

**WORLD BUSINESS HISTORY CONFERENCE  
17 MARCH 2014  
FRANKFURT AM MAIN, GERMANY**

Session D2: Global strategies and divergent patterns of electrification in late industrializing countries: electricity companies in Latin America and the Iberian Peninsula, 19th and 20th centuries

**US electricity companies in Argentina & Brazil:  
Some notes on the case of American & Foreign Power, 1926-1955\***

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\* The authors thank the institutions that contributed to support this comparative research: The British Academy, The Fulbright Commission and CONICET for Argentina, and CNPq for Brasil.

## I. Introduction

The arrival of the American & Foreign Power Co. Inc. in Brazil and Argentina indicated the large scale expansion of US direct investment in the provision of electricity in Latin America in the 1920s. Between 1929 and 1955, American & Foreign Power was the largest US private equity investor in the region. Twenty five years later than other major electricity firms, this US holding company established itself through brownfield-type investments in countries such as Brazil and Argentina, whose main markets were already served by electricity companies from Europe and Canada.

This article analyses the trajectory and performance of American & Foreign Power in Argentina and Brazil, focusing on the company's investment strategies and their impact on business-state relations. We intend to show the interplay between the strategies of this US electric holding company and the conditions of the host economies, identifying the impact of US direct investment on electricity systems in both countries.<sup>1</sup> The analysis of the conditions of host economies is mainly based on two set of parameters proposed by Mira Wilkins to explain the decisions to invest abroad: the opportunity parameter (prospects for markets) and the political parameter (government policies, regulations, attitude towards Foreign Direct Investment).<sup>2</sup>

Our main thesis is that the poor performance of American & Foreign Power in Argentina and Brazil resulted from its late timing of entry in the Southern Cone. The acquisition of electric utilities located in secondary cities just before the crash of 1929, restricted the initial investments as financial resources became scarce, preventing the reorganization of electricity systems as it had been planned by the managers of American & Foreign Power. Moreover, the host economy conditions that had favored large investments in fix assets to develop public utilities during the first global economy broke down after the Great Depression when the gold standard system collapsed. The disintegration of the global economy had a great impact on American & Foreign Power subsidiaries in both countries, as the depreciation of national currency made profits in

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<sup>1</sup> Only a few studies focused on the impact of multinational companies on Latin American countries from a Business History Perspective. Jones, *Multinationals*, 363-368. For foreign electric utilities in Brazil, see Armstrong and Nelles, *Southern Exposure*; McDowall, *The Light*, and Saes, *Conflitos do capital*. For Argentina, see Hertner, *Globale Elektrifizierung*; Lanciotti, *Foreign Investments in Electric Utilities*. A global perspective of the expansion of electric utilities in Hausman, Hertner & Wilkins, *Global electrification*.

<sup>2</sup> Wilkins proposes five set of considerations to analyse FDI: the opportunity parameter, the political parameter, the familiarity parameter (a shared culture or language), the "third country" parameter (proximity to another country); and the corporate parameter (learning process, corporate style). Wilkins, *Comparative Hosts*, 18-50.

US dollars fell down, and government regulations arose. To face the crisis of 1930, the company gave priority to the Brazilian market, investing in new plants and enlarging electricity networks. On the contrary, the company suspended the construction of hydroelectric and thermoelectric plants in Argentinian secondary cities. Distinct investment decisions gave origin to divergent trajectories: American & Foreign Power's operating companies were expropriated in Argentina, while they expanded in Brazil, particularly when Brazil reinforced its position as a natural ally of the US government during the Second World War.

The article is organised as follows. Section II reviews the establishment and evolution of American & Foreign Power in Brazil and Argentina. Looking at the relation with its parent company Electric Bond & Share, the section examines the company's strategies to organise electric utilities in both markets, the impact of the economic crisis and the performance of American & Foreign Power's subsidiaries in Argentina and Brazil in the interwar period. Section III analyses the regulatory strategies and describes the Business-State relations in both countries. Finally, the article identifies the conditions that may explain the different trajectory of the holding company in Argentina and Brazil, as well as the reasons behind its decision to divest from the region in the late 1950s.

## **II. American & Foreign Power's businesses in Latin America (1923-50)**

### ***a) From Electric Bond & Share to American & Foreign Power: US FDI in electric utilities in Argentina and Brazil***

At the end of the First World War, US foreign policy underwent a change. The armed conflict demanded a strong presence of the US. With Europe war-weary and debt-laden, the US emerged as the great new industrial power and financial center of the world.<sup>3</sup> South America, like many other regions of the globe, received greater attention for American businesses: increasing US investments were diversified across new activities, such as oil production, manufacturing and public utilities.<sup>4</sup> Capital invested in

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<sup>3</sup> Kindleberger, *World Economic Primacy*; Kenwood & Lougheed, *The growth of the international economy*.

<sup>4</sup> For the evolution of US FDI, see Wilkins, *The Maturing of Multinational Enterprise*, 52-7.

infrastructure accounted for 45 per cent and 50 per cent respectively of the US FDI in Argentina and Brazil. (Table 1).

**Table 1. US FDI in Argentina and Brazil, 1929  
(million US dollars)**

Activity/Country	Argentina	Brasil	South America
<b>Agriculture</b>	-	*	44
<b>Mining</b>	*	*	528
<b>Manufacturing</b>	82	45,7	170
<b>Sales</b>	52,9	15,8	94
<b>Petroleum</b>	29,8	23	512
<b>Public Utilities</b>	147,8	96,9	348
<b>Miscellaneous</b>	19,3	12,2	n.d.
<b>Total</b>	331,8	193,6	1.720

Source: Wilkins, *The Maturing of Multinational Enterprise*, pp. 55-7

\*included in Miscellaneous

The expansion of US FDI in public utilities was dominated by a few large holding companies, which financed their new investments through the boom in the stock market. At the top of a pyramidal structure, financial holding companies controlled the operation of public utility holding companies, which in turn were responsible for local utilities across several countries.<sup>5</sup> In the 1920s, according to the directors of American & Foreign Power, a real opportunity emerged to develop electric utilities in Latin American secondary cities. Moreover, the remodeling and expansion of electricity plants would contribute to provide a market for US electrical machinery and equipment.<sup>6</sup> This strategy, called *Unternehmergeinschaft*, had been previously implemented by major European electric manufacturers, who created holding companies and financial trusts based in Switzerland and Belgium to finance and manage electric utilities. To this end, the Société Financière de Transports et d'Entreprises Industrielles (SOFINA), the Schweizerische Gesellschaft für Elektrische Industrie (Indelec) and Motor für Angewandte Elektrizität (Motor) were founded in 1890s.<sup>7</sup>

Electric Bond & Share, created in 1905, was also a typical example of this strategy. In 1915-16, Bond & Share sought the opportunity to develop electricity

<sup>5</sup> In the 1920s, US investments in public utilities grew faster than in any other sector. Hausman and Neufeld, *U.S. Foreign Direct Investment*, pp. 363-4.

<sup>6</sup> Review of the Company affairs, American & Foreign Power, Annual Report (1942), p. 11

<sup>7</sup> Hertner, *German Multinational Enterprise*, 127-128; Segreto, *Financing the Electric Industry World-Wide*, 163-164.

companies in Latin America, as a result of a discussion between Sydney Z. Mitchell ó chairman of Bond & Shareó and representatives of General Electric Co., its parent company at the time.<sup>8</sup> They agreed to acquire a number of gas, telephone, electricity, and tramway companies in Panama. In 1919, Electric Bond & Share moved to Guatemala, following the same strategy to Cuba in 1922. In 1923, the company organised American & Foreign Power and transferred its Latin American holdings. By 1925, Bond & Share controlled five holding companies in electric utilities, mostly operating in the USA: American Gas And Electric Co. (1906), American Power & Light Co. (1909), National Power & Light Co. (1921); American & Foreign Power Co. (1923), and Electric Power & Light Corp. (1925).<sup>9</sup>

Electric Bond & Share's initial investments were located in countries close to US national interest, such as Panama, Guatemala, and Cuba. Business success in these low-risk investments, might have given US companies the confidence to proceed into new markets in the second half of the 1920s.<sup>10</sup> Nevertheless, the group's expansion into the largest Latin American markets occurred too late in comparison with other foreign electricity companies.

In Argentina and Brazil, the entry of major international companies investing in electric utilities had occurred nearly three decades prior to the arrival of American & Foreign Power. By the First World War, the cities of Buenos Aires and Rosario awarded concessions for electricity services to large companies like the German DUEG (*Deutsch Uberseeische Elektrizitäts-Gesellschaft*) and the Belgian SER (*Société d'Electricité de Rosario*), a subsidiary of SOFINA; while the Canadian Light & Power provided electricity to the most populous cities of Brazil: Rio de Janeiro and Sao Paulo.<sup>11</sup> Therefore, American & Foreign Power's strategy focused on trying to win over secondary markets, such as regional capitals or towns scattered throughout the country.

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<sup>8</sup> General Electric created a subsidiary to take charge of its operations in the Brazilian market at that time (1914). In 1921 the company inaugurated a factory in Brazil to produce incandescent lamps. GE subsidiary in Argentina was founded in 1920. Geiger, *The General Electric*, pp.38-41. For the relation of General Electric and Bond & Share, see: Hausman, Hertner & Wilkins, *Global electrification*, p.171.

<sup>9</sup> Electric Bond and Share Company. *Power for national defense*. In 1929, Bond & Share was the second-largest electricity group in the USA, controlling 14 per cent of all electricity produced by private companies. United States. Securities and Exchange Commission; *The Public Utility Holding company Act of 1935, Report to the Subcommittee on Monopoly*, p.3 For the origin of Electric Bond & Share, see Hausman and Neufeld, U.S. Foreign Direct Investment.

<sup>10</sup> Hausman and Neufeld, U.S. Foreign Direct Investment; A&FP, *The foreign power*, p.14.

<sup>11</sup> For Argentina, see Lanciotti, *Foreign Investments*. For DUEG, see Hertner, *Globale Elektrifizierung*. For Light's investments in Brazil see: Armstrong and Nelles, *Southern Exposure*; McDowall, *The Light*, and Saes, *Conflitos do capital*.

Still, these concessions covered a number of medium and small communities in a widespread area, as shown by Table 2.

**Table 2. American & Foreign Power's acquisitions in Latin America, ca. 1929**

Countries	Operation	Population (1.000 inhab.)	Number of cities
Panama	1917	138	4
Guatemala	1919	182	11
Cuba	1922	1.478	175
Ecuador	1925	130	2
Brazil	1927	3.785	260
Colombia	1927	365	13
Venezuela	1927	127	3
Mexico	1928	1.278	108
Chile	1928	936	30
Costa Rica	1928	159	35
Argentina	1929	1.906	130
Total	-	10.484	754

Sources: American & Foreign Power, *Annual Report, (1929-30)* pp. 19-22; *(1953)*, p.10.

The electricity companies taken over by the group not only shared problems of financial management and technological development, but also diverse contractual terms set out in the various concessions granted by local authorities. Unlike the experience in the Caribbean countries, the concessions acquired in Argentina and Brazil were previously owned by local groups and foreign companies -mainly British- operating with obsolete technology under different jurisdictions.<sup>12</sup> On that ground, one priority for the company was to renegotiate the concession agreements with local authorities to build a homogeneous regulatory framework that would ensure future investments. Secondly, new investments were required, as plants using obsolete technology and electricity grids poorly integrated did not generate economies of scale.

According to 1929 report, American & Foreign Power intended to take over the financial organisation of the operating subsidiaries, expanding the capacity of their plants and modernising transmission and distribution systems. Moreover, it expected to develop new forms of energy use, applying special rates to promote a growth in

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<sup>12</sup> In Argentina, British and Argentinian electricity companies operated direct-current power stations, with low generating capacity, while German and Belgian companies rapidly swichted to the alternating-current system. In Brazil, American & Foreign Power faced different conditions: Thermo-electrical plants increased their operating costs during the 1930s, while midsize hydroelectric plants had better conditions to overcome the Great Depression. Obsolete equipment in the former plants provoked continuous blackouts in regional capitals, such as Natal, Maceio, Salvador and Porto Alegre.

electricity consumption and a greater variety of electric energy use.<sup>13</sup> The company especially considered new operation and accounting methods, as well as improving the relationship with local communities. In short, the modernisation project sought to develop more efficient and profitable systems.<sup>14</sup>

In Brazil, the electricity supply faced two strategic challenges in the 1920s: building integrated regional systems to supply more energy to diversified consumer markets; and implementing cost-saving innovations to neutralize the effect of rising coal pricing.<sup>15</sup> Hydroelectricity could be an option, but also demanded huge resources to assemble the system, which were unavailable to local entrepreneurs.

In this context, American & Foreign Power acquired the *Companhia Brasileira de Energia Elétrica*, the electricity distributor for Salvador (Bahia) and for the state of Rio de Janeiro.<sup>16</sup> In the state of São Paulo, American & Foreign Power took advantage of a decentralised system with a few regional companies such as *Companhia Paulista de Força e Luz* (CPFL), to start an integration project through transmission lines.<sup>17</sup> This project would allow the company to substitute costly and obsolete thermoelectric power plants by hydroelectric dams, more distant, but with greater power-generating capacity.

By acquiring small and medium concessions, the company quickly gained large concession areas. Between 1927 and 1939, its market expanded from 78 to 309 cities. In this context, two subsidiaries were established: *Companhia Auxiliar de Empresas Elétricas Brasileiras* (CAEEB) initially called *Empresas Elétricas Brasileiras* and the *Companhia Brasileira de Força Elétrica*, both active in the state of São Paulo, an economically important coffee region. CAEEB also engaged to supply electric power to regional capitals (Table 3).<sup>18</sup>

**Table 3. American & Foreign Power's subsidiaries in Brazil, 1932.**

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<sup>13</sup> In particular, the company sought to introduce rate structures based on demand-charge to maximize profits. Neufeld, Price discrimination.

<sup>14</sup> American & Foreign Power, Annual Report (1929), p.7-8.

<sup>15</sup> Saes, *A Grande empresa*, p.257; Lorenzo, *Eletrificação*, p.100. For the Brazilian coal scarcity: Saes, Light versus CBEE.

<sup>16</sup> Barros, *Guilherme Guinle*; Honorato, *O polvo*, and Saes, *Conflitos do capital*, ch.6.

<sup>17</sup> For the expansion of A&FP in Brasil: Lorenzo, *Eletrificação*, p. 90ss, and Cachapuz *Panorama do setor*, pp.83-90.

<sup>18</sup> Cachapuz, *Panorama do setor*, pp.83-90.

Company	Subsidiaries	Main cities	Regions	Hidropower Generating capacity (kw)	Thermoelectric Generating capacity (kw)
Companhia Auxiliar de Empresas Eléctricas Brasileiras	The Pernambuco Tramways e Power Co. Ltd.	Recife	Pernambuco		20,500
	Telephone Company of Pernambuco Limited				
	Companhia Energia Eléctrica da Bahia	Salvador	Bahia	9,000	
	Companhia Linha Circular de Carris da Bahia				
	Companhia Força e Luz do Nordeste	Natal Maceió	Rio Grande do Norte Alagoas		2,340
	Companhia Central Brasileira de Força	Vitória	Espírito Santo	5,240	5,672
	Companhia Brasileira de Energia Eléctrica	Niterói	Rio de Janeiro	13,800	1,000
	Companhia Força e Luz de Minas Gerais	Belo Horizonte	Minas Gerais	11,400	
	Companhia Força e Luz do Paraná	Curitiba	Paraná	8,000	
	Companhia Tração Luz Força de Florianópolis	Florianópolis	Santa Catarina		
Companhia Brasileira de Força Eléctrica	Companhia de Energia Eléctrica Rio-Grandense	Porto Alegre	Rio Grande do Sul		24,600
	The Rio Grandense Light & Power Synd.	Pelotas			6,950
	Companhia Paulista de Força e Luz	Campinas; Ribeirão Preto	São Paulo	42,066	

Source: Empresas subsidiárias da American e Foreign Power Co. Inc. do Brasil. *Revista Brasileira de Política Internacional*, pp.169-178.

In Argentina, the most significant change in the power sector during the first postwar period was the transfer of DUEG to the Belgian firm SOFINA, which took control of the electricity and tramway systems in the nation's largest markets by population and income. In parallel, an Italian-Swiss consortium led by CIAE (*Compañía Italo-Argentina de Electricidad*) acquired several plants located in small towns.<sup>19</sup> Both groups increased their investments to expand generating capacity and distribution networks in the coastal region of the pampas (provinces of Buenos Aires and Santa Fe).<sup>20</sup> In the rest of the country, electric utilities continued to be provided by various

<sup>19</sup> CIAE was financed by the Swiss holding Columbus (founded by Brown Boveri, Pirelli, and the Argentinean group Devoto).

<sup>20</sup> Only a few electric appliances were in use in the 1920s. According to the US Department of Commerce, they were quite expensive for Argentine customers. US Department of Commerce, *Central Light and Power Plants*, p. 33.

separate British and Argentine companies until the arrival of American & Foreign Power. These companies operated low capacity hydroelectric and thermoelectric power plants.<sup>21</sup> Unlike in Brazil, hydroelectric power generation was not important in Argentina: in 1930, it accounted for only 6 per cent of overall production.

Between 1928 and 1932, American & Foreign Power acquired 19 electricity companies in Argentina, and reorganised them into five regional firms, to reduce the number of concession contracts (Table 4). New commercial departments and sale offices introduced marketing strategies to foster electricity businesses. In the late 1930s the company had 58 offices and shops, whose sales of electrical equipment totaled 2 million pesos. By 1933, after eliminating common stocks and updating fixed assets, the financial reorganisation of the subsidiaries came to an end.

**Table 4. American & Foreign Power's subsidiaries in Argentina, 1932.**

Main Operating Company	Subsidiaries	Number of cities served	Region/Province	Generating capacity (in kw)	Electricity output (in thousands of kwh)	Electric customers
Compañía Central Argentina de Electricidad	Compañía General de Electricidad de Córdoba	56	Córdoba, Santa Fe	66,373	98,259	80,417
	Electricidad de Alta Gracia					
	Compañía de Luz y Fuerza de Córdoba					
Compañía de Electricidad del Norte Argentino	Compañía Hidroeléctrica de Tucumán	5	Jujuy, Salta, Tucumán	11,354	19,501	12,979
Compañía de Electricidad del Sud argentino		64	Buenos Aires, La Pampa, Río Negro, Chubut, Santa Fe.	34,123	53,829	69,149
Compañía de Electricidad del Este Argentino		12	Entre Ríos, Chaco	14,087	20,832	19,519
Compañía de Electricidad de los Andes SA		19	San Juan, Mendoza, San Luis.	19,487	32,866	29,631
<b>Total</b>		<b>156</b>		<b>145,424</b>	<b>225,287</b>	<b>211,695</b>

Source: Revista Electrotécnica 19 (October 1933): 442–500.

<sup>21</sup> As late as 1927, regional capital cities such as Santa Fe, Entre Ríos, San Juan, Salta y Catamarca, still used direct current electricity. U.S. Department of Commerce, *Central Light and Power Plants*, pp. 29-33.

By the mid-1930s, American & Foreign Power consolidated its position in the Argentine and Brazilian markets. In Argentina, it generated 12 per cent of overall electricity production, making it the second largest company in the sector, but still well behind SOFINA, whose subsidiaries generated 53 per cent of the country's electricity. In Brazil, the industry structure was similar: American & Foreign Power accounted for almost 20 per cent, while Canadian Light grabbed 50 per cent of Brazil's electricity generation.<sup>22</sup> Although the American company remained in secondary markets, it reached a prominent position due to the volume of investments. In terms of assets invested abroad it was the largest electricity company in the world in 1937, with US \$534 million invested in its subsidiaries in 11 countries. The Canadian group Brazilian Traction, Light and Power (Light) came second with US \$425 million, followed by SOFINA and Electobel, with \$398 million and \$217 million respectively.<sup>23</sup>

**b) *Reversal of the investment scenario in 1930.***

In the early years of operations, American & Foreign Power issued \$50 million of funded debt securities and shares to start its expansion program. However, 1930 marked the end of this expansion. The company needed large amounts of capital for property acquisition and construction projects that amounted to \$358 million. For both purposes the company issued another \$50 million of gold debentures, of which 42.5 million were sold to the public. As a consequence of the international economic crisis, public financing dried up and the holding company turned to its parent company, Bond & Share, obtaining a loan of \$30 million at 6 per cent interest. In the following years, and American & Foreign Power was not able to service its bank loans, which amounted to \$50 million, and had to renegotiate them at higher interest rates. Bond & Share granted a new loan of \$5 million, for a total of \$35 million at a 7 per cent interest rate.<sup>24</sup>

In addition to financial restrictions, exchange rate losses and the economic downturn hit the profitability of Latin American subsidiaries. From 1933 to 1939, American & Foreign Power paid no dividends to its shareholders, while current incomes were dedicated to pay loan interests.<sup>25</sup>

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<sup>22</sup> Szmercsányi, *Apontamentos*, p.132-5; Martin, *Processus d'Industrialisation*.

<sup>23</sup> Hausman, Hertner & Wilkins, 2008, *Global electrification*, p.218.

<sup>24</sup> US Securities and Exchange Commission, *Holding Company Act 1935, Findings and opinion of the Commission*, pp. 10-14.

<sup>25</sup> The crisis hit the U.S. electricity industry: until the end of World War II there was practically no new investment in this sector. Ebasco Services Incorporated, New York, December 1952.

This situation did not improve until the Second World War. By 1941, bank debt was reduced to only \$15.5 million dollars, and so did the interest rate (3 per cent). Nevertheless, the \$35 million borrowed from Bond & Share remained at a rate of 7 per cent. In 1943, bank loans were entirely repaid and the debt loan with Bond & Share became an overdue obligation at an interest rate of 6 per cent. In 1944, American & Foreign Power resumed payments to Bond & Share, amortising \$5 million, while the remaining \$30 million became notes at 3 per cent.<sup>26</sup> Local currency devaluations and restrictions on foreign currency remittances ceased during the Second World War, when Latin American exports rose and currencies began to appreciate.<sup>27</sup> From 1940 onwards, profits recovered and the company resumed partial payment of dividends as indebtedness decreased.

Since the enactment of the Public Utility Holding Company Act, Electric Bond & Share reconsidered the form of corporate governance. Interlocking-directorates had been the main strategy of Electric Bond & Share to control its holding companies, but in 1935, the strategy for corporate control changed to elude the regulations of the Securities and Exchange Commission. The financial, technical, legal, and administrative services delivered to American & Foreign Power by its parent company were undertaken by Ebasco Services Incorporated (EBASCO), another subsidiary of Bond & Share.<sup>28</sup> American & Foreign Power's directorship was renewed, but Bond & Share still controlled the managerial decisions by its majority voting power. From 1937 to 1944, Bond & Share owned 76.8 per cent of common stock voting rights in American & Foreign Power, dropping to 40.2 per cent in 1952. By the second postwar period, American & Foreign Power contributed 21 per cent of Bond & Share's revenues in shares and interests, and 11.3 per cent of its revenues through dividends.<sup>29</sup>

***c) American & Foreign Power business performance, 1930-50.***

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<sup>26</sup> Electric Bond & Share paid no dividends either. By 1945, 45 per cent of the revenues came from its interests in controlled companies and 55 per cent, from dividends. Electric Bond & Share Co., *Electric Bond and Share Company*, 1947.

<sup>27</sup> US SEC, Holding Company Act 1935, Findings and opinion of the Commission, pp. 13-4

<sup>28</sup> The Public Utility Company Act aimed to minimise the adverse effects of monopoly in gas and electricity industries. Section 11b limited each system's operation to a unique integrated public utility system. US SEC, The Public Utility Holding company Act of 1935, Report to the Subcommittee, p.3; US SEC, Holding Company Act 1935, Findings and opinion of the Commission, p. 33; Electric Bond & Share Co., Remarks of C.E. Groesbeck (Chairman) to stockholders, 1937

<sup>29</sup> Electric Bond & Share Co.; Electric Bond and Share Company, 1947 (booklet).

The stagnation of public financing via international market restricted the investment plan of the US-holding company, particularly in Argentina. Against the backdrop of the Great Depression, the prospect of modernising management and services was compromised on account of the financial issues and a decreasing profitability in foreign currency.

In the early 1930s, the company's situation in Brazil was not as critical as in Argentina thanks to investments made by the former concessionaires in the 1920s. In the states of Bahia and Rio de Janeiro, the company could take advantage of midsize hydroelectric plants: *Bananeiras* (9000 kW) serving the city of Salvador, and Alberto Torres (9000 kW) and Fagundes (4800 kW) serving the state of Rio de Janeiro. These projects only sought the expansion of existing plants, such as the enlargement of the Paraguaçu River reservoir which served the *Bananeiras* plant.<sup>30</sup>

The *Cia Força e Luz de Minas Gerais*, serving the state capital of Minas Gerais, Belo Horizonte, maintained the hydroelectric plant *Rio das Pedras* (11,800 kW); in Curitiba, capital of Paraná, the *Chaminé* (8000 kW) plant was completed in 1931. The northeastern capital cities, Maceio, Recife, and Natal, depended on thermoelectric power plants, which drove up the cost of services. The most that American & Foreign Power could undertake was to expand those thermoelectric plants or to build smaller ones. Companies in Rio Grande do Sul faced the same scenario and their thermoelectric plants were enlarged in 1932 and 1937.<sup>31</sup>

In São Paulo, the company inherited a rather dispersed system of small hydroelectric plants, including one of the largest, the Marimbondo Hydroelectric Plant, which opened in 1928 (8000 kW). There, the *Companhia Paulista Força e Luz* (CPFL) was concerned about connecting local plants to a new 450 km-regional grid. Moreover, American & Foreign Power agreed to integrate a regional grid together with Brazilian Traction -Light's parent company- in capital cities of São Paulo and Rio de Janeiro. As a result, CPFL expanded the number of cities and population served up to 259 cities and more than 3.2 million people in São Paulo state by the end of Second World War. After 1945, the company needed to accelerate new plant construction projects, such as the *Peixoto* site.<sup>32</sup>

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<sup>30</sup> American & Foreign Power, Annual Report (1929-39).

<sup>31</sup> A&FP, Annual Report (1929-39).

<sup>32</sup> A 20,000 kW expansion project had been planned by the company in 1941, but it could not be developed until the second post-war. A&FP, Annual Report (1941), p XX.

Consequently, the performance of American & Foreign Power in Brazil was satisfactory in the 1930s. Despite of some difficulties in the Northeastern capitals, the concessions in São Paulo ensured economies of scale and better financial results than those in Argentina. From 1934 to 1944 the number of consumers increased from 202,000 to 343,000, while the electric power production almost doubled: from 395 million kWh to 798 million kWh.<sup>33</sup> On the upside, taking advantage of the improvements made by earlier concessionaries, it did not need to invest in costly works such as new hydroelectric plants. In 1929-39, its revenues fluctuated around an average of \$10 million, despite the devaluation of the Brazilian currency. During the war, the exchange rate recovered and revenues increased, reaching over \$19 million in 1945.<sup>34</sup>

In Argentina, the 1929 plan to reorganise the financial structure, review the concessions, and promote sales of electrical equipment was ongoing, but the \$7.5 million investment project to expand the systems was never carried out.<sup>35</sup> Nevertheless, profitability of the Argentine subsidiaries increased both in local currency and US dollars since 1935. Incomes in US Dollars grew at a moderate rate (3-4 per cent) in 1934-37, but rising fuel costs and wages affected operating profits from 1937 on. At the outbreak of the Second World War, the appreciation of the local currency caused operating and net revenues to boost; and so did profits. The revenues of Argentinian subsidiaries continued to grow until 1946, but as shown in Table 5, the annual growth rate began to slow down in 1943, when the military regime paved the way to the expropriation of American & Foreign Power's subsidiaries.

**Table 5. American & Foreign Power: Segregation of Gross Earnings of Operating Subsidiaries in Latin America.**  
(US currency at par exchange)

	Argentina	Brazil	Mexico	Chile	Cuba	Total All subsidiaries
1928		6.772.790	1.653.744		17.395.693	30.112.578
1929	4.085.237	10.990.920	8.712.591	11.695.321	18.179.657	63.709.207
1930	14.221.420	14.310.684	9.655.099	12.780.597	18.023.473	84.657.214
1931	9.708.387	9.315.939	7.909.877	10.716.507	15.259.032	65.426.170
1932	8.357.867	9.595.612	5.236.418	6.846.371	12.142.253	53.137.081
1933	10.152.848	11.191.329	4.729.330	8.090.688	10.590.232	57.513.332
1934	8.017.731	10.178.081	5.916.478	4.720.358	8.721.446	53.035.088

<sup>33</sup> Cachapuz, *Panorama do setor elétrico*, p.144.

<sup>34</sup> American & Foreign Power, *The Foreign Power system*.

<sup>35</sup> The company built few plants in small towns such as Junín, Villa María y San Francisco, and expanded the generating capacity of power plants in Tucumán, San Juan, Mercedes y Mar del Plata. A&FP, Annual Report, (1930-41)

1935	8.520.692	9.274.655	6.442.700	5.276.841	9.909.735	54.837.650
1936	9.396.942	10.367.921	6.598.811	5.087.936	10.513.933	56.371.011
1937	10.760.854	12.054.279	7.280.914	5.927.932	11.748.581	62.162.264
1938	9.865.875	10.757.402	6.534.259	6.808.227	12.518.381	59.808.648
1939	9.294.019	10.563.632	5.985.592	6.187.585	11.958.602	58.543.446
1940	9.341.223	11.431.176	5.918.692	6.858.965	12.006.161	61.389.670
1941	10.028.096	11.945.044	6.669.909	6.769.555	14.131.088	59.234.838
1942	10.712.284	13.224.288	7.203.342	6.876.294	15.928.793	64.384.946
1943	12.423.105	15.095.165	8.032.887	7.712.888	17.503.519	72.414.900
1944	12.420.072	16.541.745	8.490.634	8.728.468	18.941.857	77.716.599
1945	12.383.149	19.138.155	9.666.785	9.748.556	21.437.777	86.257.222
1946	12.953.875	23.460.740	11.069.866	10.727.237	24.084.308	97.168.640
1947	12.441.014	27.899.248	12.308.459	14.241.986	27.066.704	109.469.622
1948	10.987.524	32.035.916	11.953.033	18.384.300	33.343.038	124.108.841
1949	9.787.302	36.901.797	11.250.469	23.073.634	34.295.016	135.331.658
1950	6.990.408	39.883.964	11.765.069	26.828.480	37.343.561	145.394.998
1951	7.197.089	44.650.021	13.530.123	29.075.450	42.066.130	160.700.000
1952	9.030.608	49.523.623	15.575.524	38.306.548	47.290.306	187.186.003
1953	10.251.826	53.590.386	16.976.641	55.780.213	51.056.558	218.896.614
1954	s.d	s.d	s.d	s.d	s.d	186.200.000
1955	11.504.850	37.587.975	16.421.760	25.211.540	59.883.000	188.400.000
1956	6.111.053	44.789.993	18.555.600	26.695.431	67.552.000	202.900.000
1957	6.805.498	49.950.000	22.984.000	28.284.000	73.984.000	214.735.000
1958	7.791.356	31.296.000	27.084.640	19.932.000	75.617.000	207.104.090
1959	-	25.470.000	29.517.760	28.198.000	56.712.750	216.729.668

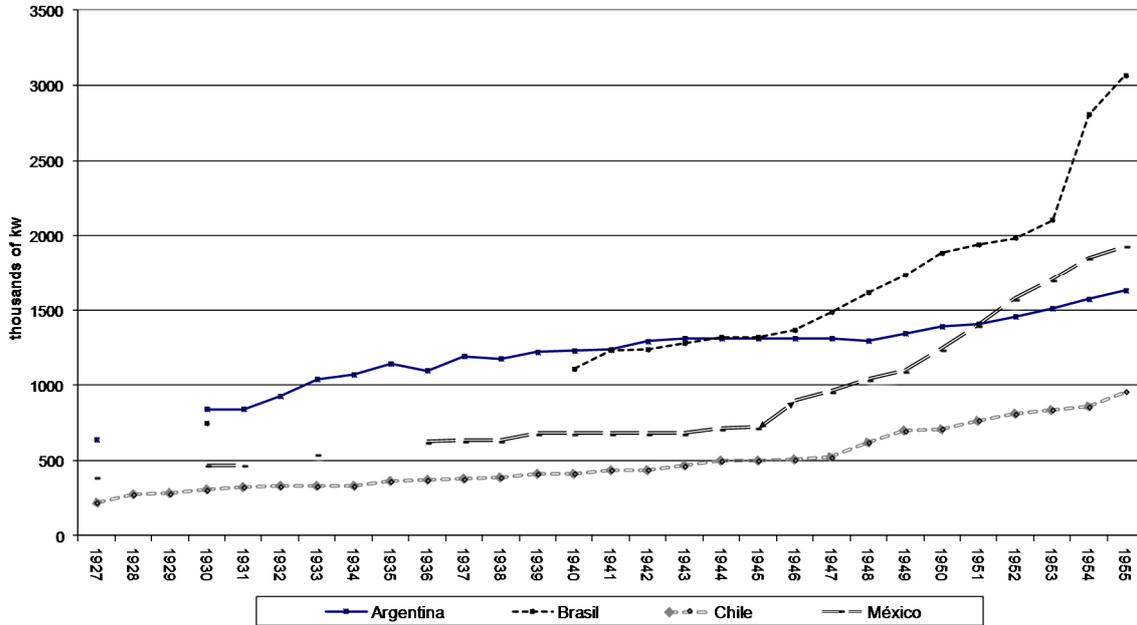
Source: A&FP, *Annual Report* (1928-60).

Before the expropriations, American & Foreign Power's businesses in Argentina were stable but unsatisfactory, insofar as the problems encountered in the diagnosis of 1929 remained unresolved. Despite the improvement of transmission lines to connect small cities, the systems operated by this company did not developed economies of scale, contrasting with the systems controlled by CIAE and SOFINA. Few investments were made to increase generating capacity, compared with those in Brazil and other Latin American countries. Consequently, electricity supply was poor, leading to numerous conflicts with local authorities.

From 1929 to 1945, the earnings of American & Foreign Power's subsidiaries similarly evolved in Latin American countries, excepting for Chile: stable revenues until the mid-1930s, with minimal growth afterwards. The poor performance of company's businesses in 1931-46 resulted from its low investments as the Great Depression blocked the ability to raise capital. Moreover, towering indebtedness with banks and with the parent company Electric Bond & Share at high interest rates, in addition to currency exchange losses in Latin America, limited the resources for self-financing. The

stagnation of investments in electricity systems is confirmed by the evolution of the total generating capacity by country, shown in Figure 1

**Figure 1.**  
**Generating Capacity in Selected Latin American Countries, 1927-1955**



Source: CEPAL, *La energía en América Latina*, pp. 121-48.

In 1946, after a decade of stagnation, generating capacity began to increase in all countries, with the exception of Argentina, where expropriations stopped the company's investment of capital. As a result, in 1955, the generating capacity of American & Foreign Power's subsidiaries in Argentina was 33 per cent lower than in 1932, even though the number of customers served and the electricity production were slightly higher, as shown in Table 6. While the Brazilian subsidiaries expanded their generating power capacity in almost 95,000 kW, and the Mexican and Chilean around 38,000 and 25,000 kW, respectively, the Argentine subsidiaries expanded by only 8,500 kW in the postwar period, before the expropriations.<sup>36</sup> The high expectations based on the expansion of Brazilian electricity market, as well as the strategic alliance between Brazil and US reinforced by the Abbink mission in 1948, paved the way to new investments in the first half of the 1950s.<sup>37</sup>

<sup>36</sup> American & Foreign Power, Annual Report (1949), p. 5.

<sup>37</sup> For the relationship between Brazil and US, which involved military and economic aid, see Hilton, *The United States and Argentina* pp.158-180

**Table 6: American & Foreign Power statistics by country, 1955**

<b>Company/ group of companies by Country</b>	<b>Estimated Population served (1000 inhab.)</b>	<b>Electric customers</b>	<b>Installed Generating Capacitiy (kw)</b>	<b>Electricity Output (1.000 kwh)</b>
ANSEC Group /Argentina	2151,8	262.080	96.658	325.520
Empresas Eletricas Group /Brazil	7395,9	743.487	314.465	1.951.840
Cia. Chilena de Electricidad /Chile	2401,4	286.426	165.198	1.142.689
Cia. Colombiana de Electricidad/ Colombia	848,2	78.438	65.379	276.945
Cia. Nacional de Fuerza y luz/ Costa Rica	384,1	39.758	39.170	197.065
Cia. Cubana de electricidad/ Cuba	2753,6	647.492	266.915	1.199.491
Empresa electrica del Ecuador/ Ecuador	331,5	37.103	19.835	83.720
Empresa electrica de Guatemala/ Guatemala	486,3	46.980	20.170	98.560
Impulsora Group /Mexico	2804,4	348.962	203.832	1.543.760
Cía. Panameña de Luz y Fuerza/ Panama	272,2	52.508	29.220	104.725
Cia. Anonima Luz Eléctrica de Venezuela/ Venezuela	744,6	100.179	1.990	264.351
<b>Total Latin American countries</b>		<b>2.643.413</b>	<b>1.222.832</b>	<b>7.188.666</b>

Source: A&FP, Annual Report (1955), p. 48

As of 1950, capital expenditures in the electricity power industry revived, especially applied to renewal, mechanisation, and the installation of high capacity generating units. In this period a new financing model for the electricity industry emerged, based largely on long-term loans with international banks and in a much more cautious manner, by issuing securities. The revival of investments increased revenues for the Latin American subsidiaries (excluding Argentina), which reached their peak in 1953. However, the expropriation of the Cuban subsidiary in 1960, followed by the expropriations in Brazil and the sale of Mexican subsidiaries put an end to all favorable expectations. The operating revenues fell by half, marking the final chapter of the group's venture in Latin America.<sup>38</sup>

### **III. American & Foreign Power and the State: Argentina and Brazil, 1930-60.**

#### ***a) Government regulation of foreign utilities after the Great Depression.***

<sup>38</sup> A&FP, Annual Report (1960).

American & Foreign Power's directors could not imagine that the effects of the Great Depression on Latin America economic policy would be so painful and long lasting. Their main concern was that currency devaluation would damage the sustainability and profitability of their investments. Moreover, governments restricted currency remittances in Argentina, Brazil, Chile, Colombia, Costa Rica, and Ecuador. In this context, foreign companies and governments clashed over the standard of public utilities, but the timing and patterns of government intervention differed greatly in Brazil and Argentina.<sup>39</sup>

Brazilian electricity policies shifted during the administration of Getúlio Vargas in 1930-45. All decisions about electric utilities were centralised and transferred from the local authorities to the Federal government, concessions for perennial water courses and waterfalls were suspended, and the exploitation of hydropower was undertaken by the central government. In 1932, Minister Juarez Távora created a board for issues concerning hydropower exploration and regulation of water resources at the *Departamento Nacional de Produção Mineral* [National Department of Mineral Production].<sup>40</sup> It was, however, the suspension of the gold clause (Decree No. 23501, 1933), which confronted the interests of foreign utility companies, as the previous adjustment of electricity rates to gold, reduced the effects of currency devaluation on the company's current incomes in US dollars. In 1934, with the new Brazilian constitution, the Water Code—the first national legislation on water and electricity—was finally enacted.<sup>41</sup>

These regulatory policies clearly upset the electricity companies, especially the foreign ones. However, the regulation of electricity rates and the restrictions on private access to waterfalls—enforced from 1937 to 1942—did not threaten the concessions managed by Light and American & Foreign Power. The role of the government shifted only through the creation of CHESF (*Companhia Hidrelétrica do São Francisco*) in 1945, to overcome electricity deficit in the surrounding area. In parallel, other regionally-oriented state-owned enterprises were created from the late 1940s to the 1950s.

In Argentina, on the other hand, local concessions prevailed in the interwar period, except in those provinces such as Córdoba and Tucumán that relied on water

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<sup>39</sup> Lanciotti and Saes, *La regulación de los servicios*.

<sup>40</sup> Lima, *Estado e energia*, p.32-3; Cavalcanti, *Concessões de energia*.

<sup>41</sup> In 1939, the National Council of Water and Power (CNAEE) was formed following the US Federal Power Commission. Correa, *O setor de energia elétrica*, chap. 3.

resources (whose use was regulated by provincial governments).<sup>42</sup> Local concessions set minimal standards of service provision and maximum rates adjustable to gold price. Electricity companies were exempt from paying import taxes for raw materials and equipment. The impact of the 1930 crisis on electricity rates led to the first attempts at regulation by local governments. Municipal commissions for electricity companies were created in the cities of Buenos Aires and Rosario, as well as in the provinces of Tucumán and Córdoba. Based on the criteria of the US Federal Trade Commission, their reports revealed assets overvaluation and excessive profits. On top of it all, the quality of service was poor. Municipalisation was recommended; however, the regulatory framework did not change until 1943.

The military, who seized power in 1943, changed the regulatory strategy for electric utilities. A decade after the first regulations in Brazil, the Argentine government took more radical actions. The national government created the *Dirección Nacional de la Energía* [National Agency of Energy], responsible for overseeing the production and distribution of energy and promoting the development of renewable energy sources. The Ministry of Interior also established two investigative commissions charged with reviewing the foreign power concessions, and ordered rate reductions of around 20 per cent, while suggesting the possibility of expropriating public utility assets.<sup>43</sup>

Electricity policy was integrated with the planning of the National Post-War Council (1944), which gave priority to the development of hydroelectric energy production to reduce the fuel consumption of thermo-electrical plants.<sup>44</sup> The transition from local concessions to centralised management of resources also motivated the creation of the National Water Administration, an agency responsible for coordinating water uses throughout the territory. Implementation of the plan was the responsibility of a new agency, the *Dirección General de Centrales Eléctricas Estatales* [General Department of State Power Plants], whose mission was to plan, construct, and operate electric power plants and distribution networks.<sup>45</sup>

The inquiry commissions recommended to suspend the legal status of concessions and to expropriate the foreign subsidiaries. However, the national government opted to send the documentation to the provincial governments which would take the necessary

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<sup>42</sup> A typology of regulatory strategies for electricity monopolies, in Gómez Ibañez, *Regulating Infrastructure*, pp.18-36.

<sup>43</sup> Decrees 4910 and 12648, 1943

<sup>44</sup> The Council reported directly to the vice presidency of the country and was led by Colonel Juan Domingo Perón. Villarruel and Berrotarán, *Un diagnóstico de la crisis*

<sup>45</sup> Dirección General de Centrales Eléctricas del Estado, *Memoria de Centrales Eléctricas*, p. 1.

steps, thereby transferring the decision whether or not to expropriate to the provinces. From 1943 to 1946, Provincial authorities of Tucumán, Jujuy, Corrientes, Mendoza, Santa Fe, Entre Rios, Cordoba, and San Luis expropriated the plants of American & Foreign Power.<sup>46</sup> The reasons given were the problematic status of the plants, whose obsolete equipment prevented efficient provision of service and whose limited capacity left them unable to meet demand.<sup>47</sup>

By 1946, 11 of the 14 electricity companies expropriated in Argentina, were American & Foreign Power's subsidiaries. The expropriation mainly affected small plants in the north and center of the country; however some larger plants were expropriated as well, such as those located in the province of Córdoba. Notably, large thermal power plants located in the most populated regions of the country, belonging to the SOFINA and the Italian-Swiss group, were not expropriated. Expropriation decisions were based on the government project to build new hydro-power plants in secondary cities to stimulate the growth of regional economies and promote the use of water resources to reduce fossil fuel consumption.<sup>48</sup> Moreover, the compensations for those expropriated assets were substantially less than the potential costs of expropriating the large plants owned by SOFINA in the most dynamic areas.

To sum up, expropriations mainly affected the subsidiaries of American & Foreign Power for the following motives: 1) US companies were less capitalized than their competitors, so the Government could afford the compensations for expropriation, as it did a decade later. 2) As American & Foreign Power did not invest in expanding the generating capacity and enlarging networks, the provision of electricity in the cities covered by this company was very poor, contrasting with the service provided in the pampean region. Therefore, conflicts between the electricity companies and users arose in the 1930s, getting worse in the years of the Second World War. 3) US companies operated in secondary cities and in large rural areas, whose electrification became a priority according to the industrializing program of the Argentinian Government. 4) Argentine neutrality in the Second World War strained the already tense diplomatic

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<sup>46</sup> El Informe Rodríguez Conde, *Informe de la comisión investigadora*

<sup>47</sup> Archivo General de la Nación (AGN), Legajo 664, Carpeta 67- Cámara de diputados. *Comunicación sobre concesiones eléctricas*, Decretos 1086 y 1093; A&FP, Annual Report (1943), p. 9; (1944), pp. 5-6; (1945) p. 7; (1946), p. 7; (1947), p. 6. For the expropriations, see Lanciotti, *Del estado garante*.

<sup>48</sup> Dirección General de Centrales Eléctricas del Estado, *Memoria de Centrales Eléctricas*, pp. 1-4.

relations between US and Argentina, making the US companies the main target of nationalistic positions.<sup>49</sup>

While the Argentine provincial governments expropriated electricity plants, the Brazilian government followed a policy of rapprochement with the US. By 1947, American & Foreign Power and the government had the same view: it was time to reinvest in the electricity sector and review rate structures to ensure higher revenues. The difficulty of raising funds in the financial market led to the strategy of seeking resources from international lending institutions, such as the International Bank for Reconstruction and Development (IBRD) and the Export-Import Bank of the United States (Eximbank).<sup>50</sup> From the end of the Second World War to 1956, both institutions invested more than \$450 million in Latin American electricity sector, especially in Brazil and Mexico (Table 7). As a result of the expropriations of US subsidiaries, Argentina was denied access to these sources of capital.

**Table 7. Latin America: International loans authorised for the electricity sector by May 1956 (thousands of dollars)**

Countries	To state-owned companies		To private companies		Total
	Eximbank	IBRD	Eximbank	IBRD	
Brazil		57,300	47,552	91,390	196,242
Colombia	4,990	13,030	297		18,317
Costa Rica	3,523				3,523
Cuba			24,004		24,004
Chile	11,137	13,500			24,637
El Salvador		12,545			12,545
Mexico	23,150	53,800	24,853	26,000	127,803
Nicaragua	600	7,950			8,550
Peru	444				444
Uruguay	12,000	31,900			43,900
Venezuela			6,854		6,854
Total	55,844	190,025	103,560	117,390	466,819

Source: CEPAL, *La energía en América Latina*, p. 82.

In Brazil, Light received over \$91 million from IBRD, while American & Foreign Power received \$47 million from Eximbank. State enterprises together received \$57

<sup>49</sup> A comparative analysis of SOFINA and American & Foreign Power in Argentina, in Lanciotti, Foreign Investments. For the rivalry between US and Argentina, see Di Tella and Watt, *Argentina between the Great Powers*.

<sup>50</sup> A&FP, *Review of Company's progress and its future Outlook*, Annual Report (1947)

million, which was invested in CHESF and other state-owned companies in Rio Grande do Sul (CEEE), Minas Gerais (Cemig), and São Paulo (CESP). In 1948, American & Foreign Power's expenditures came to \$6.2 million, distributed among eight subsidiaries and funding projects like CPFL's Carioba Thermal Power Plant (30,000 kW) in São Paulo state. The amount of the loan would jump to more than \$40 million by 1952, when CPFL became responsible for a \$30 million investment for the construction of the *Peixoto* Plant, one of the largest in the world at that time, allowing the subsidiary to increase its generating capacity by 65 per cent. The plant was inaugurated in 1957 and it reached an annual production of 192,000 kW by 1960.<sup>51</sup> The increase of net electricity output was also benefitted by the expansion of state-owned companies that supplied electricity to American & Foreign Power's subsidiaries, such as the Paulo Afonso hydroelectric plant in the Northeastern Brazil.<sup>52</sup>

The situation of American & Foreign Power in Brazil and Argentina was quite different in the 1950s: while the uncertainty already pointed to a definitive exit from Argentina, Brazil offered the prospect of continuity, especially after the new investments. Both governments had expanded their participation in the electricity sector, through new laws and agencies; however, US capital still had an important share in the project of the Brazilian government, while it was distant to the Argentine project. The trajectory of American & Foreign Power in both countries varied upon the investments made by the company and its relationship with national governments, mediated by the very active American diplomacy.

***b) The end of an era: Expropriations in Argentina and Brazil.***

The fate of the Argentine holdings was clear by the end of the 1940s. In 1944-46, American & Foreign Power had brought suits in the provincial courts, claiming that subsidiaries had been deprived of current incomes and compensations were inadequate. The appeals reached the Supreme Court, which rejected them in 1946. Subsequently, American & Foreign Power stop investing in Argentina and proposed a deal to sell the all its properties to the government.<sup>53</sup>

The regulation strategies applied by the military government continued during the administration of Juan Domingo Perón (1946-52). The electrification project was

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<sup>51</sup> CEPAL, *La energía en América Latina*, Appendix X

<sup>52</sup> A&FP, Annual Report (1955), p.19

<sup>53</sup> A&FP, Annual Report (1944), pp. 5-6, (1945) p. 7; (1946), p. 7-8; (1947), p. 6; (1949), p.7-8.

included in the First Five-Year Plan, which proposed developing hydroelectric potential, expanding the generating capacity, coordinating energy policy between the federal, provincial, and local authorities, and assuming direct management of electric utilities when needed. To this end, the state would build 12 thermal power plants and 47 hydroelectric plants, a planned investment of \$417.5 million along 15 years. By 1951, the National Energy Company, an state-owned company which replaced the former agency, administrated 51 plants, with a total capacity of 83,643 kw.<sup>54</sup>

Competition with state-owned plants was seen by American & Foreign Power as a further problem. According to the company reports, the expansion of energy sales in Argentina would not compensate for losses caused by the expropriation of plants in Santa Fe and Cordoba.<sup>55</sup> Incomes from non-expropriated subsidiaries barely covered the operating costs, since rates were frozen until 1949. Moreover, the 1949 Constitution provided for acquisition of public services by the State either by purchase or expropriation; subsequently, the company again proposed to sell all its assets to the Government. From 1950 on, the US subsidiaries in Argentina faced deficits.<sup>56</sup>

Negotiations moved forward in 1953, when the enactment of a new foreign investment law providing for improved foreign exchange treatment for new foreign investments was announced.<sup>57</sup> The agreement was finally signed by the administration of Arturo Frondizi in 1958, along with a cooperation program between US companies and the Argentine state oil company *Yacimientos Petrolíferos Fiscales* (YPF). According to it, all the subsidiaries would be transferred to the government, and their assets would be valued by the Supreme Court, and four experts appointed by the executive branch, the IBRD, the Chief Justice and the American & Foreign Power.<sup>58</sup> A year later, American & Foreign Power transferred its properties to the Argentinean government, which paid \$2.5 million and agreed to cancel the remaining amount of \$45.3 million in 13 years.

In Brazil, on the other hand, optimistic business expectations prevailed until 1958. The 1956 report celebrated the Juscelino Kubitschek government's Target Plan, aimed

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<sup>54</sup> AGN, Fondo documental Secretaría de Asuntos Técnicos de la Nación 1946-1955. Legajo 456, Planificación Primer y Segundo Plan Quinquenal. Proyectos y objetivos; Legajo 395, 2do Plan Quinquenal, Plan de Energía Eléctrica (anexos). Legajo 664, Memorandum de la Dirección de Economía y Estadística del 6 de setiembre de 1946.

<sup>55</sup> A&FP, Annual Report (1948), pp. 5-6.

<sup>56</sup> A&FP, Annual Report (1947), p. 6-8; (1950), p. 7; (1952), p. 16

<sup>57</sup> A&FP, Annual Report (1953), p. 15

<sup>58</sup> A&FP, Annual Report (1958), pp. 18-19

to develop the country's infrastructure.<sup>59</sup> Kubitschek facilitated the entry of foreign capital, showing a strong interest in developing the Brazilian energy sector.<sup>60</sup> Hence, in 1956, the company proposed a five-year project to expand electricity generation, which would cost \$250 million, increasing the installed capacity in 421,500 kW.<sup>61</sup> At that time, American & Foreign Power's investments in Brazil accounted for 38.8 per cent of its total investments.<sup>62</sup>

In the second half of the 1950s, American & Foreign Power came to a turning point: increasing incomes were drained by the increase of general expenses.<sup>63</sup> According to the company's directors, profits were less than expected, as consequence of inflation, currency devaluation (especially after October 1953- and the effects of the Water Code, which kept the rate of return of electricity companies at their historical values in local currency, restricting the automatic adjustments of rates. As a result, the average revenue did not follow the increase of the average cost of living.<sup>64</sup> Thus, new investments were needed, which suggested seeking additional financial resources in Brazilian capital market.<sup>65</sup>

Even though the company provided electricity throughout most of Brazil, in 1959, the government of Rio Grande do Sul expropriated *Companhia de Energia Elétrica Rio-Grandense*. The conflict was caused by the nationalist leanings of the state governor who, questioning the services of the US company, took over the subsidiary for the amount of 1 cruzeiro!.<sup>66</sup> The case was appealed to the federal government but saw no definite solution. In 1962, new disputes emerged in the city of Recife. The local government claimed that the company's assets should be reverted to the government of Pernambuco at the end of the concession. From the company point of view, uncertainty would persist even if the expropriations were reversed by the Federal government. Moreover, at that time the company faced significant losses abroad, especially those

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<sup>59</sup> President's Letter. A&FP, Annual Report (1956), p.3.

<sup>60</sup> Lessa, *15 anos de Política Econômica*; Orenstein and Sochaczewski, *Democracia com desenvolvimento*, p.179.

<sup>61</sup> The plan was not entirely fulfilled: 156,900 kW were installed according to the company due to the non-commitment of BNDE. *Memória da Eletricidade [Memory of Electricity]* 2006, p.238-242).

<sup>62</sup> A&FP, Annual Report, (1954-60).

<sup>63</sup> A&FP, Annual Report, (1957) p. 27.

<sup>64</sup> In 1939-55, the average cost of living in São Paulo increased to more than 900, while the average revenue per kWh in Cruzzeiros increased to almost 225. A&FP, Annual Report (1955), p.18.

<sup>65</sup> The Brazilian Bank for Economic Development, created in 1952, contributed to finance the American company at that period. A&FP, Annual Report (1957) p. 3-4

<sup>66</sup> Brizola, L, *A Compra das subsidiárias*.

resulting from the 1959 Cuban revolution. Its strategy shifted to rapidly withdraw from remaining concessions, and to minimise losses as far as possible.

Seeking support from the US government, American & Foreign Power alleged that it suffered considerable losses in Cuba, expropriations amounted to \$153 million and it needed to reduce the risk of further expropriations, as seemed likely to occur in Brazil. Company's director requested the government to sell eleven electric utilities, as it had done in Mexico, taking advantage of the fact that the João Goulart administration (1961-64), was undergoing serious financial difficulties, thereby requiring US financial support.<sup>67</sup> President Goulart wanted to roll over existing debts with the US, so the US government conditioned the negotiations to an agreement with American & Foreign Power<sup>68</sup>. In fact, the company requests were not solved during the Goulart administration, which fell to a military coup in 1964. The report for the sale of American & Foreign Power's subsidiaries was presented by the Scandinavian Engineering Corporation, which was responsible for placing them under government trust, and signed the agreements for the expropriation on November 12, 1964<sup>69</sup>. Company's assets were to be transferred to the newly formed state-owned company *Eletrabras*, and their valuation proved to be a victory for the interests of the US holding company.

In the 1960s, the company strategy shifted, as shown by the agreements between American & Foreign Power and both governments to invest in state-owned oil companies such as YPF and Petrobras. Despite their divergent trajectories, Argentina and Brazil seem to have typified an era of US investments in the electricity sector in Latin America.

#### **IV. Concluding Remarks**

American & Foreign Power's trajectory reveals the fluctuant trend of US direct investment in Latin American electric utilities. The company's strategy aimed at expanding electric utility systems to provide a market for machinery and equipment manufactured in the United States of America in place of products previously obtained

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<sup>67</sup> Bandeira, *O governo João Goulart*.

<sup>68</sup> John F. Kennedy Library, *Conversation between John Kennedy and João Goulart*, p.1.

<sup>69</sup> Electricity Archive, Sweden. Scandinavian Engineering Corporation. *Report on the findings and determinations specified in clause eighteen of the contract of sale between Eletrabras, American & Foreign Power, and BEPCO*

from Europe<sup>70</sup> was similar in both countries at the beginning. However, the crisis of 1930 prolimited the investments to the Brazilian market, which had better prospects than the Argentinian market in terms of size and economies of scale. Consequently, the performance of American & Foreign Power began to diverge in both host economies. In Brazil, where investments were done, the company could negotiate with the government the development of new projects and further investments despite of the regulations introduced during Getulio Vargas administration. On the contrary, in Argentina, the company did not develop the systems according to the concession terms, giving place to a number of conflicts with the government.

The investment strategy of the company not only depended on the good prospects for electricity markets, but also on the financial restrictions caused by the crash of 1929, followed by the change of the political conditions of the host economies.<sup>71</sup> As the financial market fell down, the depreciation of the exchange rate made profits drop and new regulatory strategies arose. The company decided to defer the expansion of investments in Brazil and to suspend the plan for Argentina. After the Second World War, US foreign policy towards Brazil and Argentina consolidated the different strategies of American & Foreign Power. The diplomatic friction between US and Argentina contrasted to the cooperation with the regime of Getulio Vargas in Brazil. Then, the expropriation of American & Foreign Power's subsidiaries made the Argentine- American relationship even worse at the end.

Early company's goals, aimed at the reorganisation of Latin American subsidiaries, were only partially achieved. The revision of the concessions to homogenise the legal status of utility companies in different provinces and municipalities failed. Despite some progress in restructuring the capital of subsidiaries and the implementation of modern accounting methods, the plans for financial organisation and technical modernisation of electric utilities, which relied on huge investments, were slowed by the financial crisis. The crisis of 1930 marked the end of public financing of electric utilities; thereafter, public utility holding companies consolidated their dependence on the controlling parent company by increasing their debt at high interest rates. At the same time, the end of the gold standard, followed by the devaluation of Latin American currencies, increased the companies' financial costs in the 1930s. During the first decade of operations, operating incomes increased along

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<sup>70</sup> Review of the Company affairs, A&FP, Annual Report (1942), p. 11

<sup>71</sup> Wilkins, Comparative Hosts, 18-50.

with the expansion of the Argentinean and Brazilian economies; however, financial losses pushed profits in US dollars down.

The good prospects for American & Foreign Power's global businesses declined all over the world after the crisis, however the performance of the company varied upon the interplay between the corporate strategy and the host economies conditions. American & Foreign Power could rely on the medium size hydroelectric plants operating in Brazilian regional markets, while the low capacity plants acquired in Argentina, required high investments to produce adequate returns. As the company original plan was not implemented, the political parameter became more significant to explain the controversial relationship with the government and the poor performance of the firm.

In the second post-war, a new form of financing based on international bank loans began to emerge, while national governments broadened their participation in the electric power sector. The availability of capital to modernise electricity systems renewed the business expectations of success. In that context, the Brazilian subsidiaries of American & Foreign Power increased their generating capacity and extended their systems, obtaining higher incomes. The cooperation between Brazilian and US government favored this expansion, as the company could improve its services taking advantage of the international loans available for the closest US allies in the second post-war period. .

In contrast to Brazil, the political parameter impacted negatively on American & Foreign Power businesses in Argentina. The poor quality of the services and the insufficient electricity supply, paved the way to the expropriation of several plants in 1943-48. The tense relations between the US State Department and Argentina's military government hindered any negotiations between the two parts and the company decided to sell its properties in Argentina. The claim for adequate compensations remained unsolved for more than a decade. As a result, Argentina did not get international funding until the end of 1950s, and the generating capacity of Argentinian electricity system increased slower than it did in other Latin American countries.

The close relationship between Brazilian and US government could not avoid the emergence of further difficulties in the late 1950s. The leading role of Latin American governments in electricity systems, which included the confiscation of American & Foreign Power properties in Cuba and the subsequent expropriation of some subsidiaries in Brazil, along with current losses from the exchange rate, grounded the

firm's decision to withdraw from the region. The company sold its properties to the Mexican government and signed an agreement with the governments of Argentina and Brazil, to pay off the debt of expropriated companies, transferring the remaining assets to the state-owned electricity enterprise.

Overall, we conclude that in the long run American & Foreign Power's revenues fluctuated substantially, and that the average performance was not entirely satisfactory. Business performance was greatly affected by changes in the international financing conditions and in the regulatory framework, moving from concession contracts to discretionary regulation. Nevertheless, the main reason to explain the poor performance of this American company was its late entry into a market controlled by European and Canadian holding companies, which had been operating electricity companies in more developed areas since the end of the nineteenth century. From 1930 to the second post-war, American & Foreign Power followed a venture capital investment strategy: its investments were reduced to minimum and technology transfer was low. Therefore, the systems managed by this company hardly increased the generating capacity of its plants and they did not benefit from economies of scale. As the payment of loans interests was the top priority, the development of the electric power systems actually depended on the investments made by the former companies in Argentina and Brazil. Previous investment patterns determined the different trajectories of American & Foreign Power's subsidiaries in the interwar period, which certainly influenced business-state relations as of the end of the Second World War.

This article also shows that the interests of Electric Bond & Share, the parent company of American & Foreign Power, hindered the expansion of low-cost and high-quality electricity services in Latin American before the second post-war. In this sense, national governments seeking to intervene in the conflicts between electricity companies and consumers, began to discuss the extent of foreign ownership and control of electric utilities. The analysis of these conflicts in Argentina and Brazil also highlights how discussions between the company and both governments were not confined to business issues but encompassed diplomatic efforts as the financing of new ventures was conditioned upon solving the problem of expropriations posed by the US government.

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