential between the rediscount and deposit rates. Although the deposit and rediscount rates were separate decisions, the bank had difficulty accepting a situation in which it was lending funds (through its rediscounting) at rates lower than it acquired funds from public sources. Other banks, its competitors in commercial markets, could raise funds by borrowing money from the Banco do Brasil at lower rates than they paid to depositors. In practice, the argument regarding the competitive and economic logic of the rediscount rate simply represented an attempt to enhance the bank's profits from its financing of Treasury operations.[87] Shareholders paid a price for this policy, documented by the very low return on their earning assets.[88] The bank further demonstrated the extent to which its State sponsorship affected its private-sector credit portfolio in 1927, the year after closing its central bank facilities and formal public-sector responsibilities. Immediately, its interest rates increased and the bank was increasingly conservative with increased reserve ratios and declining leverage of its deposit base (Figures 4.3 and 4.4). Its financial structure quickly began to approach those of the private domestic banks when it no longer had either the responsibility or automatic backing of the Treasury. Finally, these trends reversed slightly again at the end of the decade, as the Banco do Brasil took on an informal counter-cyclical role with the onset of the Depression.



## *CONCLUSION*

The banking system in 1930 had little in common with its antecedents at the beginning of the Republic. From 1889 until 1898, uninhibited ambitions for growth, competing economic ideologies, and inexperience with the dynamics of financial markets contributed to financial chaos. The slow and painful reconstruction lasted until 1906. After the Encilhamento, regulation prohibited banks from issuing their own notes and trading in foreign exchange. Markets for long-term investment, either in loans or stocks and debentures, were not liquid. Therefore long-term investment became a risky strategy. Banks adopted conservative business practices both out of prudence and necessity. By the time that Brazil was able to access significant new international loans, valorize coffee, go on the gold standard, and reestablish a national bank, bankers and financial authorities had structured a financial system that was both safe and dynamic.

After its reorganization at the end of 1905, the banking system developed many characteristics of stability and maturity that strengthened through the remainder of the First Republic. The entire banking system grew, while also exhibiting conservatism. The variation in the experiences of different types of banks corresponded with the differences of their ownership structures and economic interests. The types of business transactions in which banks engaged became more strongly focused, as they learned from past problems and as regulation required. Declining returns for lenders (proxy interest rates) indicated the increasing efficiency of money, while still reflecting economic fluctuation and the distinction between public and private in predictable manners. Declining market concentration was another indication of dynamic fluidity among privately owned organizations. Characteristics of dynamism combined with conservative business strategies of banking enterprises resulted in a system that did not experience generalized failure for the remainder of the First Republic, even if it suffered strong fluctuation. These changes also indicated that economic agents increasingly perceived banking as a viable and desirable activity that responded to economic circumstance in manners consistent with their financial structure. This represented a significant improvement from previous bank experiments throughout the nineteenth century.

The results for the banking system corresponded to expectations derived from modern banking theory and the experiences of other economies. Under conditions of general economic growth with reasonably steady monetary policy and a strong international position from 1906 to 1912, a strong system emerged with a stability that continued through the remainder of the First Republic. The financial and economic reversals of World War I encouraged the economy to turn inward, creating domestic financial instruments in the face of closed international markets from 1913–14. Restructuring and accommodation characterized the remainder of the 1910s. During the 1920s, institutional mechanisms more overtly attempted reconciliation between domestic and international financial circumstance. Through these vicissitudes of government intervention, the banking system continued to function, and with increasing success.

Simultaneously with this positive evolution, the banking system demonstrated characteristics that raised questions about its long-term effectiveness and substantiated some of the complaints of contemporaries. Although diminishing, reserve ratios remained high. Combined with the low rate at which banks leveraged deposits into credit, the widely publicized opinion in the commercial community that banks could have been more expansive in creating credit deserves consideration. While the trend was clearly toward increasing expansiveness, bankers also weighted the risk factors very heavily in their lending decisions and in the types of transactions they were willing to undertake.

Further, the relationship between public and private sectors provided one of the strong dynamics for banking. Because of its size and the politicized nature of the federal government's role, the State's use of the banking system through the Banco do Brasil was an active avenue by which it constructed influence in the economy. Its combination of public and private ownership injected an important ambiguity in the definition of "public interest." The opposition between the state-subsidized banks and the Banco do Brasil was evident in the inverse relationships between them with respect to growth, reserves, and interest rates. Additionally, the strong dichotomy of the growth experiences of public- and private-sector banks suggests that a two-tiered banking system began to emerge at the beginning of the twentieth century. This tension between the federal government and individual states in banking developed into a very strong economic and political force through the twentieth century. Incipient evidence of the opposing dynamics became obvious from the earliest days.

These transformations of the banking system did not require any of the fundamental conditions associated with the introduction of the Republic.



However, it is difficult to imagine an environment in which banking could have arisen without the structural economic change that was integral to the Republic. The transition from slave to wage labor, the reconstitution of governing mechanisms, and the vast expansion of the labor force in commodified agriculture and industry created the demand for responsive and dynamic banking in the private sector. Even in light of this dynamism, though, this chapter has also indicated potential constraints to the ability of banks to maximize their contribution to long-term economic growth and development. This picture of an energized banking system in the wake of the early failures of the First Republic lays a foundation for understanding the interactions of banks with other economic agents, as well as the opportunities and limits of banking for transmitting economic change.