

THE SUCCESSFUL AND LIBERAL STABILIZATION OF CAMPOS SALES, 1898-1902

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As a consequence of the repeated episodes of monetary instability that characterized Brazilian history from World War I to the accession of Fernando Henrique Cardoso in 1994, many tend to forget that this country had only two such outbreaks prior to the First World War. Following independence, the *milreis* collapsed from 63 pence to 23 pence. The Regency of the 1830s re-established the Brazilian currency at 27 pence (official parity from 1846) the same value it held at the fall of the monarchy in 1889. No less than 60 years of exchange stability! This situation came to an abrupt end when the republican provisional government pursued an easy monetary policy¹ to win planter support for the new regime. By Campos Sales' inauguration in 1898, the *milreis* had fallen to seven pence. For four years, he and his finance minister, Joaquim Murinho, pursued a successful stabilization plan under the aegis of liberalism. This plan invites comparison, in financial terms, with that of Fernando Henrique Cardoso, almost a century later.

The similarities between Campos Sales and Fernando Henrique Cardoso are financial only; politically Campos Sales ruled as a dictator while Cardoso was a true liberal. Cardoso presided over free elections won by the opposition, respected the primacy of the legislature, and never imprisoned anyone for political ideas. Campos Sales organized the "politics of the governors", under which the chief executives of the largest states decided who participated in the docile congress, and arrested and deported dissidents without due process². Whether Campos Sales could have governed Brazil with greater liberalism may be a moot point, but, it must be remembered, he ruled at a time when three of the four largest economies, the United Kingdom, the United States, and France, all had executives subordinated to legislatures, and the fourth, Germany, boasted both advanced social legislation and a legislature with greater autonomy than that of Brazil. England may have been heavy-handed in Ireland and South Africa; France mistreated its colonies while the United States discriminated against a large minority of its citizens, but by and large, at home, these countries enjoyed functioning liberal democracies. Campos Sales in particular, and the well-informed Brazilian elite in general, understood the politics of these leading countries but made no attempt to establish the essence of a democracy.

Turning to the economic side of liberalism, if "liberalism" and "neo-liberalism" mean a retreat from state intervention in the society, then both Campos Sales' and Fernando Henrique Cardoso's stabilizations qualify. In common the two plans featured increased taxes accompanied by decreased spending and the privatization of state companies. Both plans achieved a significant appreciation of the Brazilian currency followed by relative exchange stability. Policies that facilitated imports characterized both plans although

¹ On this boom, see John Schulz *A Crise Financeira da Abolição, 1875-1901* (Edusp, São Paulo, 1996).

² *Rio News*, June 11, 1901.

Cardoso's measures had more drastic effects. Campos Sales' reliance on tariffs for the bulk of his revenues limited his options with regard to trade. Both plans followed closely upon major debt renegotiations while the two presidents inherited stable political conditions from their predecessors. A major difference between the two situations is that while Campos Sales required virtually no social spending, Cardoso encountered a huge social security system to finance.

Both Campos Sales and Fernando Henrique Cardoso took office at favorable moments in the global financial cycle. Cardoso's inauguration occurred five years after the fall of the Berlin Wall made possible one of the largest booms of the century. Campos Sales came to power just after gold discoveries in Alaska, South Africa, and Australia helped reverse the deflationary pressures prevalent since the "Great Depression" of 1873. Let us now focus on the situation that faced Campos Sales.

The Brazilian president took office at the height of the international gold standard. During the 1870s, most of the advanced economies had demonetized silver in favor of a monometallic gold currency. By 1892, Austria-Hungary became the last Great Power to go on gold although Italy went off convertibility in 1897. Until World War I, the other powers unanimously retained the gold standard. Even though Brazil made several attempts to achieve a convertible currency, first in the 1850s and then again in 1889, the *milreis* often fluctuated 30 per cent from par so no real convertibility prevailed.

London remained the center of the international payment system during Campos Sales' administration but already faced serious competition from Paris, Berlin, and New York. From 1855 to 1906, the British Rothschilds monopolized underwritings for the Brazilian imperial and republican governments while a number of British, French, German, and American banks led issues for the state authorities and the railroads. International lending grew spectacularly during the nineteenth century financing trade, railroads, and less-productively, foreign wars.

During the nineteenth century, excessive international and domestic lending also caused severe credit crises, the worst being in 1825, 1837, 1857, 1866, 1873, and 1893. Gradually the Bank of England came to occupy the position of "lender of last resort", a development made conscious by Walter Bagehot's **Lombard Street** in 1874. In 1890, a consortium of banks led by the Bank of England and the Rothschilds rescued Barings then suffering from the default of the Argentine government. The successful outcome of the Baring crisis demonstrated how the lender of last resort could avoid a major threat to the financial system.

The gold standard successfully withstood a prolonged crisis in the United States from 1893 to 1896. This occasion was the last in which the United States was a borrower. Like other desperate debtors, the United States considered abandoning convertibility. In 1896, William Jennings Bryan almost won the presidency after warning the American voters

that they were being “crucified on a cross of gold”. But with the discovery of gold and the recovery of the world economy, the situation of the United States improved dramatically. The year Campos Sales assumed office the United States won its war with Spain and became a colonial power. By the time Campos Sales left the Catete Palace, the United States had made its first major loan to the United Kingdom, to fund the Boer War, and became a significant creditor. The United States surpassed the United Kingdom in steel production becoming the world’s leading industrial nation as well.

Besides the United Kingdom and the United States, two other countries were both creditors of and models for Brazil: France and Germany. When Campos Sales took office, France ranked as the world’s second international lender. It dominated the markets of Russia, Italy, and Spain, and it competed in Brazil. As the richest Latin society, France also served as a cultural model for Brazil. After Germany defeated France in 1870 and completed its unification, this country became an influence on Brazil as well. Many immigrants came from Germany and German-speaking Austria as is testified today by the red-white-red flag of the state of Santa Catarina. Germany was also in the process of passing the United Kingdom as an industrial power and had entered the global credit market as a lender. Its major sphere of influence became the Balkans and the Middle East, and the Germans proved eager to conduct business in Latin America as well. Before their involvement in the two tragic world wars, Germany and Austria were considered world cultural leaders dominating music and helping set the pace in literature, science, philosophy, and history while an Austrian physician invented psychoanalysis.

Germany under Bismarck (1862-1890) reversed the tide of free trade and started a major global trend towards protectionism. The flow of economic liberalism commenced with the *Wealth of Nations* (1776) and reached its fullness with the repeal of the Corn Laws (1846) when England adopted free trade. Other countries also reduced tariffs, and the whole world seemed to be moving towards freedom of commerce until Bismarck’s celebrated tariff of 1879. He managed to reconcile both the conservative agricultural interests who required protection from American cereals and the rising industrialists who insisted that German manufacturers needed the tariff to compete with England. German industry expanded magnificently after the promulgation of this schedule convincing other countries that protection made sense. Many Brazilian leaders were impressed. Meanwhile the United States also continued to develop its industry that since independence had enjoyed substantial protection. By Campos Sales’ inauguration, even the English had second thoughts about protection although they persevered with free trade until the World War.

Bismarck also led the world in social legislation. A reactionary himself, the German prince saw social benefits as a means to co-opt workers, weaken the potentially dangerous social democratic opposition, and prevent the liberals from allying with elements of the working class. In the 1880s, he passed the first retirement pension legislation. England saw the establishment of its Labor Party in 1890 and Parliament enacted important social

legislation during that decade. Thanks to these developments in England and those of Germany, the locus of the debate on public finance shifted for good. Before 1800, government expenditure had been largely a question of defense and defense-related debt. The early nineteenth-century state assumed responsibility for “improvements” typified by railroads. The late nineteenth-century state added public education to its obligations while, after Bismarck, retirement benefits became a major user of funds. By the time Campos Sales assumed office, virtually all males in the advanced countries voted so the interests of the masses could no longer be ignored.

Let us now turn our attention to Campos Sales` Brazil. Unlike the advanced countries, Brazil collected neither income taxes nor excises. Tariffs on imports and exports comprised most of the central government`s revenues. President Floriano Peixoto (1891-1894) and his finance minister, Serzedelo Correia, had utilized tariff policy to protect the nascent textile industry, but in general, Brazilian tariffs were set with revenue targets in mind. Excessively low or high rates would have severely curtailed revenue.

From independence to 1850, Brazil`s governments spent most of this income on defense and debt service. After mid-century, with coffee earnings rising continually, the Brazilian elite turned its attention to improvements, the most expensive of which were railroads. In 1862, a separate ministry of agriculture, commerce, and public works was established to coordinate expenditures on improvements. By 1893, when Floriano Peixoto changed the name to ministry of industry, transport, and public works, this portfolio absorbed fully 40 per cent of the national budget. This ministry operated railroads, roads, and other utilities. From 1888 to 1897, significant expenditures were made on immigration that Campos Sales` predecessor eliminated in his unsuccessful attempt to balance the budget. The state of São Paulo, that began to finance immigrants during the eighties, assumed responsibility for this activity³. Education, a relatively low priority of the Brazilian elite, consumed approximately seven per cent of the federal budget.

Following a period of instability and civil war after independence, the governments steadfastly pursued conservative monetary policies. In 1846, the cabinet set the exchange parity at 27 pence per *milreis*, accepting a situation already in existence for 15 years. Remarkably, in view of Brazil`s twentieth-century experience, the monarchy maintained this parity until its overthrow in 1889. But the passage of abolition the year before caused a major departure from the prevailing monetary practices. The imperial elite felt that something had to be done to provide credit to the former slaveholders who, having received no compensation for the loss of what they considered their property, threatened to abandon the monarchy. Planters complained that they lacked the money they now required to pay freedmen and immigrants who worked on their lands. João Alfredo, the prime minister of abolition, promulgated a major financial reform that permitted private banks to issue bank notes while he lent official funds to these institutions. His successor,

³ See Vitória Saddi **The Role of Coffee in the Creation of Institutions in Brazil: 1830-1930** Ph.D. Dissertation, University of Southern California, 2002, 145-172.

the viscount of Ouro Preto, last prime minister of the Empire, lent⁴ a greater volume of public funds to banks, many just organized, to onlend these resources to the planters. Ouro Preto also permitted a more aggressive issue of banks notes. Due to this expansion of the money supply combined with relief that abolition had not disorganized agriculture, a boom began on the local stock market. We have given an account of this boom, the *Encilhamento*, elsewhere. See **A Crise Financeira da Abolição, 1875-1901** (Edusp, São Paulo, 1996).

Although supported by merchants and by planters, the *Encilhamento* did not save the monarchy that fell to a military⁵ rising on November 15, 1889. The newborn Republic wished to gratify the planters just as much as the Empire had, and the new finance minister, Ruy Barbosa, decided to continue the expansionary policies that originated the boom. But Barbosa faced a more difficult situation than his monarchist predecessor had. International bankers thought that the new regime lacked legitimacy until it held elections so they refused to extend credit. The Baring Crisis of 1890, mentioned above, confirmed the bankers in their desire to avoid exposure to Brazil. Meanwhile foreign and domestic businessmen sent funds outside the country forcing down the *milreis* that had stood at par, 27 pence, at the proclamation of the Republic. After two months of financial contraction, Barbosa allowed favored bankers to double the circulating medium. He granted the privilege of issuing bank notes without demanding backing. As a result, Barbosa gave these bankers the ability to print money. Bankers lent their notes to their own enterprises provoking devaluation and inflation while opening up the new Republic to charges of corruption. The increase in the circulating medium raised the value of shares while speculation returned with a vengeance. By the time Barbosa resigned from the ministry in the first month of 1891, the exchange had fallen below 20 pence. His successor, the baron of Lucena, granted further privileges to the special bankers. By the third quarter of 1891, the exchange collapsed to 14 pence, and the boom appeared to be at an end. To save the speculators, Lucena proposed a further increase in the circulating medium that had almost tripled during the short life of the Republic. The Congress refused. President Marshal Deodoro da Fonseca and Lucena then executed the “stock exchange coup” unconstitutionally closing Congress. Twenty days later, a counter-coup led by the navy and opposition army officers deposed the president and his unpopular minister.

Vice President Marshal Floriano Peixoto took power with the express intention of returning the country to monetary and fiscal orthodoxy. The exchange had fallen to 12 pence, less than half its value at the onset of the Republic, while the circulating medium had increased from 200 million *milreis* to 550 million. Apparently the quantity theory of money applied in this case. Peixoto began by prohibiting further bank note issues while taking control of the major surviving bank of issue. He also set about increasing taxes and decreasing expenses. In spite of a promising start, Peixoto failed to regain stability

⁴ Ministerio da Fazenda **Auxílios á Lavoura** (Rio de Janeiro, 1889), 53, 75.

⁵ See John Schulz **O Exército na Política, 1850-1894** (Edusp, São Paulo, 1994).

because of a large government loan to industry and, more important, because he became involved in a costly civil war.

On November 15, 1894, after five years of military rule, a civilian president, Prudente de Moraes, assumed office. The *milreis* traded at ten pence while the circulating medium was 200 per cent larger than it had been at the fall of the monarchy. Unfortunately the favorable world economic situation that prevailed at the rise of the Republic now had been replaced by a crisis that lasted from 1893 at least to 1896, and almost forced the United States off the gold standard as discussed above. Prudente set about reducing expenses and succeeded for a while after terminating the civil war. In 1896, the state assumed responsibility for all the existing bank notes, turning these bills into paper money, and Prudente incinerated several million *milreis* of these instruments. Unfortunately the next year, after weathering an uprising at the military academy, the president found himself forced to send an army to suppress a millenarian community deep in the interior. His troops acted with barbarism, slitting their prisoners' throats, and literally killed off all the inhabitants of Canudos by October. Both Prudente's budget and his bank note burning policy proved to be casualties of this conflict. Meanwhile his minister of industry, transport, and public works, Joaquim Murinho, also sought for means of reducing expenditures. He eliminated subsidies for immigration. As a contemporary noted, if the land ownership practices permitted immigrants to acquire their own farms, immigration subsidies would become redundant⁶. Murinho encountered less success in his attempts to sell public railroads and resigned in protest against his inability to reduce outlays⁷.

The same month that Canudos fell and Murinho resigned (October, 1897), Prudente announced his nomination of Campos Sales to succeed him. A few weeks later, while he received the victors of Canudos at the Rio docks, an assassin tried to eliminate Prudente killing the minister of war in the process. Prudente took advantage of this crime to remove his most violent opponents. Thus a month after his nomination, Campos Sales saw his election guaranteed. If hardly democratic, Brazilian politics at least became stable. That month of November, the president took a short (two-year) two million sterling loan from the Rothschilds in effect to help him meet interest payments on the 40 million sterling external debt⁸. The combination of war and economic crisis had driven the exchange down to seven pence, and many felt, for the first time, Brazil would prove unable to meet its international obligations. Those Brazilians who invested in local *milreis*-denominated debt during the Empire had lost three quarters of their purchasing power in global terms and almost as much in domestic values.

⁶ **Rio News**, January 5, 1897.

⁷ *Ibid.*, October 5, 1897.

⁸ *Ibid.*, November 30, 1897.

In January of 1898, as the international press spoke with increasing frequency of a possible Brazilian moratorium, Prudente sold off three naval vessels under construction⁹. The value of outstanding debt in the secondary market continued to fall with the 1889 loan declining from 60 to 54 during one week in March¹⁰. The president and the president-elect decided to take the initiative, and the latter went to London to renegotiate the external debt with the Rothschilds. This British bank still monopolized the underwriting of Brazil's federal obligations. On this trip, Campos Sales was received by Prime Minister Salisbury. Both the bankers and the president-elect proved satisfied with the terms reached in June. On its 40 million sterling external debt and its 12 million sterling guaranteed railroad debt, Brazil would go three years without paying interest and another ten without amortization of principal. To obtain this "Funding Loan", Campos Sales mortgaged the Rio customs and promised not to issue any additional paper money. The customs pledge proved to be a mere formality while Prudente was already engaged in the struggle to reduce the paper money in circulation. Although criticized at the time for not sustaining the national honor¹¹, Campos Sales succeeded in maintaining the ties between his country and the international community. Investment funds flowed into Brazil throughout the three-year interest moratorium demonstrating widespread foreign confidence in Brazil's economic management¹². The bankers for their part were criticized for not consulting the bondholders and for having been too free to lend their clients' money when times looked more promising¹³.

Campos Sales assumed office on November 15, 1898 with the Funding Loan in place. He called Joaquim Murinho to the ministry of finance and gave this physician from Mato Grosso his full support in the campaign for fiscal and monetary orthodoxy. Murinho began his term with two major expenses already under control: immigration and the debt. As mentioned previously, he had eliminated immigration expenses while minister under Prudente. The Funding Loan itself removed the need for three years of interest payments. The other large users of funds, defense and railroads, were resolved in due course. In each of their four years, Campos Sales and Murinho reduced expenses on the military while the minister resumed his search for buyers or renters of government railroads. He kept the civil service payroll stable, and according to a newspaper friendly to the government, the minister actually fired several public employees for not going to work¹⁴. Along the same line, he sought to limit the granting of public pensions, an especially scandalous practice whereby those in favor received large life time payments from an already bankrupted treasury. Following upon important precedents set by Prudente's ministers, Murinho also denied official loans to the planters. The agricultural loans made during the *Encilhamento*

⁹ *Ibid.*, January 5, 1898.

¹⁰ *Ibid.*, March 15, 1898.

¹¹ On the eve of the resumption of Brazil's interest payments in 1901, Senator Arthur Rios castigated Murinho for treating the foreign creditors more generously than he treated the Brazilians. Rios declared "We are nothing more than a colony of the Jews of the City!" (sic) **Jornal do Brasil**, May 28, 1901.

¹² Ana Celia de Castro **As Empresas Estrangeiras no Brasil** (Rio de Janeiro, 1979), 61-73.

¹³ **Rio News**, January 26, 1897.

¹⁴ **Gazeta de Notícias**, April 7, 1900.

had never been repaid. Therefore we consider possible agricultural loans as potential fiscal expenses rather than as lending¹⁵.

Murtinho's great contribution to fiscal policy may be found, however, on the income side of the national accounts. Although he failed to reduce the level of corruption at the customs house¹⁶, Murtinho increased collections from imports, still by far the central government's major source of revenue, by charging a quarter of the tariffs in gold. The Campos Sales administration imposed Brazil's first excise tax that generated approximately one tenth of federal income¹⁷. Murtinho rented several of the government railroads to private companies converting a sizable expense into a source of revenue. None of these ideas may be considered particularly novel. The gold tariff had been frequently discussed during the Empire and effectively used under Ruy Barbosa. Great Britain levied excise taxes for two centuries before Campos Sales did while many contemporary governments left their railroads in private hands.¹⁸ Murtinho's merit derives from successfully executing these reforms in the face of powerful opposition.

As a consequence of his prowess in raising taxes, Murtinho could continue the deflation initiated by Prudente -- in spite of the inflow of capital from abroad. During his four year term, 1898-1902, the circulating medium fell to 675 million *milreis* from 733 million in 1898.¹⁹

In Campos Sales' Brazil, the circulating medium was still the major component of the money supply although bank deposits were becoming significant. Prior to the *Encilhamento*, the circulating medium consisted of paper money, bank notes—largely of the Banco do Brasil—and metal coins when the *milreis* traded at or above par. The supply of bank notes exploded during the *Encilhamento*.²⁰ Floriano Peixoto prohibited further bank note issues but put the government printing press to work to finance his war. During Prudente's administration, the government assumed responsibility for existing private bank notes while taking over the limited amount of backing that supposedly guaranteed these instruments. Campos Sales' circulating medium therefore consisted solely of paper money.

¹⁵ It appears that the borrowers of the 1889 agricultural loans never intended to repay them while the bankers, utilizing government funds, did not make a great effort at collection.

¹⁶ Rio News, September 25, 1900.

¹⁷ *Ibid.*, September 4, 1900. Though advocating a balanced budget, the foreign commercial community resented the zeal of the excise collectors, a sign that taxes were effectively imposed.

¹⁸ Even the great Liberal prime minister, Gladstone, had doubts as to the convenience of leaving all railroads in the private sector. Roy Jenkins **Gladstone** (London, MacMillan, 1996), 321.

¹⁹ Victor Viana **O Banco do Brasil** (Rio de Janeiro, 1926), 706.

²⁰ At the beginning of 1889, Brazil's circulating medium included 186 million *milreis* in paper money and a residual amount of Banco do Brasil bank notes. See Amaro Cavalcanti **Resenha Financeira do Ex-Império do Brasil** (Rio de Janeiro, 1890), 333. Viana, 649 states that total bank note issues to the end of Deodoro da Fonseca's government reached no less than 346 million *milreis* while paper money at the end of 1892 was 215 millions. After the Naval Revolt, the printing presses added to paper money circulation which attained 367 millions by March of 1895. The total circulating medium including the 346 million of bank notes was therefore 708 millions.

As Brazil did not sustain a convertible currency, gold coins, especially sovereigns, circulated at their market value. When Brazil enjoyed a trade surplus, the money supply did not expand as it would have automatically under the gold standard, but rather the value of the *milreis* was bid up. The notional upward limit to this increase would be 27 pence, still Brazil's official parity. With information then available, it is clear that Murinho erred in his exchange policy by not restricting the *milreis*' potential rise. In his influential **Brazilian Exchange, the Study of an Inconvertible Currency**, J. P. Wileman had warned against returning to parity in 1896 when Prudente was already burning paper money. Wileman suggested adopting the current rate of 10 pence²¹ and maintaining this level principally by reducing the government expenditure. He criticized Prudente's incineration of the circulating medium. Wileman believed there existed two separate factors influencing exchange: the balance of payments and the size of the circulating medium. He recognized that, absent changes in the former variable, a reduction in the circulating medium must raise the value of the exchange. He feared that such a rise in the *milreis* would harm the lower classes and give an unfair benefit to wealthy creditors²². He noted further that both declining exchange and rising exchange harmed the poor, the former because wages lagged far behind devaluation and the latter because revaluation immediately created labor friction, wage reductions, and redundancies²³. Wileman's reasoning bears an uncanny resemblance to that of Poincaré who chose a new, lower parity when he returned France to the gold standard after World War I. History proved kinder to Poincaré than to his British contemporaries who reassumed the gold standard at the old parity thereby creating an immediate and persistent unemployment problem. Supporters of revaluation argued that individuals who lent to public and private borrowers had seen the real value of their financial assets shrink to little over a third since the establishment of the Republic. They felt that fairness required the currency return to parity. Wileman disagreed recalling that loans and government bonds had changed hands during the course of the devaluation so revaluation would not favor the original creditors. Furthermore, many bonds had been issued, especially during wartime, at large discounts so that revaluation would provide a windfall to current holders²⁴. Finally he observed that internal prices had appreciated by less than the devaluation so that creditors had not lost as much as they appeared to have lost²⁵. Wileman wanted Prudente to hold the circulating medium constant. He advocated augmenting government revenue through the re-imposition of a gold tariff, which had lapsed after Ruy Barbosa left office, as well as the institution of an excise. He also wished to reduce expenses to eliminate the federal deficit. He opposed foreign borrowings, arguing that Brazil, unlike more responsible debtors, tended to waste resources²⁶. Wileman called the president's attention to Brazil's balance of

²¹ Wileman, 264.

²² *Ibid.*, 227 and **Rio News**, January 1, 1896.

²³ Wileman, 172 and 264.

²⁴ *Ibid.*, 39.

²⁵ *Ibid.*, 175.

²⁶ *Ibid.*, 46-47.

payments that he felt became negative in 1890²⁷ not due to trade but rather to increased immigrants' remittances, Brazilians' expenses abroad, and capital flight.

Murtinho ignored the arguments of Wileman and set his sights on 27 pence. Beginning at seven pence, this target seems extreme. The most dramatic recovery of a nineteenth century currency, the United States dollar, went from a Civil War low of 39 cents to parity in 1879. In addition to the poor, as Wileman had commented, two other groups suffered from rising exchange: the planters and the industrialists. Planters supported the orthodox finances that prevailed since the collapse of the *Encilhamento* under the governments of Peixoto, Prudente, Campos Sales, and his successor, Rodrigues Alves, because these exporters came to see that the disadvantages of money instability outweighed the disadvantages of declining exchange. Industrialists, although unhappy with rising exchange, lacked the political power to make their wishes satisfied. The collection of a portion of the tariffs in gold, a fiscal measure, replaced part of the effective protection lost as the *milreis* appreciated. Thanks in part to the prosperity that began under Campos Sales, industry expanded smartly throughout the years of financial orthodoxy. It is worthy of note that the only president who identified with the industrialists, Floriano Peixoto, and his most pro-industry finance minister, Serzedelo Correia, both advocated financial stability. Although Peixoto had died in 1895, Correia continued active in politics as the chairman of the finance committee of the Chamber of Deputies and supported Campos Sales and Murtinho throughout their administration²⁸. Campos Sales threatened to raise tariffs on goods coming from France and Italy as retaliation on their high coffee duties²⁹. But he refused steadfastly to use exchange policy to favor the planters.

Brazil had no central bank to coordinate monetary and exchange policies. A privately-owned Banco do Brasil had acted as fiscal agent for the state before the *Encilhamento*. In moments of financial crises, the Banco do Brasil had been allowed to expand its issues of bank notes like the Bank of England was. After the *Encilhamento*, Minister Serzedelo Correia incorporated the Banco do Brasil into the Banco da República which had issued most of the outstanding bank notes in the country. The government assumed the power to appoint the president of this institution which, though still private, came under effective official control. With all its unrealizable loans, made largely during the boom, the Banco da República proved to be more a burden for the state rather than a lender of last resort³⁰.

Campos Sales and Murtinho had the good luck that the coffee market recovered as they assumed office. While the unit price for this commodity remained stable, consuming countries considerably increased the volume of their imports. After the defeat of William

²⁷ *Ibid.*, 138.

²⁸ Inocêncio Serzedelo Correia **Problema Econômico do Brasil** (Brasília, 1980, first published in 1903), 19-26 and 43-46. Also **Jornal do Brasil**, July 2, 1901.

²⁹ **Rio News**, February 22, 1900.

³⁰ Viana, 684-687.

Jennings Bryan in the presidential election of November 1896, the economic situation in the United States, Brazil's principal market for coffee, improved significantly. The discovery of gold in Alaska, South Africa, and Australia at the same time helped reverse the world's deflationary bias that had begun with the crisis of 1873. At this time, Germany and the United States increased their commercial and financial efforts in the Brazilian market. By 1900, the **Rio News** saw the Germans in southern Brazil as a threat to American interests³¹.

Taking advantage of this favorable international situation, Murinho negotiated an agreement with the Banco da República that he thought would set this institution on a firm foundation. The *Encilhamento* had left the bank with a large portfolio of unrealizable loans, most of which had been ultimately funded by public money. In March of 1900, Murinho offered to cancel 186 million *milreis* of the bank's debt to the government in return for a cash payment of 25 million *milreis* and a note for the same amount to be repaid over four semesters³². Since the start of the *Encilhamento*, the authorities had certainly behaved benevolently to the Banco da República and its predecessors. The 186 million *milreis* included 80 millions of bonds that Floriano had issued as "aid to industry" that in fact bailed out the bank. Another 40 millions represented Ouro Preto's agricultural loans to the bank's predecessor institutions while the remaining 66 millions consisted of advances made by successive ministers to provide the bank with liquidity³³. Murinho acknowledged the worthlessness of the bank's portfolio by accepting just over a quarter of the original value of the government loans. To strengthen private initiative, the state relinquished its right to name the president of the bank, a power it maintained since Serzedelo's decree of 1892.

The improvement of coffee export volumes allied with the contraction of the circulating medium led to an appreciation of the *milreis*. At seven pence when the year 1900 began, the Brazilian currency rose constantly amidst heavy speculation reaching 14 pence in July before retreating to ten pence in August. Murinho committed an error at this point in failing to set an exchange rate target. Although Wileman among others made the case for not allowing the exchange to rise towards the old parity, Murinho never disavowed the notion of returning to 27 pence per *milreis*. Writing at the end of Campos Sales' term, Alcindo Guanabara claimed that Murinho's objective in 1900 was 12 pence and that the minister later changed his course wishing to attain the official parity of 27 pence³⁴, which would have been a disaster. As Wileman argued, rising exchange distorted relative prices just as falling exchange did, exacerbating labor friction while granting a windfall profit to creditors. Had the minister adopted a rate somewhat above the seven pence exchange prevailing at his accession, the government would have diminished bullish expectations, thereby reducing volatility. He could also have expressly suspended the burning of the

³¹ **Rio News**, March 19, 1900.

³² Alcindo Guanabara **A Presidência Campos Sales** (Brasilia, 1983, first published 1903), 191.

³³ Viana, 667-693.

³⁴ Guanabara, 273.

paper money to slow the *milreis'* ascent. To have kept the exchange stable, Murtinho would have to have chosen a new official parity, preferably between 10 and 12 pence, and have offered to issue freely should the currency have maintained itself at this level. Such a policy would have placed Brazil on the gold standard but would have broken the government's promise to reduce the circulating medium.

Although the public blamed the British and German banks for the volatility of the exchange, the Banco da República also participated heavily in this speculation³⁵. The downturn in the *milreis* helped provoke a run on this bank that had been under private management since March. As in past periods of difficulties, the bank turned to the government for help. In July, Murtinho lent £ 400,000 to the bank³⁶. As the terms of the Funding Loan precluded the issue of paper money, in August Murtinho offered a second loan denominated in sterling. He proposed an advance of £ 600,000 equivalent at the time to 18 million *milreis*³⁷. The bank's management considered the amount too small and did not wish to incur an additional exchange risk—especially as the *milreis* had been declining. After a small delay, the bank took this loan. Early in September, Murtinho refused the directors' second request for a 50 million *milreis* loan. On the eleventh, they resigned and the bank closed.

When the Banco da República failed, it owed the treasury £ 1 million, equivalent to 30 million *milreis*, for the sterling loans, as well as 10 million *milreis* on deposit and the 50 million *milreis* that the bank had undertaken to discharge in March but had not actually paid³⁸. Serzedelo Correia, from the Chamber of Deputies, defended the bank eight years after his merger decree. He observed that the Banco da República had 99 million *milreis* of deposits³⁹. Against these liabilities, its assets included 18 million *milreis* in cash⁴⁰, 51 million *milreis* in federal and state bonds, and a large amount of stock of which he mentioned only 10 million *milreis* of shares in the Santos docks. These enumerated assets were 20 million *milreis* less than the deposits. On top of the deposits of course stood the bank's debt to the government. The bank in fact was completely worthless, or rather it had a negative worth.

As a condition for government assistance, Campos Sales and Murtinho insisted upon the appointment of Otto Petersen, the manager of the German bank, as director of the Banco da República. Understandable nationalist outcries joined the normal noises that accompany bank interventions⁴¹. Petersen did in fact take charge of the institution for a

³⁵ David Joslin **A Century of Banking in Latin America** (London, 1963), 144-145.

³⁶ Guanabara, 192.

³⁷ **Jornal do Brasil**, September 17, 1900.

³⁸ **Cidade do Rio**, September 11, 1900.

³⁹ **Gazeta de Notícias**, September 15, 1900.

⁴⁰ This cash did not in fact exist. **Rio News**, September 18, 1900.

⁴¹ **Jornal do Brasil**, September 11, 1900. The most violent attack upon Petersen came from the **Cidade do Rio** which on September 11, not only called for Murtinho's resignation but also placed a detailed description of the German occupation of Paris in 1871 on the front page next to the denunciation of the German banker.

number of months⁴². He tried at first to re-open its doors but had to suspend payment again within two days. All the other domestic banks suspended as well leaving the economy completely without liquidity⁴³. Only individuals with deposits at foreign banks or gold hoarded at home could pay for even the most trivial purchases. Commerce stopped for total lack of means of payment. This crisis proved to be worse than 1864 and 1875 because it affected virtually everyone. In 1864, the government had allowed the Banco do Brasil to issue bank notes, and in 1875, the ministry had issued paper money; in 1900, it could do neither for fear of undermining its stabilization program.

In spite of the limitations imposed by stabilization, Murtinho proved to be far from a passive spectator. In fact, within two days of Petersen's suspension, the minister presented a solution that maintained the government's credibility regarding inflation while providing a means to restore liquidity. He called his proposal a "liquidation plan" although he clearly intended to fortify the Banco da República rather than liquidate it. Murtinho offered an additional £ 1 million in cash. As the Funding Loan agreement prohibited the issuance of paper money, the government proposed to issue 100 thousand million *milreis* of five-year bonds paying three per cent that would be delivered to the bank to pass to its creditors. The state would also lend the bank 25 million *milreis* out of the paper money it had retired charging the bank only two per cent interest per year. As collateral for all of these credits, the government took all of the stock of the Banco da República and resumed the right to name its executive officers⁴⁴. Within a period of only two weeks, the bank's stockholders agreed to the Murtinho plan, and the creditors also voted to accept the three-per cent government bonds as payment for their deposits at the Banco da República.⁴⁵

The acute shortage of liquidity continued for a month after the bank's shareholders and creditors meetings while the government prepared the bond issue. Over-extended banking and commercial houses disappeared. In Rio, seven banks in addition to that of the Republic either reorganized or liquidated⁴⁶ during 1900. These institutions carried hopeless loans on their balance sheets since the *Encilhamento*. Contemporaries considered the crisis of 1900 as the liquidation of the *Encilhamento*⁴⁷. While incompetent and fraudulent institutions disappeared, the more prudent banks re-established themselves with relative ease. The Banco Commercial offered its creditors 25 per cent cash, 25 per cent in government bonds that could be sold without a loss as soon as liquidity returned, and the remaining 50 per cent in three semi-annual notes paying five per cent per annum, almost a full market rate.⁴⁸ Commercial's depositors accepted this form of repayment suffering little if any loss. The financial crisis affected the state capitals as well as Rio. In

⁴² **Jornal do Brasil**, November 29, 1900.

⁴³ *Ibid.*, September 13 and September 18, 1900.

⁴⁴ **Gazeta de Notícias**, September 15, 1900.

⁴⁵ *Ibid.*, September 25, 1900.

⁴⁶ *Ibid.*, October 26 and October 31, 1900.

⁴⁷ Guanabara, 191.

⁴⁸ **Gazeta de Notícias**, October 25, 1900.

Bahia, at least two banks, including the former bank of issue, went into liquidation. The Banco da Bahia signed an agreement with its creditors similar to that of the Banco Commercial and quickly returned to business as usual⁴⁹. After the creditors of the Banco da República approved Murtinho's plan, even the share price of that institution recovered reaching around half of its par value⁵⁰.

On November 5, upon receipt of the three-per cent bonds, the Banco da República re-opened⁵¹. Gradually liquidity returned to the economy paced by earning from exports, the repatriation of hard currency by Brazilians⁵², and advances from foreign merchants. During the crisis, the government's debt, both internal and external, lost its liquidity like all other assets. With the re-opening of the banks, this liquidity returned, and the official debt rose to prices substantially higher than before the crisis.⁵³ The appreciation of the public debt represents the most sincere sign of contentment over Campos Sales' management of the bank crisis.

With coffee exports at record levels, the crisis of 1900 can only be attributed to domestic causes. The accumulation of bad loans during the *Encilhamento* as well as Murtinho's contraction of the money supply appear to be the two principal factors leading to this event. Murtinho has been censored⁵⁴ for an overly orthodox response. His refusal to create money contrasts with the actions of the finance ministers of 1857 and 1864, who allowed the Banco do Brasil to issue bank notes, as well as the government of 1875 that printed money to lend to this bank. On the other hand, we cannot forget that the experience of the *Encilhamento* placed real constraints on Murtinho. With the excesses of Deodoro da Fonseca's administration not such a distant memory, elite opinion feared easy money and largely supported the contraction of the money supply that occurred under Campos Sales, his predecessor, and his successor. Moreover we should by no means consider that Murtinho remained immobilized by orthodox principles. In two days he prepared an innovative plan that resolved a good deal of the market's liquidity problems. His contemporaries in the United Kingdom even thought him a bit too permissive compared to their financial authorities⁵⁵. Writing at the height of the panic on September 25, the editor of the **Rio News** also berated Murtinho for not allowing the failed ventures to go to the wall, while praising him for resisting the temptation to resolve the crisis by printing money.

⁴⁹ Thales de Azevedo and E. Q. Lins **História do Banco da Bahia, 1858-1958** (Rio de Janeiro, 1969), 60-61 and 195.

⁵⁰ **Gazeta de Notícias**, September 26, 1900.

⁵¹ *Ibid.*, November 5, 1900.

⁵² See **Rio News**, October 16, 1900, for a discussion of capital flight..

⁵³ **Gazeta de Notícias**, November 16, 1900.

⁵⁴ Carlos Peláez and Wilson Suzigan **História Monetária do Brasil** (Brasília, 1981), 146-147.

⁵⁵ **Jornal do Brasil**, October 26, 1900 citing an article in **The Times** of the previous day. See also **Gazeta de Notícias**, March 4, 1900 commenting on the **Economist**.

Joaquim Murinho survives in Brazilian thought as the financial strong man. This reputation is justified. Murinho executed genuine reforms, including the imposition of the excise, which increased government income and decreased expenses. He took a relatively hard position during the crisis of 1900 forcing the stockholders of the mismanaged banks to absorb at least part of their losses, while providing liquidity that avoided further negative effects upon the economy as a whole. During and after the crisis, Murinho fulfilled Brazil's part of the bargain with the foreign bankers; in consequence, capital from both merchants and investors flowed into the country. Coffee revenues undoubtedly played a significant role in Murinho's attainments, but his tenacity must have been equally essential.

Successful tight money policies, those that have been followed by periods of low inflation and high growth, have always received criticism for causing more suffering than necessary. Could a milder or more permissive stance have produced more prosperity in both the short and long term? This question is crucial to understanding 1900 as well as to guiding us in the present. What can be demonstrated is that, too rigid or not, Murinho's tight money period contributed to a decade of spectacular development. In all probability, by stabilizing the currency and the public accounts, Murinho made Brazil a more attractive market for Brazilian and foreign investors as well as a more hospitable destination for immigrants. This situation permitted Brazil to obtain more benefits from the prosperous world economy of the pre-World War years than would most other industrializing countries.

If Campos Sales and Murinho are to be found at fault, it is regarding their exchange policy. By signaling that the government wished to return to the old parity of 27 pence, they encouraged speculation. The doubling of the value of the *milreis* in 1900 severely distressed borrowers and increased unemployment even before the banking crisis. An announcement by the authorities that they opposed rather than supported this rise would have certainly made for a lesser change in the *milreis* accompanied by lower pressure on debtors. As a further measure, the government could have threatened to issue paper money once the currency rose to a new, lower parity. In any case an increase from seven pence to 27 would have been unprecedented and highly disruptive.

The year after the crisis vindicated Campos Sales and his minister. As scheduled, July 1, 1901, Brazil resumed the payment of interest on its foreign debt. The government used its credit standing to obtain a new loan, twice the size of the Funding Loan, the proceeds of which went to purchase a number of foreign-held railroads⁵⁶. This transaction saved the taxpayers money in that the interest on the new loan came to less than the guaranteed minimum payments set by the earlier railroad agreements. Following an idea that emerged during Prudente's administration⁵⁷, Campos Sales rented several rail lines to

⁵⁶ Steven Topik **Political Economy of the Brazilian State, 1889-1930** (Austin, Texas, 1987), chapter four.

⁵⁷ Guanabara, 151.

private companies, converting thereby government expenses into government revenues. This measure consciously reduced the role of the state in the economy.

Murtinho's treasury report that year summarizes his thoughts concerning the government's place in the economy as well as his assessments of Brazil's relationship to the international financial system. Regarding the latter, the minister battled to honor the country's commitments to the investment bankers to obtain therefrom greater resources for public and private infrastructure undertakings⁵⁸. Harking back to the policies of eighties, he wanted to borrow from abroad to retire the internal debt thus releasing funds for "productive" purposes⁵⁹. Far from being a lackey of foreign interests, Murtinho differentiated sharply between investments in railroads and those in mines⁶⁰.

"Let us turn our attention to the exploitation of our mines.

Even though capital for these undertakings may be supplied in part by foreigners, I think the exploitation should be made by domestic companies.

Mines are very different from railroads, ports, and other activities, which, along with direct profits, provide indirect benefits of incalculable value.

If a railroad or a port is owned by a foreign company, the direct profits of these ventures leave the country, but we enjoy all the indirect benefits that develop trade, industry, agriculture, and the other elements of civilization.

The situation changes with mining which leaves no indirect benefits at all...

This is what is happening with us: our wealth, the gold of our Earth, is siphoned off outside of our country without any positive gain for us."

Further demonstrating his independence of foreign interests, Murtinho proposed during the height of the 1900 crisis that the banks that dealt with exchange be prohibited from taking deposits⁶¹. The Banco da República was specifically exempted from this measure. Had Murtinho's bill passed, the foreign banks would have had to relinquish their local deposits in order to remain in the exchange business and would therefore have lost one of their two principal sources of profits. Murtinho showed himself quite willing by this act to utilize un-liberal government intervention to further his policies, in this case the fortification of the Banco da República.

⁵⁸ Nícia Villela Luz *Idéias Econômicas de Joaquim Murtinho* (Brasília, 1980), 277.

⁵⁹ *Ibid.*, 278.

⁶⁰ *Ibid.*, 277-278.

⁶¹ *Rio News*, October 23, 1900.

Murtinho's treasury report demonstrates a balanced view of the government's role in the economy. Although criticized for doing too little⁶² to assist the bank's shareholders and creditors, Murtinho felt required to defend his actions from those who thought public funds should not have been used at all to bail out private interests⁶³.

"But, Mr President, if we refused to follow the policies assumed until then regarding this credit institution, we did not have the right to abandon its creditors and shareholders.

Two motives, one moral, the other social, obliged us to intervene.

From the moral point of view, we could not forget that the government was mostly to blame for the madness at the stock exchange and for all the economic and financial confusion accompanying the devaluation of our currency.

It was the government that authorized the issue of bank notes which generated these acts of insanity whose gigantic losses became concentrated in the portfolio of the Banco da República."

Murtinho made available credits to the bank equal to some one third of the total circulating medium of the country⁶⁴, hardly the workings of a dogmatic opponent of government intervention. His liquidation plan for the Banco da República explicitly proposed only to liquidate the "old portfolio⁶⁵". A new government bank arose out of the debris of the failed institution, with Murtinho's blessings. (Campos Sales' successor, Rodrigues Alves, completed the bank's reorganization and changed its name to Banco do Brasil.) Clearly Campos Sales and Murtinho neither intended for the state to withdraw from banking nor for the government to retire entirely from the railroad business. They rented out some of the railroads to private companies, but they supported the construction of new lines within the state sector⁶⁶.

In defending himself from attacks for not helping the coffee planters, during this period that the growers felt to be one of over-production, Murtinho tried to draw the line against state intervention. He noted that to overcome the current unsatisfactory prices, demand would have to expand while supply contracted, an observation as uncreative as it was irrefutable⁶⁷.

"The process by which consumption expands is, however, by nature slow, and all efforts in this regard, even if we start immediately, will not affect the present crisis.

⁶² Luz, 341-520.

⁶³ *Ibid.*, 270.

⁶⁴ Murtinho made available 100 million *milreis* in bonds, 60 millions equivalent in sterling, 50 millions of the renegotiated loan, 25 millions in paper money, and the 10 millions on deposit for a total of 235 millions compared to a circulating medium of less than 700 millions.

⁶⁵ Luz, 274.

⁶⁶ *Ibid.*, 288.

⁶⁷ *Ibid.*, 275-276.

Accordingly the reduction of supply has unfailingly to come from a selection which will eliminate the weakest allowing only the survival of the fittest.

I have been branded a barbarian for defending this doctrine, as if I were the creator of this law of nature and as I could prevent it from being enforced.

It has been argued here that this law does not apply to human societies, but this is a time when its manifestations become ever more intense and ever more visible.

And in spite of its harshness, this is the law par excellence of progress, and when a society does not have this law rule its trade, its industries, its agriculture, and its other human activities, then all its social classes will be comprised of inferior beings and the society will degenerate.”

Without a doubt, we should alleviate the sufferings that come from its effect; but it would be madness to oppose or try to prevent its action.”

A century later, Murtinho's fear of being taken for a barbarian by the elites strikes one as somewhat ironic. While this elite enjoyed the material advantages of the twentieth century, most of Brazil's other "citizens"-- freedmen, immigrants, and squatters -- lived in barbarian poverty. Neither Murtinho nor his critics considered that the state had obligations to these groups as well as to the coffee planters. At least, to his great credit, Murtinho struggled to avoid delivering the keys to the treasury to one single interest.

Murtinho received some of the sharpest attacks from a rather unexpected quarter, the foreign merchant community. Just months before the resumption of interest payments on the international debt, the **Rio News** charged⁶⁸:

“Minister Murtinho's great defect as a financier is his narrowness. He seems to be utterly incapable of grasping the idea that the real interests of the national treasury depend on the prosperity of the country. In his opinion every *vintem* extorted from an impoverished people is so much net profit. Taking office when the country was suffering from prolonged financial and commercial depression, he proceeded at once to aggravate the situation by heaping upon the already overtaxed people new and exceedingly oppressive burdens. In this way he has woefully depleted the most valuable sources of public revenue, recklessly destroyed an immense amount of private wealth and completely paralyzed energies which would in a few years have furnished ample means for meeting all reasonable demands of the national treasury”.

⁶⁸ **Rio News**, February 5, 1901.

This line of criticism, echoed in more recent times, is that the government should exert itself more in reducing expenses rather than in increasing income. In the case of Murinho, this attack appears to be refuted by the budget figures. Almost half of his budgets went towards provisions for the payment of the debt, a use of funds that the foreign community surely could find no fault. The second greatest employer of public resources, the ministry of industry, transport, and public works, found its resources greatly reduced by the Campos Sales and Prudente de Moraes governments. The latter eliminated subsidies for immigration while Murinho rented out railroads to the private sector and slowed construction on new state lines. The third area of government outlays was defense. Under Prudente de Moraes and Campos Sales, spending on the armed forces declined continuously, even to the point where the army's ability to maintain order could be considered impaired. The navy actually sold a number of its newest vessels. As we have seen, Murinho endeavored to reduce spending for civil and military pensions. Finally, Murinho avoided the large expense that did not appear on the budget: loans to planters. The landed interest's complaints notwithstanding, the Campos Sales administration resisted the temptation to create agricultural loans. While hardly free from abuses and corruption, the Campos Sales government did as good a job of controlling expenses as could be expected given the values of the Brazilian elite.

The foreign community faulted the government in which Murinho participated for high-handed actions, including the deportation of a foreign merchant without due process⁶⁹. These businessmen resented corruption at the customs house that many felt had increased substantially since the advent of the Republic⁷⁰. The merchants saw the government's taxation measures as unfair. Wealthy planters still paid no land or income taxes while both the customs and the excise weighed heavily upon merchants, many of whom were foreign. Not only the **Rio News** but also the **Cidade do Rio**, spokesman for the freedmen and the poor in general, denounced the injustice of Murinho's fiscal reforms. The **Cidade's** editor, José do Patrocínio, wished to institute an income tax instead of the excise⁷¹.

Although one may feel strongly that stabilization's advantages outweigh its costs, costs do certainly exist. A government must try to distribute these burdens, both the increase in taxes and the decrease in benefits, upon its constituents as fairly as possible. As every other event at this time, the stabilization program favored the large planters in that additional taxes were imposed on others, especially the merchants and the final consumers. It could hardly have been otherwise in the Brazil of 1900. The planters' contribution came indirectly, through the appreciation of the exchange rate.

⁶⁹ **Rio News**, June 11, 1901.

⁷⁰ *Ibid.*, March 12 and March 19, 1901.

⁷¹ **Cidade do Rio**, June 15, 1901.

Foreign businessmen complained that prices in sterling became high by international standards during the stabilization phase.⁷² Prices in *milreis* barely declined even though, by 1901, the *milreis*, at 12 pence, bought twice as much British currency as it did during the worst days of Prudente's administration. This same overvaluation of the Brazilian currency took place at the onset of Fernando Henrique Cardoso's stabilization. In principle, this phenomenon should have been favorable to the merchants, many of whom were importers. Planters should have been the group most opposed to the appreciation of the *milreis* as they received less local currency for their exports. Yet the majority of planters supported Campos Sales during his tight money administration calculating that financial stability and access to the international credit market would bring them more advantages than easy money and moratorium. Only when financial stability appeared to be safely achieved, and when the exchange rose further to 16 pence with no upper limit in sight, did the planter consensus turn against the appreciation of the *milreis*. This change in the consensus occurred at the end of Campos Sales' successor's term in 1906.

To summarize, the stabilization plan depended upon both a favorable world conjuncture and a determined government. Excellent coffee export volumes provided the treasury with significantly higher revenues and supplied the economy with greater liquidity. The determined administration won the support of Brazilian and foreign investors who brought their capital into the country. A forceful government also managed to obtain substantial -- if unfairly assessed -- additional income as well as major economies in public spending. Paradoxically, to reduce the state's effects on the economy, authorities must actually raise revenues. If they do not, inflation will distort the economy to a greater extent than increased taxes do. Although taxation and the contraction of the money supply together forced a number of weaker corporations and farms into bankruptcy, the overall impact on the economy appears to have been highly beneficial. A more equitable division of the burdens of stabilization would undoubtedly have been much healthier for the country; Campos Sales and Murinho did what appeared to be possible.

The currency rose and then remained stable from the end of the Campos Sales administration until World War I knocked most of the world off gold. In fact, with appreciating exchange in 1906, Brazil adopted the gold standard. And more important, Campos Sales's successor, Rodrigues Alves, taking advantage of prosperity and stability, undertook a number of major public projects including the rebuilding of the center of Rio de Janeiro. Brazil enjoyed continuous economic growth until World War I.

⁷² **Rio News**, September 10, 1901.