

The Establishment of Railways in the 19th Century Brazil and the British Imperialism

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Introduction

In the XIX Century, the Brazilian government, as many other administrations around the world, granted incentives for the construction of railroads in order to encourage private investments in the sector. Even though some studies on the history of Brazilian railways in the period are available in the literature, specific investigations on the effects of the subsidy policies implemented on the economy as a whole have not attracted yet a major attention from economic historians.¹⁸³ The formulation of such policies has been usually assumed exclusively as the result of pressures from exporters, an argument that this paper will question.

The review of previous Brazilian experiences with financial partnerships between the private and public sectors is particularly appropriate in the present moment, as the Government is, considering, once again, the adoption of similar policies. Such partnership is being seen nowadays as a possible solution for complementing the scarce resources of the Central Government to dismantle infrastructure bottlenecks that have been undermining economic growth. A bill proposal establishing the construction of partnerships between private sector and Government is presently in discussion in Congress.

The purpose of this paper is twofold. The first aim is to show that the economic policies implemented by the Brazilian Government in the second half of the XIX Century in order to stimulate investments on railways should not be seen exclusively as a by-product of coffee and sugar exporters' interests. The Central

as well as the Provincial Governments was also interested in improving the system of transport in Brazil. The construction of a more efficient transport network in such a large country as Brazil would certainly bring many other benefits to the Central administration, as it would facilitate the preservation of national sovereignty as well as the financial and political administration¹⁸⁴. An examination of the legislation makes it clear that the Government had in mind such benefits and had in fact the intention of building up a partnership with the private sector in the construction of railroads. The second purpose of this work is to show that such partnership also had some adverse effects. This paper investigates particularly the responsibility of such policies in increasing the foreign and internal Brazilian Government indebtedness, which led to the Funding Loan of 1898 and consequent interference of British bankers in the internal Brazilian affairs.

1. Partnership between Government and private sector.

Brief summaries on the evolution of the railway legislation in the Nineteenth Century are found in the literature. Most of such summaries, however, only describe the inclusion of the government obligations to guarantee minimum interest rates of 5% in the Decree N.641, June 26, 1852, and of 7% in the Decree N. 2451, September 24, 1873¹⁸⁵. Authorisations given to the Central government to grant other privileges – as, for instance, the exemption of import tariffs over machines and materials necessary to the construction and operation of the railroads, among others– have been overlooked. As have also been overlooked the authorisations given to the Government to interfere in the rate freights to be charged and in the establishment of the conditions related to the repayment of interests received. Moreover, the advantages to be conceded to

¹⁸³ Exception made to the works of William R. Summerhill. See, for instance: W. R. Summerhill, "Market Intervention in a Backward Economy: Railway Subsidy in Brazil, 1854-1913", *The Economic History Review*, New Series, Vol. 51, No 3 (Aug, 1998), 542-568.

³ This point is emphasized in: Carlos Marichal and Steven Topik, "O Estado e o crescimento econômico na América Latina: Brasil e México, 1880-1920", *História Econômica e História das Empresas*, vol VI, (1) , 2003.p. 8.

¹⁸⁵ Even if Provincial Laws gave the additional 2%, the Central Government was to warrant its payment.

the government by the companies have not deserved any attention, obscuring the characteristics of partnership between private and public sectors in the railway sector. This bias in the literature may be explained by the fact that such obligations of the railway companies towards the Government were not described in general laws and decrees related to railway construction but on the specific conditions enclosed in the legal authorisations given for the constitution of railways joint stock companies. These conditions were not the same for all companies. Therefore, a complete investigation on the benefits to be given to the Government by the railway companies would require an examination of the conditions imposed to each of them. The examination of such conditions revealed the Government's intention to create a partnership between private and public sectors.

In fact, a research on the conditions imposed by the Government to some companies –which is not yet complete- shows that the benefits derived from the construction of railroads in most part of the XIX century were not confined to those associated to the characteristics of public goods. The Government forced the companies to render free or subsidized services of transport to satisfy some needs of the Public Administration such as transport of public values, of civil servants on duty, of immigrants and prisoners, and others. Most significantly, the companies were obliged to put at the Army's' disposal all the available cars whenever required.

2. Evolution of joint stock company and railroad legislation in Brazil.

Given the great amount of capital required to construct railways, it is quite reasonable to expect that the great majority of railway enterprises would have to be constituted as joint stock companies. Therefore, the legislation on joint stock companies as well as those directly connected with railways has to be examined.

Before 1849, the constitution of any joint stock company depended upon government initiative and was implemented through specific legislation. In 1849, a law regulated for the first time the constitution of joint stock companies. In order to be established, a joint stock company had to be authorised by the Central

Government¹⁸⁶ The Commercial Law of 1850 maintained the government's authorisation as a necessary condition for the constitution of any joint stock company.¹⁸⁷ In 1860, a decree specified the criteria, which should be used to decide whether an application for the constitution of a joint stock company should be approved.¹⁸⁸ This legislation was enforced until a new law was passed on November 2, 1882, which dispensed government approval with few exceptions. Among such exceptions were foreign joint stock companies, which remained subject to the official approval.¹⁸⁹ However, the decree, which regulated this law, exempted from this obligation those joint stock companies, which had as their purposes the construction of railroads.¹⁹⁰ Such exemption reveals the awareness of the government that foreign investments in this sector were needed and should be forwarded.

The first piece of legislation enacted by the Brazilian Government related exclusively to railways was the Decree N.101, of October 31, 1835 that authorised the Government to concede privileges to companies that built railways from the city of Rio de Janeiro to the provinces of Minas Gerais, Rio Grande do Sul and Bahia. Such privileges did not include any interest rate guarantees. The Decree N. 101 could hardly be seen as legislation to be able to attract private capital to investments in railways. The poor economic performance of the export sector in the first decades of the century did not justify the construction of railroads.¹⁹¹ By 1835, the gold production in the provinces of Minas Gerais was in decadence and the cultivation of coffee, which had just made its appearance in the scenario, was mainly restricted to the

¹⁸⁶ Decree N. 575, January 10, 1849, article 1.

¹⁸⁷ Law N556, June 25, 1850, known as Código Comercial do Império do Brasil (Commercial Code of the Brazilian Empire).

¹⁸⁸ Decree N. 271, December 19, 1860, which regulated Law N. 1083 of August 22, 1860.

¹⁸⁹ Law N. 3150, November 4, 1882. The joint companies to remain subject to the Government authorization were discriminated in the paragraphs 1 and 2 of the article 1. Decree N. 8821, December 30, 1882 which regulated Law No. 3450, November, 30, 1882.

¹⁹⁰ Those would be allowed to work by concession from competent authorities according the stipulations of Decree N... 5561, February, 28, 1871.

¹⁹¹ In fact, from 1821 to 1835, a period of fifteen years, the Balance of Trade presented insignificant surpluses only in three years. Instituto Brasileiro de Geografia e Estatística, *Repertório Estatístico do Brasil, Quadros Retrospectivos*, N° 1 (Rio de Janeiro, 1941) p.68.

regions of valley of the Paraíba River on the borders of this province with the Province of Rio de Janeiro. Even though sugar was still the main export product, its production was located in the Northeast regions, from where it was exported. The routes defined in the decree suggest that the government's purpose was mainly the maintenance of the sovereignty over the territory. In fact, the south region of the country (Province of Rio Grande do Sul) had been the stage of constant military disturbances since the first days of the Empire. It is at least suggestive that the decree No 101 was enacted just after the revolution in Rio Grande do Sul between republicans and monarchists, known as Guerra dos Farrapos, had broken out. So, as it would be expected, the Decree N.101 was unable to encourage any investment on railways.

Decree N^o 641 of June 26, 1852 modified the previous Decree of 1835 and introduced new dispositions. By its first article the Government was authorised to give concessions to companies to build partially, or totally, a railway from the city of Rio de Janeiro to the provinces of São Paulo to Minas Gerais and not to Minas Gerais, Rio Grande do Sul and Bahia as had been established in the previous decree N.101, of October 31, 1835. Contrary to the previous decree which fixed the maximum price to be charged by all companies, the Decree of 1852 established that a table with the prices to be charged would be fixed by the Government in accordance with the company and should not surpass the prevailing costs of transport. However, the most important innovation to the legislation was introduced by the paragraph 6th of article 1: "The Government will guarantee to the company an interest rate up to 5% on the capital employed in the construction of the railway, and will decide how and when such interests would be paid." The following paragraph established that the company should start repaying the interests received after reaching dividends of 8 % and that a ceiling rate of dividends should be established above which the freight rates charged should be reduced.

Even though the first article of this decree authorised the Government to allow the entire or partial construction of railroads from the city of Rio de Janeiro to the provinces of Minas Gerais and São Paulo, article 2 extended the possibility

of concessions for the construction of railroads anywhere in the Empire. In such cases, however, the contracts should be submitted to the Congress. The change in the destinations of the routes to receive official privileges suggests a change on government position partially derived from a better performance of the export sector in the second half of the century. Revenues from exports had doubled from 1833-1834 to 1850-1851 and, since 1830, the percentage of exports earnings derived from coffee was the highest.¹⁹² By this time, coffee was being cultivated in the provinces of Rio de Janeiro, Minas Gerais and São Paulo. Such change in the railway routes to receive benefits does not allow the conclusion that the aim of the legislation was exclusively to attend coffee growers' interests. On one hand, the expansion of the coffee plantations brought about a general increase on Government and private demand for transports in those coffee regions, which had to be attended. On the other hand, the coffee growing activities, as well as the expansion of other economic activities directly or indirectly induced by coffee increased the potentiality of some areas of the provinces of Minas Gerais, São Paulo and Rio as sources of income for the government. Consequently, the development of railways in export regions would allow the government to keep its authority over the most promising regions of the country as well as to assure its collection of taxes.

The Decree No. 2450 September 24, 1873 introduced some modification on the previous Law of 1852. By this decree, the Government was authorised to grant a maximum interest rate of 7% over the capital employed even though the total amount of capital subject to guarantee rates should not exceed one hundred thousands *contos*. The Government was also only authorised to grant such guarantees to those railways, which were to serve as the main means of transport between producer centres and export centres, and only to one company in each province. Moreover, the Government should underwrite the guarantees conceded by Provincial authorities. The Decree N. 6995, August 10, 1878 specified in detail the conditions for the concessions for railways with guaranteed interested rates. As to the amount of capital to receive interest

¹⁹² Data on exports and imports in IBGE, *Estatísticas Históricas*, p.68.

rate guarantees it would be restricted to the fixed capital recognised by the government as necessary for the establishment of the railroads.

3. The emergence and expansion of railroads in the Nineteenth Century Brazil

The first railway to be opened to traffic in Brazil had its establishment authorised by a concession from the Province of Rio de Janeiro a few months before the Decree N. 641, June 26, 1852 was promulgated. After the Decree of 1852 allowed the Central Government to assure interest rates guarantees up to 5%, and before the decree of 1873 increased such guarantees to 7%, eighteen companies were authorised to be constituted in order to establish new railways: thirteen under the guarantee system and five without guarantees. Even though the Decree N. 641 allowed the Central government to be provided of 5%, in most cases, Provincial laws in fact increased such guarantees to 7% through an additional rate of 2 percent. Therefore, the increase on the guarantee rates authorised by the decree of 1873 only transferred the burden of the 2 per cent additional guarantee expenses from the provinces to the Central administration.

The extension of railways opened to traffic increased from 15 km in 1854 to 9,973 km in the last year of the Empire, 1889. During the first decade of the Republic it increased to 14,916 km.¹⁹³ On one hand, no one can deny that the policy of incentives implemented by the Imperial Government succeeded in creating a system of transports, which benefited the export sector as well as the production for domestic market and therefore had a significant role in the economic growth of the country. Besides, as a partnership between private enterprises and public sector it certainly brought about important advantages to the public sector inasmuch as it facilitated the communication between the Central government and provincial authorities. On the other hand, however, one has to bear in mind that such policies significantly increased public expenses and were in great part responsible for a huge foreign debt to be faced by the

¹⁹³ IBGE, *Estatísticas Históricas*, p. 411.

Republican Government.¹⁹⁴ Thus, such partnership also had adverse effects on the financial administration of the Government.

¹⁹⁴ Brazil was proclaimed a Republic on November 15, 1899.

4. Some adverse effects of the Brazilian policy of incentives to the financial administration

The policies of incentives to railways implemented by the Government increased the Brazilian foreign and internal debt in the last decades of the XIX Century. Remittances to foreign shareholders granted by law had to be made and foreign loans had to be contracted in order to cover expenses of government and private railways. Such expenses on foreign currency were financed by public revenues and were, in part, responsible for the recurring deficits presented by the Public National Accounts. Difficulties in raising all the necessary funds through the issue of internal public bonds and the limits and the restrictions imposed to the increase of inconvertible paper money in circulation given by its adverse effects on the financial administration of the country, compelled the Government to contract new foreign loans. Expenses associated to such debts as well as to guarantee rates to foreign capital invested in railways implied an increase in demand for foreign exchange and consequent adverse effects over the external value of the local currency. New foreign loans were also asked to cover deficits in the Government Balances. Thus, it is reasonable to assume that the policies of incentives to the railways implemented in the XIX century brought some new difficulties to the financial problems faced by the Central Administration.

Authorisation for the Government to contract loans for railway companies was given by the Law N. 912 of August 26, 1857. The first foreign loan was contracted to finance part of the Brazilian Government's expenses in the process of taking over the Railway Company D. Pedro II, which had been initially owned by private Brazilian investors under guarantees. The contract for a loan of £1,526,500 with N.M. Rothschild's & Sons was signed on May 19, 1858. The Brazilian Government raised other foreign loans with N.M. Rothschild & Sons with the specific purpose of attending the financial needs of construction and extension of railways as well as the payment of guaranteed interest rates.

Foreign loans contracted for railways in Brazil in the XIX Century

Year	Issuing Bank	Nominal Amount	Interest Rate	Destination
May 19 1858	Rothschild & Sons	£ 1,526,500	4 ½	D.Pedro II Railway ⁽¹⁾
April 10,1860	Rothschild & Sons	£ 1,373,000	4 ½	Recife São Francisco Railway ⁽²⁾
Feb.23 ,1871	Rothschild & Sons	£ 3.459.600	5	D.Pedro Railway and others ⁽³⁾
1875	Rothschild & Sons	£ 5,301,200	5	Government debts related to railways ⁽⁴⁾
January 23,1883	Rothschild & Sons	£ 4,599,600	4 ½	Railways and others ⁽⁵⁾
1893	Rothschild & Sons	£3.710.000	5%	Estrada de Ferro Oeste de Minas Railway ⁽⁶⁾

Sources and notes: ⁽¹⁾Valentim F. Bouças, *História da Dívida Externa*, 2nd ed. Rio de Janeiro, 1950, p.92. ⁽²⁾ According to Bouças, *História da Dívida Externa*, p.93 out of this loan only £ 400,000,00 went to the Recife São Francisco Railway. ⁽³⁾ According to the Minister of Finances, Francisco de Salles Tôres Homem, one of the purposes of this loan was to finance an extension of the railway Estrada de Ferro D. Pedro II. Bouças, *História da Dívida Externa*, p. 109. ⁽⁴⁾ The date this contract was signed is not available. ⁽⁵⁾ This loan was said to be necessary considering that the revenues expected for 1882/1883 and 1883/1884 “were not enough to cover the expenses with studies, constructions and extensions of railways, interest rates payments to the respective companies” and other expenses. Reasons presented by the Minister of Finances, Martinho de Campos, are reproduced in Bouças, p. 114. ⁽⁶⁾ The Government paid the equivalent amount in mil-réis to the railway Estrada de Ferro do Oeste de Minas.

The increasing foreign indebtedness of the Brazilian Government in the second half of the XIX Century certainly should not be explained exclusively by the foreign loans asked to attend directly the railway sector. Old debts inherited

from pre-railways era were still being paid and new loans were also asked with the purpose of repaying old debts and covering the deficits in National Accounts' Balance. Even though public expenditures certainly contributed to the increase of such deficits, one has to take into account that, in the long run, better means of transportation would allow for an increase on production and consequently on the collection of taxes.

However, the share of the costs incurred by the government with the payment of interest rate guarantees in its total expenditure increased significantly during the second half of the nineteenth century. If in the 1860's this share was only 1,7%, in the first Republican decade, 1890-1899, it reached 7,4%. Even though guarantee interest rates were paid also to Brazilian companies, the percentage paid to foreign companies was substantially greater. From 1855-1856 to 1860-1861 all the interest rates guarantees to railways were paid to Brazilian companies. In 1861-1862, interest rates guarantees started being paid to British companies. From 1867-1868 to 1873-1874 there is no register of any interest guarantee rates to railways being paid in Brazil, while 10,487 *contos* were sent to London as payment of interest rate guarantees to railways. From 1874-1875 to 1880-1881, the amount paid to Brazilian railways was 35 per cent of the amount sent to London and in the last year of the Empire, only 2,9 per cent.¹⁹⁵

The system of incentives to the construction of railroads adopted in Brazil increased the debt of the Brazilian Government in relation to London and more specifically in relation to one British firm, the Rothschild & Sons. The share of

¹⁹⁵ Sources: *Balanço da Receita e Despesa do Império* (various years) and *Balanço da União* (various years). Data for expenses with railway guarantee rates are given in the national balances of revenues and expenditures published yearly by the Imperial and Republic governments. It is important, however, to observe that the values given in those balance for expenses in sterling were calculated according to the legal exchange rate between sterling and the mil-réis. As such, expenses were in fact made in mil-réis bought at their market value; there was an item in the Balances that accounted for differences between the official and market rates. In order to obtain the expenses made in Brazilian currency, the values for guarantees paid in sterling were transformed in mil-réis values according to the market values of the sterling. The legal parity of 27 pennies for one mil-réis was fixed by Law No 401, September 11, 1846. In this conversion . The annual averages of the sterling value in mil-réis in the exchange rate market of Rio de Janeiro were used for such conversion. IBGE, *Estatísticas Históricas*, p. 63.

expenses in *mil-réis* with interest rate guarantees in relation to the total expenses with payments related to foreign debts was significant. In 1880s, the average annual share was about 40% percent. In the following decade it increased to 64%. The burden of the expenses with debts in foreign currency created difficulties to the financial administration of the country. Expenses increased with the devaluation of the exchange rate. In spite of the legal parity fixed by law, foreign exchanges had to be bought according the rates prevailing in the market. In the First Republican decade, the external value of *mil-réis* decreased significantly. The value of one mil-réis in pennies, which was 26.44 and thus quite close to the legal parity of 27 in 1888, started decreasing from then on. In 1898, it reached its lowest value, 7.19 pennies.

For many years the conduction of the monetary policies in Brazil had been the subject of warm debates between those favouring the adhesion of such policies to the rules of the gold standard (the *monetaristas*) and those who advocated the expansion of credit and the issue of inconvertible paper money (*papelistas*). A study of this debate reveals that the strongest argument of the *monetaristas* was that the adoption of the gold standard rules implied a fixed exchange rate. The devaluation of the external value of the *mil-réis* observed in the 1890's increasing its expenses with debts to be paid in foreign currency worsened the difficulties faced by the financial administration of the economy, reinforcing at the government level the need to follow orthodox policies. The equilibrium between public revenues and expenses became a desideratum in order to avoid new issues of inconvertible paper money. Revenues had to be increased and expenses, cut. It was in this context that the policies of protection to the railway sector, responsible for significant government expenses, started being reviewed. The official efforts to restrict expenses did not succeed as civil wars that took place in this period required increasing expenses. The Government deficits presented by the central administration balances from 1892 to 1898 were the highest ever reached.

It was in such adverse circumstances that a new loan was contracted with the Rothschild & Sons, the Funding Loan of 1898. Given the adverse financial conditions prevailing in Brazil, the British bankers were able to impose certain clauses which interfered directly in the conduction of economic policies to be followed by the Brazilian Government. This interference had as its main objective to assure that the monetary policies to be applied would lead to a fixed exchange rate which would create facilities in relation to the Brazilian payments of foreign debts. The Rothschild & Sons inaugurated an era of interference of foreign creditors in the internal affairs of Brazil.

The experience of the Brazilian government in the construction of railways in the XIX century makes it clear that costs and benefits have to be carefully analysed in any new partnership to be established between public and private sectors.