Sarah Elisabeth Schmelzer-Roldán

The Impact of Electricity Sector Privatisation on Employees in Argentina and Brazil
A Comparative Institutional Analysis
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In memory of my grandfather

– an electrical engineer and the director of a local public electricity company
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<td>ADEERA</td>
<td>Asociación de Distribuidores de la República Argentina—Argentine Association of Electrical Energy Distributors</td>
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<td>Alianza</td>
<td>Alianza por el Trabajo, la Justicia y la Educación—political coalition in Argentina, ruling in the period 1999 to 2001</td>
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<td>ANEEL</td>
<td>Agência Nacional de Energia Elétrica—Brazilian Regulatory Agency for the Electricity Sector</td>
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<td>APJAE</td>
<td>Asociación del Personal Jerárquico del Agua y la Energía—Argentine Association of Managers in the Water and Electric Energy Sector</td>
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<td>APUAYE</td>
<td>Asociación de Profesionales Universitarios del Agua y la Energía Eléctrica—Argentine Association of Academic Professionals in the Water and Electric Energy Sector</td>
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<tr>
<td>ATE</td>
<td>Asociación de Trabajadores del Estado—Argentine Association of Public Sector Workers</td>
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<td>AyE</td>
<td>Agua y Energía Eléctrica—former state-owned Argentine electricity company of federal jurisdiction</td>
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<td>BNDE</td>
<td>Banco Nacional de Desenvolvimento Econômico—predecessor of the BNDES</td>
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<tr>
<td>BNDES</td>
<td>Banco Nacional de Desenvolvimento Econômico e Social—Brazilian Development Bank</td>
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<tr>
<td>CAMMESA</td>
<td>Compañía Administradora del Mercado Mayorista Eléctrico—Argentine Electricity Wholesale Market Administration Company</td>
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<tr>
<td>CEMIG</td>
<td>Companhia Energética de Minas Gerais—Brazilian energy company owned by the state of Minas Gerais</td>
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<tr>
<td>CGT</td>
<td>Confederación General del Trabajo de la República Argentina—Argentine General Confederation of Labour</td>
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<tr>
<td>CLT</td>
<td>Consolidação das Leis do Trabalho—Consolidation of Brazilian Labour Laws</td>
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<tr>
<td>CNPE</td>
<td>Conselho Nacional de Desestatização—Brazil’s National Privatisation Council</td>
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<tr>
<td>COPPE</td>
<td>Instituto Alberto Luiz de Coimbra de Pós-Graduação e Pesquisa de Engenharia, Universidade Federal do Rio de Janeiro—Luiz Coimbra Institute for Engineering Research at the Federal University of Rio de Janeiro</td>
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<td>CPPA</td>
<td>Comitê Permanente de Prevenção de Acidentes—Committee for the Prevention of Accidents at Light</td>
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<tr>
<td>CSN</td>
<td>Companhia Siderúrgica Nacional—former state-owned Brazilian steel company</td>
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<td>CTA</td>
<td>Central de Trabajadores de la Argentina—Central Workers’ Union Confederation in Argentina</td>
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<tr>
<td>CTERA</td>
<td>Confederación de Trabajadores de la Educación de Argentina—Confederation of Argentine Education Workers</td>
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<tr>
<td>CUT</td>
<td>Central Única dos Trabalhadores—Central Workers’ Union Confederation in Brazil</td>
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<tr>
<td>DNAEE</td>
<td>Departamento de Águas e Energia Elétrica—National Department of Water and Electrical Energy in Brazil</td>
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<tr>
<td>EDEA</td>
<td>Empresa Distribuidora de Energía Atlántica—private Argentine electricity distribution company in the province of Buenos Aires</td>
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<tr>
<td>EDELAP</td>
<td>Empresa Distribuidora La Plata—private Argentine electricity distribution company in the area of Greater La Plata</td>
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<tr>
<td>EDENOR</td>
<td>Empresa Distribuidora y Comercializadora Norte—private Argentine electricity distribution company in the North-Western part of Greater Buenos Aires</td>
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<td>EDESUR</td>
<td>Empresa Distribuidora Sur—private Argentine electricity distribution company in the Southern part of Greater Buenos Aires</td>
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PJ Partido Justicialista—Argentine Peronist party, ruling in the period 1989-1999
PND Programa Nacional de Desestatização—Brazil’s National Privatisation Programme
PPP Programa de Propriedad Participada—Argentine Employee Stock Ownership Plan
PSI Public Services International
PSIRU Public Services International Research Unit—Research Institute Based in London as part of the Business School of the University of Greenwich
PT Partido dos Trabalhadores—Brazilian Workers’ Party, ruling since 2003
RESEB Reestruturação do Setor Elétrico Brasileiro—Restructuring of the Brazilian Electricity Sector
RME Rio Minas Energia Participações S.A.—Brazilian electricity company
Segba Servicios Eléctricos del Gran Buenos Aires—former state-owned Argentine electricity company in the city of Buenos Aires
Senge-RJ Sindicato dos Engenheiros no Estado do Rio de Janeiro—Union of Engineers in the State of Rio de Janeiro
SGST Sistema de Gestão de Trabalho Seguro—Management System for a Safe Working Environment at Light
SINTERGIA-RJ Sindicato dos Trabalhadores nas Empresas de Energia Elétrica do Rio de Janeiro—Union of Electricity Company Workers of Rio de Janeiro
STIURJ Sindicato dos Trabalhadores nas Indústrias Urbanas do Rio de Janeiro—Former Union of Urban Industry Workers of Rio de Janeiro
TEL Taller de Estudios Laborales—Argentine Research Institute for Labour Studies
UN United Nations
YPF Yacimientos Petrolíferos Fiscales—former state-owned Argentine oil and gas company
Preface

One of the most popular advocates of privatisation policies, Margaret Thatcher, passed away last year. Her policies were strongly influenced by the pro-privatisation economic theory predominant at the time and initiated a process that would spread around the world from the 1980s onwards. Currently, in the context of the European financial and economic crisis, privatisation has again become an issue—heavily indebted European countries are privatising in order to generate government revenue and reduce their fiscal deficits.

Although a multitude of privatisation studies have been published during the last two decades, many aspects of privatisation have not so far been fully understood. The impact of privatisation on employees is one such aspect often neglected by the literature. The current search for a new economic paradigm to replace monetarism, further, requires reflection on the policies introduced under the international monetarist regime and their impact upon the countries and populations concerned. This book strives to address current research gaps by comparing the privatisation processes of two Latin American countries, applying a comparative institutional approach.
Chapter 1. Introduction

1.1. Privatisation Processes in Latin America and the World
"Latin America has truly embraced privatisation.” (Megginson and Netter, 2001)

The private sector has historically played an important role in the provision of services in many countries, including Argentina and Brazil. Electricity, one of the main infrastructure sectors, was frequently privately managed during the 19th century. After the Second World War, a move towards the nationalisation of infrastructure services began, motivated by the underinvestment and poor performance of the private firms providing them. Nationalisation, on the other hand, was expected to improve company performance, create full employment, and increase economic growth.¹ Infrastructure sectors in the subsequent years were, therefore, mostly characterised by state monopolies.

A few decades later, from the end of the 1970s onwards, liberalisation and privatisation measures started to be introduced, in turn, on a worldwide basis. A paradigm shift from Keynesianism to monetarism occurred, accompanied by a debate on the role of the state in the economy. One of the earliest and most important privatisation programmes was initiated by the Conservative government of Margaret Thatcher in the United Kingdom during the latter 1980s and early 1990s, with goals including raising state revenues, promoting economic efficiency, reducing government interference in the economy, promoting wider share ownership, providing the opportunity to introduce competition, and subjecting state-owned enterprises to market discipline.² From the late 1980s to the present, many other European governments have also launched large privatisation programmes in several sectors. The UK was followed by Sweden in the early 1990s. In Austria, Belgium, and Germany, privatisation processes followed more or less the time frame set by the European Union starting in the late 1990s.³ In the context of the Washington Consensus,⁴ liberalisation and privatisation measures spread to further parts of the world; even developing countries increasingly started to privatisate former public services. As a consequence, states progressively withdrew from the production of goods and the provision of services. The privatisation process, however, varied widely across regions. In Latin America, it was generally far-reaching and was introduced earlier than in other developing regions, with Chile the first in

⁴ The term Washington Consensus is used here in accordance with Williamson, J. (2004), and refers to the policy employed by the Bretton-Woods institutions vis-à-vis recipient countries.
the area to privatise former public companies, launching a programme as early as the 1970s. By the start of the 1990s, the process in Latin America was fully underway, with three countries (Argentina, Brazil, and Mexico), accounting for virtually 50% of all privatisation proceeds in developing countries and 80% of privatisation revenues in Latin America in the 1990s. This process affected all economic sectors, including infrastructure services. As illustrated by Figure 1, private investment in infrastructure in Latin America amounted to 262 billion US$ in the period 1990 to 1999, making up 54% of total investment in all developing regions, with Argentina and Brazil ranking highest.

**Figure 1:** Investment in Infrastructure with Private Participation per Developing Region, 1990-1999 (in US$ Million)

The reasons for privatising infrastructure services in developing countries include increased demand for services and poor networks, as well as poor performance of public companies, budget deficits, and requirements of structural adjustment programmes.

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7 Own calculation, based on World Bank, Private Infrastructure Projects Database, retrieved from http://ppi.worldbank.org/.
8 Private participation is defined by the World Bank as follows: “The private company must assume operating risk during the operating period or assume development and operating risk during the contract period. A foreign state-owned company is considered a private entity.” See World Bank, PPI Project Database, Project Criteria and Database Terminology.
However, expectations related to the implementation of privatisation, deregulation, and liberalisation measures remained generally unfulfilled; as Rodrik (2006) pointed out: “The only thing that is generally agreed on about the consequences of these reforms is that things have not worked out the way they were intended.”10 After a series of financial crises in the region (Mexico in 1994, Brazil and Ecuador in 1999, Argentina in 2001, and Uruguay in 2002) and other parts of the world, the Washington Consensus and related policy reform agendas became unpopular, not only in Latin America but also, increasingly, in other regions.11 As a consequence, privatisation processes have recently appeared to slow down. Privatisation has become associated with negative consequences, particularly in the infrastructure industries (electricity, water, and public transport).12 Whereas 45% of Latin American residents regarded the privatisation of public services as beneficial for their country in 1998, only 31% felt the same by 2005.13 Growing demonstrations and movements against privatisations were observed in many Latin American countries, which, in some cases, prevented further privatisation or contributed to the cancellation, delay, or renegotiation of contracts, particularly in electricity and water supply.14

As shown in Figure 2, the share of cancelled or distressed private projects in the electricity sector in Latin America is very high in comparison to other developing regions. Whereas on average 10% of private electricity sector projects were cancelled or distressed across all developing regions, the Latin American average of 15% was significantly higher. Criticism of public infrastructure service privatisation generally refers to distributive issues, especially the conflict between privatisation and equality. Privatisation of energy and water, moreover, is associated with price increases and employee number reductions. Additionally, it is commonly perceived that these sectors should remain in public hands, rather than being subjected to commercial interests.15

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This study aims to improve understanding of the Latin American population’s current negative attitude towards privatisation. It does so by concentrating on an aspect of privatisation long neglected: the impact on employees. Employees play a crucial role in guaranteeing the quality of service provision to the public by privatised infrastructure companies, and it is therefore vital to gain further knowledge about the ways in which they are affected by the implementation of privatisation policies. This study investigates the impact of privatisation on employees by combining elements of economic and political analysis. Privatisation is interpreted as a policy process in order to assess not only what policy outcomes were observed as a consequence of privatisation, but also how and why they came about. The definition adopted for this purpose goes beyond a narrow interpretation of the term in its strict economic sense. The following section introduces the approach to the concept of privatisation chosen for the analysis of such processes in Argentina and Brazil.

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16 Cancelled or distressed projects are defined by the World Bank as
- “cancelled projects from which the private sector has exited in one of the following ways:
  - selling or transferring its economic interest back to the government before fulfilling the contract terms
  - removing all management and personnel from the concern
  - ceasing operation, service provision, or construction for 15 per cent or more of the license or concession period, following the revocation of the license or repudiation of the contract
- distressed projects where the government or the operator has either requested contract termination or are in international arbitration”

1.2. Reflections on the Term Privatisation

“Privatisation is more than the mere sale of public assets or the contracting-out of services […]” (Collyer, 2003)

The term privatisation was adopted in the early 1980s to replace the notion of denationalisation. Even now, however, the origin of the word is not entirely clear. The management author Peter Ferdinand Drucker claimed that he had used the term as early as 1969, but its coinage has also been attributed to the British conservative politician, David (now Lord) Howell, who allegedly initiated it within the Thatcher government. The term is now commonly used to describe different policy initiatives involving the retreat of the state from the industry.

Referring to the political meaning of privatisation, Starr (1988) presented two definitions—one broader and one more specific—which were namely any shift of activities or functions from the state to the private sector, and any shift of the production of goods and services from public to private, respectively. Whereas the broader definition included reductions in state regulatory and spending activities, the more specific version allowed for the possibility that privatisation might not result in such a reduction. Starr, moreover, emphasised that privatisation might not only be driven by the supply side, but could also be demand driven. Furthermore, instead of considering just production, one could also focus on the consumption sphere of privatisation. Since the purpose of this analysis is to study the consequences for employees of privatising electricity services, the author has chosen a supply and production-focused interpretation of privatisation, looking at the transfer of the provision of a good or service from the public to the private sector. This definition, however, needs to be supplemented, allowing for the inclusion of further aspects of privatisation. As pointed out by Parker (2009), privatisation cannot, in practice, be separated completely from other economic policies applied simultaneously. A jurisprudential perspective allows for a clear terminological distinction between privatisation and liberalisation.

In practice, however, it is difficult to tell which particular privatisation or liberalisation measure will have led to the observed consequences, particularly since liberalisation and privatisation measures are often introduced simultaneously, as in the cases of Argentina and Brazil. Other definitions, therefore, include additional aspects of privatisation. Tittenbrun

(1996), for instance, distinguished between three principal meanings of privatisation: denationalisation (a change in the ownership of an enterprise), commercialisation (the adoption of a more commercial approach by a public enterprise), and contracting-out of public services (the transfer of the provision of a good or service from the public to the private sector). These three can all be observed in the context of electricity sector privatisation in Argentina and Brazil.

In the course of this study, therefore, the specific privatisation definition used by Starr will be broadened to include the phenomena of denationalisation, commercialisation, and contracting-out. Additionally, the term *privatisation*, as used here, goes beyond the implementation stage in order to include the political process involved, as well as the different actors and institutions which enabled privatisation in Argentina and Brazil. Since “it matters a lot how privatisation is done,” one focus of this book is to analyse the different ways in which privatisation measures were introduced in those countries, and how these processes impacted on electricity distribution company employees.

### 1.3. Privatisation of Infrastructure Services in Latin America

Essential services, including infrastructure areas such as energy, transport, telecommunications, and water supply are of central importance to businesses since they are crucial to almost all production processes, but they are also equally important to households, playing a major role in a country’s economic growth, poverty alleviation, and environmental sustainability.

Governments traditionally supplied these essential services because their intrinsic value and social benefits were not considered to be captured by market value alone. Until the beginning of the 1990s, infrastructure services in Latin America were provided mainly by public monopolies. Industries such as telecommunications, electricity, and railways are characterised by large networks that are seen as natural monopolies because, from an economic point of view, it makes no sense to build them more than once. The network owners therefore have significant monopoly power, and, as a consequence, the networks were provided by the state in the past in order to protect consumers from such power and to

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guarantee constant supply. However, as Altvater (2003) points out, “in times of depression there are no alternatives to private investment opportunities.”

Increasingly poor quality and coverage of infrastructure services led many Latin American countries to adopt sector reforms, including privatisation, during the 1990s, with the objective of attracting international investors to finance infrastructure requirements. Sector reforms advanced rapidly in telecommunications, power, and gas sectors across Latin America and included changes in sector regulation, the adoption of new legislation enabling private participation, and the establishment of new regulatory frameworks. Privatisation and restructuring of public services is, however, much more complex in comparison to other sectors. Functioning regulatory frameworks are of particular importance for privatised network industries because of their monopolistic characteristics. Contrary to regulatory requirements, many Latin American countries had already privatised network industries before the new regulatory frameworks were established, enabling the providers to exert monopoly power. Moreover, introducing private participation in the infrastructure sector also implied the addition of a profit motivation into the management of utilities.

Such a profit motivation, however, conflicts with the very reasons why such services were provided by the state, namely that they are of particular concern to the community. Kesseler and Alexander (2004) stress that “the economic logic underlying private provision of essential services can exclude or harm poor people.” The outcome of privatisation policies is not necessarily positive; it depends largely on the national context and might even have a regressive effect on income and wealth distribution. Privatisation, thus, has a strong political dimension. As outlined above, infrastructure service privatisation is now highly controversial, and the privatisation of drinking water and electricity supplies in particular is often rejected by the affected population. While the negative effects of privatisation on access and quality of infrastructure services have been explored by a variety of studies in recent years, comparatively little attention has been paid to its impact on the employees who provide these services; not only was this neglected in the literature, but it has also been ignored in the political debate. In practice, however, employment issues cannot be separated from service quality. Since privatisation policies generally aim at reducing the costs of service provision—most easily achieved by decreasing employment costs—it is the workforce of former public

service companies that are most directly affected, their jobs threatened by privatisation decisions. Utilities generally employ large numbers of workers, and the privatisation of utilities in Latin America thus entailed extensive job losses.

This study assesses the different impact dimensions of privatisation on employees in Latin America. It does so by investigating two Latin American countries’ different privatisation processes and regulatory contexts in relation to the impact of privatisation on employees. Relevant ideational and structural factors in the Argentine and Brazilian privatisation processes of the 1990s are identified, and the new regulatory frameworks and changes in national regulatory investigated and subsequently linked to the impact of privatisation on employees. The focus of the study is the impact on electricity sector employees. Electricity supply is regarded as an essential service; privatisations in this sector advanced rapidly, but in comparison to other sectors, such as drinking water supply, they have been investigated much less.

1.4. Privatisation of Electricity Services in Latin America

Electricity is classified as a sub-sector of energy by the World Bank. Among the sectors considered by the World Bank’s Private Infrastructure Projects Database, energy has the highest number of projects with private participation and the second-highest investment figures for the period 1990 to 1999. This sector is of crucial importance to national economic developments, and its supply entails the following stages: generation, transmission, distribution, and retailing (see also Figure 3 below).

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35 “The Private Participation in Infrastructure Projects Database divides each sector in subsectors as follows […]:
- energy - electricity and natural gas
- telecommunications - telecommunications
- transport - airports, seaports, railways, and toll-roads
36 See ppi.worldbank.org.
Before privatisation policies were applied to the electricity sector, Latin American electricity industries were largely characterised by vertically integrated public monopolies. From the 1980s onwards, many Latin American countries started to introduce privatisation programmes in this sector, starting with Chile in 1980, followed by Argentina in 1992 and Brazil from 1995 onwards.\footnote{See Hall, D. (2005), p. 3.} Advances in the theory and practice of regulation led to new ideas about the \textit{unbundling} of some infrastructure services,\footnote{See Millán, P. & Soriano, A. (2003), p. 7.} often performed simultaneously with privatisation. Electricity sector unbundling implies a vertical unbundling of the electricity supply stages as well as a horizontal unbundling of generation and retail. Figure 4 illustrates horizontal and vertical unbundling in the electricity sector.

Apart from retailing, the electricity supply stages are very capital intensive and characterised by high fixed costs. The rationale for electricity sector unbundling is that these stages imply different forms of competitive markets. Electricity transmission and distribution are characterised by natural monopolies, and can therefore only compete \textit{for} markets, whereas with generation and retailing, competition \textit{on} markets is possible.\footnote{See Thomas, S. (2006), p. 3; Krause, M. (2002), pp. 11f, 28f.} Competition in electricity markets is, however, generally limited due to inelastic supply and demand, with the result that market power does not seem to be self-correcting. Regulation is therefore of crucial importance in order to avoid market concentration; it does not only have to control costs, but also quality of supply. Furthermore, it has to ensure the funding necessary for network investment and capacity expansion.\footnote{See Hellwig, M. (2007), p. 35; Millán, J., Lora, E. & Micco, A. (2001), pp. 8f, 27f.}
Whereas electricity sector reforms in OECD countries were generally introduced in order to make already functioning systems more efficient, their implementation in Latin American countries was due to a failure of the old systems. Faced with an increasing demand and high rates of inflation, public electricity companies in Latin America were highly indebted and in urgent need of investment during the late 1980s and early 1990s.\footnote{See Millán, J., Lora, E. & Micco, A. (2001), pp. 10, 22.} This led many countries to adopt reforms along similar lines to those of pioneering OECD countries, despite their different institutional contexts. Millán, Lora, and Micco (2001) stress a big “institutional gap” affecting regulatory reforms in Latin American countries. According to the authors, institutional constraints in Latin America led to a lack of clear regulatory frameworks and law enforcement problems in the electricity industries. In contrast to OECD countries, reforms and institutional conditions in Latin America did generally not conform to requirements. However, the authors also stress important differences in the application of privatisation policies and regulatory frameworks between the different Latin American countries.\footnote{See Millán, J., Lora, E. & Micco, A. (2001), pp. 10f, 34.} One aim of this study is to examine the differences in the application of privatisation policies and regulatory contexts in Argentina and Brazil, using a comparative institutional perspective to capture the implication of their approaches towards privatisation for policy outcomes with respect to employees.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure4_Specification.pdf}
\caption{Horizontal and Vertical Unbundling in the Electricity Sector}
\end{figure}

\textit{Note:} Translation by author  
\textit{Source:} Krause (2002)
1.5. Research Aims and Objectives

As outlined in the first section, the introduction of privatisation policies has important social consequences long neglected by the literature. Early studies focused mainly on the economic rather than the social impact of privatisation, with employment issues in particular often neglected or trivialised. These are, however, of great importance to countries which implement privatisation policies. The failure of politicians to address the social impact of privatisation before applying such policies has led to increasing discontent among the population in Latin America and other parts of the world. This study aims to summarise systematically the findings of empirical studies on the impact of electricity sector privatisation on employees in Argentina and Brazil focusing on two specific cases, the Argentine electricity company Servicios Eléctricos del Gran Buenos Aires (Segba) in Buenos Aires and the Brazilian electricity company Light Serviços de Eletricidade S.A. (Light) in Rio de Janeiro. This may shed light on the following questions: what was the impact of privatisation on employees with respect to employment numbers and working conditions and, subsequently, are employment effects really as trivial as claimed by economic theory? In addition, the study seeks to investigate the impact of privatisation on trade unions, since this can be assumed to affect employees directly. The findings are compared in the light of a contextualised perspective which includes analyses of the historical, political, economic, and ideational contexts of the privatisation process and establishment of new regulatory regimes in Argentina and Brazil. In this way, country-specific responses to privatisation, as well as conditions under which particular privatisation outcomes become possible, are established. Assessing the question of why Argentina and Brazil chose to privatise, the study further aims to identify relevant ideational and structural factors in the two countries’ privatisation processes of the 1990s in order to investigate their role in triggering a paradigm shift towards privatisation. A further aim is to find out how the privatisation paradigm was translated into institutional practices in the electricity sector in these countries. Linking the impact on employees to the privatisation process and regulatory contexts in the electricity sector allows a deeper understanding of the ways in which negative impacts of privatisation on employees came about and how they could be avoided in the future. This book, hence, adopts a comparative institutional approach for the analysis of privatisation processes in Argentina and Brazil. In order to capture a broader picture of the phenomenon of privatisation, elements of economic and political analysis are combined.
1.6. Structure

Chapter two begins with a discussion of the theoretical approaches to, and the empirical literature on, privatisation, regarding its impact. The first section presents the economic rationale for privatisation by introducing three theories of central importance to the introduction of such policies: the property rights theory, the public choice theory, and the theory of the Austrian School of Economics. Section two gives an overview of empirical privatisation studies by first summarising mainstream economic approaches to privatisation, and secondly, presenting empirical studies with an explicit labour focus, mostly published by union-related research institutes. From these studies, different dimensions of privatisation processes, regulatory contexts, and impacts on employees are derived. Section three introduces recent social science approaches to privatisation and neoliberal reforms, contrasting them to economic theory, with a focus on approaches applied to the Latin American context. New institutionalist approaches are particularly emphasised, since they are of major interest for the approach towards privatisation in Argentina and Brazil chosen here. From the theoretical approaches presented in this section, conclusions for this approach to privatisation in Latin America are drawn. On the basis of the literature review, a research focus is formulated, and a comparative institutional research approach is developed in section four. Section five briefly summarises this study’s contribution to the literature.

Chapter three details the applied methods and methodology. Section one presents the approach, introducing the different dimensions of the privatisation process, regulatory contexts, and impact on employees chosen for the analysis. Section two provides information on the comparative method selected, as well as the specific country and company cases. A research chronology is briefly presented in section four. Section five introduces the data used, differentiating between secondary and primary data, and presenting details on the conducting of primary research.

Chapters four to six present the main body of the book. Chapter four provides a contextual analysis of the privatisation processes in Argentina and Brazil, assessing the relative importance of the various factors involved, with the aim of gaining insight into how and why negative impacts of privatisation on electricity sector employees came about in those countries. The first section provides an overview of the historical,
political, and macroeconomic backgrounds to privatisation in Latin America and the general reasons for implementing such policies in the region. Section two investigates the Argentine privatisation process of the 1990s in nine sub-sections. The historical, political, economic, and ideational contexts of privatisation and reasons for privatisation in Argentina are explored, and the country’s paradigm shift towards privatisation is analysed, including an investigation into union responses and resistance to privatisation, an overview of the privatisation of infrastructure sectors during the 1990s, an introduction to characteristics of the Argentine electricity sector, and an assessment of the translation of privatisation policies in that sector. This is followed by information on the restructuring of privatised infrastructure sector companies and on electricity sector reform, outlining privatisation methods, prices, and forms of payment. In addition, the issue of corruption in the context of privatisation in Argentina is briefly summarised, and ownership structures of privatised electricity sector companies are presented. Section three applies the same approach to the Brazilian context. The subsequent section four summarises the results, drawing initial conclusions.

Chapter five explores the regulatory contexts of privatisation in Argentina and Brazil, aiming at further insight with respect to how privatisation policies were translated into institutional practices in the two countries. Defining institutions as formal rules and as organisations, a two-level institutional analysis explores the legislation which enabled the implementation of privatisation policies, new regulatory regimes, and the role and functions of the recently established regulatory agencies in the electricity sector, as well as national labour regulations. The first section provides an introduction to regulatory changes in the electricity sector, section two assesses the regulatory contexts of Argentina, the third section investigates those of Brazil, and the fourth section presents interim conclusions.

Chapter six aims to provide a multi-dimensional answer to the question of what the impacts of privatisation on electricity sector employees were in Argentina and Brazil. The first section assesses the impact of privatisation in Argentina in five sub-sections. Employment levels over the 1990s at the national, sector, and company level are presented, and new working arrangements are explored for the electricity sector and for the company Segba. Moreover, the impact of privatisation on union membership and
collective bargaining are investigated. Section two applies the same approach to Brazil and to the electricity company *Light*; section three introduces interim conclusions.

Finally, chapter seven strives to bring the different results together. Section one reflects on the theoretical and methodological approach applied. Section two compares the results for Argentina and Brazil, focussing on similarities and differences in the privatisation process, regulatory context, and impact on employees. Section three derives possible policy implications of the results.
Chapter 2. Theoretical Approaches to, and Empirical Studies on, Privatisation

This chapter gives a review of the theoretical approaches and empirical literature regarding the impacts of privatisation. It provides the theoretical basis for formulating the research focus and deriving research aims and objectives. The first section introduces the economic rationale for the phenomenon of privatisation, originally perceived as mainly economic. Section two presents empirical research on privatisation, starting with mainstream economic studies, which dominate the early works in the field. Since the author’s understanding of privatisation goes beyond mere economic interpretations, and this book concerns its impact on employees, empirical studies focussing on the electricity sector in the two selected country cases, Argentina and Brazil are introduced. Their findings allow the summarising of various dimensions of privatisation process, regulatory context, and employee impact. Since an explicit labour focus does not provide a deep theoretical conceptualisation of the research area, section three deals with further theoretical approaches to privatisation, concentrating on those which incorporate a dynamic understanding of the term and provide a framework for its contextualisation by concentrating on Latin America and new institutionalist approaches. The different theoretical approaches presented in section three, hence, define the theoretical framework used in this study. The comparative institutional framework chosen as the author’s own approach towards privatisation in Argentina and Brazil is then outlined in section four. Section five gives an overview of this study’s contribution to knowledge.

2.1. The Economic Rationale for Privatisation

Academic research on privatisation is still dominated by economic studies. The origins of the economic rationale for privatisation can be traced back to the work of the Scottish philosopher, Adam Smith, and probably before.43 The economic theories of privatisation developed parallel to the global spread of privatisation programmes in the 1980s and 1990s.44 Three such theories present claims on the superiority of private versus state ownership: The theory of the Austrian school of economics45 plus two from the tradition of the Chicago school of economics, the property rights theory and the public choice theory.

The Chicago school was very influential in paving the way for privatisation in Latin America. Some of its most prominent members, including Milton Friedman, were directly involved in the Chilean privatisation process and influenced economic teaching in various Latin American countries.\textsuperscript{46} A training and research programme in economics, for instance, was launched between the University of Chicago, the Catholic University of Chile and the National University of Cuyo in Argentina and many Argentine students received graduate training at Chicago.\textsuperscript{47}

Together with the Austrian school, the Chicago school provided a powerful rationale for privatisation from the 1970s onwards.\textsuperscript{48} The basic assumptions of the property rights theory, the public choice theory, and the Austrian school, as well as main criticisms, are introduced in the following sections, allowing the author’s original research to be positioned in a more critical analytical framework thereafter.

### 2.1.1. Agency Theory / Property Rights Theory

The theory of property rights was developed by economists such as Armen Albert Alchian, Ronald Harry Coase, and Harold Demsetz.\textsuperscript{49} The term property rights theory was commonly used in the 1970s, but today the term agency theory is used more frequently.\textsuperscript{50} The agency theory pursues the viewpoint of methodological individualism. Similar to other microeconomic approaches, human action within this theoretical framework is perceived as purely individualistic. Its central idea is that various forms of ownership result in different economic incentives and thus different economic results.\textsuperscript{51} The form of ownership is, thus, the main criterion for varying performance of different organisations. According to the agency theory, profits will decline, the share price fall, dissatisfied shareholders sell their shares, and the firm become vulnerable to a hostile takeover bid if managers of publicly-quoted joined stock companies pursue inappropriate policies. As a consequence, the management of a privately owned firm has incentives to pursue policies which tend to maximise the firm’s market worth. In the public sector, these incentives are absent, since the owner is unable to

\textsuperscript{46} Most of the economists appointed by General Pinochet during his dictatorship in the period 1973 to 1989 were trained at the University of Chicago and hence became known as the “Chicago Boys”. See Valdés, J. G. (1995), p. 2.
\textsuperscript{50} See Parker, D. (2009), p. 21.
sell his ownership share, and no takeover threat exists. Managers of publicly owned firms, hence, have greater opportunity for shirking. In addition, competition for managerial jobs, in accordance with the agency approach, is much weaker in the public sector, as are efficiency incentives for public managers.\textsuperscript{52} The agency theory, thus, provides important arguments in favour of private versus state ownership.

Criticism of the agency theory, inter alia, refers to the broad scope of the definition of ownership, leading to ambiguities and inconsistencies in problematic cases, such as identifying the owner when property rights in a given asset are apportioned between various persons.\textsuperscript{53} Moreover, the theory does not account for “mixed” enterprises and ignores similarities between public and private enterprises in practice.\textsuperscript{54} According to the agency approach, the market is taken as the standard for judging value, and profitability is set as the main corporate objective, ignoring the fact that public companies have other than purely economic objectives. In assuming that public management is less efficient, the theory further ignores the monitoring capacities of the public sector.\textsuperscript{55} In addition, the agency theory neglects takeover costs, which reduce the takeover threat in reality. Empirical evidence further suggests that it is not the worst performing firms that become takeover targets; acquired firms may even be more profitable than acquiring ones. Once responsibility is delegated from company owners to management performance, incentives decrease in both public and private firms, as proven by empirical evidence. Therefore, overemphasising ownership as a single factor can be considered one of the main drawbacks of the property rights approach. The motivation to work cannot only be accounted for by ownership type and individual material incentives, since other factors such as job satisfaction, loyalty to the organisation, or social duty may also impact on individual performance.\textsuperscript{56}

\subsection*{2.1.2. Public Choice Theory}

The theory of public choice was developed in the 1970s. Among its early exponents were James Buchanan, and the economists Gordon Tullock and William Arthur Niskanen.\textsuperscript{57}

\textsuperscript{57} See Parker, D. (2009), p. 20.
The theory applies the logic of microeconomics to politics,\textsuperscript{58} drawing upon neoclassical economics and referring particularly to the notion of individual utility maximisation. The central idea is that government employees may pursue self-interest in political decision making.\textsuperscript{59} According to the public choice theory, government employees, in contrast to private entrepreneurs, do not seek profit maximisation but exploit public firms attaining political goals, such as limiting unemployment, at the expense of efficiency. As with property rights, the public choice approach, thus, assumes public companies to be generally less efficient than private ones. Moreover, government employees are assumed, from a public choice perspective, to be vulnerable to lobbying pressures on the part of different interest groups, spreading the costs of privileges granted to these groups over the population at large.\textsuperscript{60} Privatisation in this theoretical setting would therefore allow “[…] profit-maximising entrepreneurs to take the place of size-maximising bureaucrats and vote-maximising politicians.”\textsuperscript{61} The underlying concept of the state is a minimal or protective one.\textsuperscript{62}

According to Starr (1988), the public choice approach neglects the basic functions of political democracy, according to which individuals are quite capable of recognising a collective interest apart from their own.\textsuperscript{63} The theory is commonly criticised for overemphasising self-seeking behaviour and thereby disregarding possible altruistic behaviour by government employees.\textsuperscript{64} Public choice theory also disregards checks and balances among and within different branches of government and overstates the historical trend towards higher government expenditure.\textsuperscript{65} Overall, as for the property rights approach, many of the restrictive theoretical assumptions of the public choice theory do not hold in practice. Nevertheless, both approaches influenced economic theorising on privatisation in the 1980s and 1990s.\textsuperscript{66}

\textsuperscript{64} See Parker, D. (2009), p. 20.
2.1.3. The Austrian School

The Austrian theory of economic thought dates back to the 1870s. It was established as an alternative approach to neoclassical economics by Carl Menger and developed by Friedrich von Wieser. Later prominent adherents include Ludwig von Mises and his student Friedrich von Hayek. Like the property rights theory and public choice approach, the Austrian school subscribes to the principle of methodological individualism. However, in contrast to neoclassical economics, it emphasises spontaneous and accidental individual action, introducing a dynamic conception of time. Whereas private sector firms are expected to be alert to market signals and respond accordingly, public enterprises are assumed less responsive to changes in supply and demand, and thus likely to be inferior to private enterprises. Privatisation, according to the Austrian school of thought, improves the process of transferring resources from declining to growth industries, as it facilitates responsiveness to market signals. Additionally, private property is a precondition for efficient exchange in the market; private entrepreneurship and competitive markets are attributed to human action and thereby to individual freedom. According to Scherrer (2003), the dynamic conception of time within this theory requires the rejection of a number of neoclassical assumptions. Moving away from the so-called Pareto principle, moreover, implies that external effects become less relevant as a justification for government regulation. In this context, market failure appears an exceptional case.

The Austrian school has been criticised for arguing tautologically in stating that the market is efficient because it has always delivered efficient results. Further criticism targets the variety of positions within the Austrian school and its oversubjectivism, which reduces social relations to intersubjective relations. In addition, strict methodological individualism excludes social structures and institutions as well as culture. Nonetheless, Austrian economic theory, especially the work of von Hayek, was particularly important regarding

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72 The Pareto principle is a neoclassical concept of welfare economics. It is named after the Italian economist Vilfredo Pareto and refers to the economic allocation of resources. Pareto efficiency describes a state in which it is impossible to make any individual better off without making at least one individual worse off. Pareto-optimality is defined by the Oxford Dictionary of Economics as a situation in which no feasible change can raise anybody’s welfare without lowering that of somebody else.
economic thinking in Europe as it influenced Margaret Thatcher’s privatisation policies in the UK in the 1980s, gaining further popularity thereafter.\textsuperscript{75}

In summary, privatisation, from an economic-theory perspective, can be seen as a means of reducing the impact of political factors on economic incentives, behaviour, and performance.\textsuperscript{76} The economic rationale for privatisation is thus to improve incentives for economic efficiency at corporate level.\textsuperscript{77} The three aforementioned economic theories all imply, albeit from different angles, that privatisation should generate efficiency gains, and that privatised companies should outperform public companies under competitive conditions. The agency theory emphasises greater performance incentives of private managers vis-à-vis those of public companies, public choice theory stresses the self-interest of government employees and the political interference in public companies, and the Austrian school—by introducing a dynamic conception of time—focuses on the alertness to market signals of private entrepreneurs, in contrast to public companies. The three theories, hence, all have similar implications for public policy, demanding privatisation policies, and thus providing a powerful rationale for privatisation policies.

The following section introduces empirical privatisation research, starting with mainstream economic studies, which still dominate the literature and often directly refer to the arguments in favour of privatisation, as outlined above. Economic privatisation studies focus heavily on economic policy outcomes, stressing expected efficiency gains due to privatisation, while tending to disregard non-economic aspects. Since this study adopts a definition of privatisation that goes beyond the economic understanding, and the author’s research interest lies in investigating the impact of privatisation on employees, studies with an explicit labour focus are also considered.

\textsuperscript{77} See Yarrow, G. (1999), p. 158.
2.2. Empirical Approaches to Privatisation

Privatisation is probably the most controversial—as well as the most extensively studied—reform within the liberal agenda. Since economic-based work dominates its early literature, non-economic aspects of privatisation are still being afforded comparatively little attention. This section first gives an overview of mainstream economic studies on privatisation and recent tendencies within the economic literature. Section two presents findings of empirical studies with an explicit labour focus, concentrating on the electricity sector in Argentina and Brazil, from which dimensions of privatisation process, regulatory context, and employee impact are derived.

2.2.1. Research on the Economic Impact of Privatisation

Empirical studies by the IMF, World Bank, and Inter-American Development Bank (IDB) support many of the arguments in favour of privatisation suggested by economic theory. At the micro level, a number of studies investigate aspects such as firm performance, efficiency, and shareholder returns. In their study “The Financial and Operating Performance of Privatised Firms during the 1990s,” D’Souza and Megginson (1999) summarise various analyses of privatised company performance, providing data from 28 industrialised countries, and finding increases in post-privatisation profitability, output, operating efficiency, and dividend payments. Another influential survey by Megginson and Netter (2001), moreover, provides an overview of empirical studies on privatisation, with a focus on the relative effectiveness of state versus private ownership, noting an improved post-privatisation corporate performance. Further studies examine macroeconomic effects of privatisation and establish a link with economic growth. A World Bank paper by Alexander and Estache (1999) reviews the evidence from Latin America on the impact of various types of infrastructure sector reform, among them changes in industry structure, regulatory aspects, and privatisation. It finds evidence from cross-country studies that infrastructure sector reform is linked to economic growth, and the authors further present single-country evidence on sector performance improvements in the context of privatisation in Argentina and Chile for different industries.

The aforementioned empirical studies are only a few examples of the vast literature focusing on the economic aspects of privatisation. Further aspects have long been neglected. As pointed out by Andrés et al. (2008) “much of the literature has focused on the performance of financial indicators, rather than broader measures of importance to citizens.” The final report of the Commission of Inquiry into “Globalisation of the World Economy” of the German parliament, moreover, points to a lack of literature regarding the consequences of globalisation on employment. As emphasised by Chong und López-de-Silanes (2002), “Despite its importance, labor has probably been the single least addressed issue in privatisation.” Recent years have seen growing numbers of privatisation studies with a broader perspective, assessing further aspects of privatisation, such as social, distributional, and welfare. Even World Bank studies now increasingly investigate more than the purely economic aspects.

Several studies, furthermore, stress that the way in which reforms are applied matters, and hence do not only focus on output—as with most early economic privatisation studies—but also emphasise the importance of process. Megginson (2000) points out that “The real question is how—not whether—to transfer state firms to private hands,” while Williamson (2004) emphasises that “it matters a lot how privatisation is done,” Bel and Warner (2006) further suggest that governmental regulation and market structuring are necessary to ensure sustainable cost savings. Economic studies increasingly recognise the relative roles of competition, regulation, and ownership change in determining performance improvement in the context of privatisation and gradually adopt a broader approach towards privatisation. In their study on the impact of private sector participation in infrastructure, Andrés et al. (2008), for instance, differentiate between various possible types of impact of private participation in infrastructure, which include not only economic but also social aspects: employment and wages, price and quality of services, access and coverage, asset ownership, fiscal flow, productivity, financial solvency, overall welfare, and distributional impact. Table 1 summarises the impact of private participation in infrastructure identified by Andrés et al. according to mainstream economic theory and empirical evidence: the former predicts a decrease in employment in the context of privatisation due to increased pressure for efficiency, which is supported by the latter.

80 See Andrés, L. A. et al. (2008), p. 239.
81 See Deutscher Bundestag (2002).
Table 1: Summary of Impact of Private Participation According to Mainstream Economic Theory and Empirical Evidence

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Theoretical and Actual Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Theoretical: Employment should fall because of increased pressure for efficiency. Actual: Studies found substantial employment reductions.</td>
</tr>
<tr>
<td>Price of service</td>
<td>Theoretical: Prices should adjust upward or downward toward cost-reflective levels, but depend on initial conditions. Actual: Mixed results, with several studies showing price increases.</td>
</tr>
<tr>
<td>Quality of service</td>
<td>Theoretical: Quality should improve because of better management and know-how. Actual: Quality improvements found in many studies, but others found little impact.</td>
</tr>
<tr>
<td>Access to service and coverage</td>
<td>Theoretical: Access may improve because of improved finances and reduced cost of service. Actual: Access and coverage improved in most cases.</td>
</tr>
<tr>
<td>Asset ownership</td>
<td>Theoretical: Asset sales increase private ownership; concentration depends on design details. Actual: Increased private ownership (by definition); some findings of increased foreign ownership.</td>
</tr>
<tr>
<td>Investors</td>
<td>Theoretical: Private investors generally should, on average, earn normal profits. Actual: Limited, mixed evidence. Some studies found that returns exceeded the cost of capital, others did not.</td>
</tr>
<tr>
<td>Fiscal flow</td>
<td>Theoretical: Subsidies to the sector should be reduced, sale revenues may be large, and tax revenues may increase thereafter. Actual: Fiscal flows did improve in most cases. More than half of private capital flows to infrastructure in LAC went to state treasuries during the 1990s.</td>
</tr>
<tr>
<td>Productivity and financial solvency of providers</td>
<td>Theoretical: Productivity and solvency should improve because of increased efficiency. Actual: Studies found productivity and profitability improvements.</td>
</tr>
<tr>
<td>Distributional impact and consumer welfare</td>
<td>Theoretical: Should improve, the extent depends on interaction of above elements. Actual: Studies showed varied but largely positive results. New customers tended to gain by attaining access, while existing customers could be hurt by price increases, but enjoyed increased quality of service.</td>
</tr>
</tbody>
</table>

Source: Andrés et al. (2008), based on Foster, Tiongson & Ruggeri Laderchi (2005)

Note: LAC = Latin America and the Caribbean.

a. Should indicates probable impact.
b. May indicates possible impact.

However, with rather restrictive and parsimonious underlying theoretical assumptions, economic studies still have a limited focus on the privatisation process, and generally show difficulty incorporating processes of change.\(^8\) In restricting the understanding of actors involved in privatisation to rational, benefit-maximising individuals, economic privatisation studies cannot explain complex decision making processes, where different actors play an active role.\(^8\) Concentrating on economic criteria, they further forgo in-depth analysis of the impact of privatisation on employment and working conditions. Even though some economic studies now also assess the impact of privatisation on employment, overall focus remains on

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economic criteria. Employment effects are often trivialised and seen as temporary phenomena, compensated for by overall economic growth and welfare gains.87

In summary, economic theory did not only provide a powerful rationale for privatisation, but economic studies also still predominate among the empirical work on the impact of privatisation. Economic approaches have been broadened in recent years, but still do not take account of the complexity of the process and pay scant attention to non-economic criteria, highlighting the continued need for political analysis of the impact of privatisation.

2.2.2. Research on the Impact of Privatisation on Employees

The following section introduces some of the recent empirical studies by research institutes concentrating on the impact of privatisation on employment and working conditions, paying particular attention to those concerning the electricity sector. Since very few focus on electricity sector employees in Latin America, these are supplemented by an extensive report on the impact of public service liberalisation and privatisation in several European countries. The studies presented in this section have an explicit labour focus, and were mostly published by union-related research institutes. Their main research foci and findings with respect to the impact of privatisation on employees, as well as dimensions of processes and regulatory contexts, are summarised.

Two reports by Viviana Cifarelli from the Argentine Institute Taller de Estudios Laborales (TEL)88 refer to the Argentine privatisation process of the 1990s and its impact on electricity sector employees. In both reports, Cifarelli focuses on the consequences for the electricity sector in general and its employees in particular, stressing the role of international financial organisations in the process. Among reasons for privatisation, Cifarelli identifies the country’s external deficit and economic crisis, and in her 1999 study, lists company restructuring, denationalisation, and deregulation as the main consequences. She provides data on the number of employees of the main public infrastructure companies89 before and after privatisation, in 1987/1990 and 1997, respectively. According to her findings, the number of employees of all the companies cited decreased considerably after privatisation.90

88 TEL provides research and education with the aim of improving the capacity and quality for participation of employees and their organisations in labour relations and collective bargaining.
89 The companies considered by Cifarelli were Segba, Gas del Estado, OSN, ENTeL, YPF, and Aerolíneas Argentinas.
For the electricity sector, she finds a huge reduction in employees as well as a deterioration of working contracts and thus conditions. She further presents data on the post-privatisation ownership structure, emphasising the importance of foreign companies. In the study of 2000, Cifarelli adds ownership concentration to the consequences and emphasises the particularities of the electricity sector.\(^91\) In addition, the author differentiates between two stages of electricity sector reform, the first consisting of the introduction of sector reforms and the second including reform consolidation and deepening as well as extension.\(^92\) Referring to the poor conditions of the public enterprises before privatisation and the problem of corruption, Cifarelli further acknowledges the role of the national government in the Argentine privatisation process. Overall, she remains rather descriptive.

Duarte (2001) provides further details concerning the political and economic contexts in which neoliberal policies were introduced by Argentine governments, stressing the importance of the new legislation introduced to enable privatisation. Thereupon, based on data from the Latin American Faculty of Social Sciences (Facultad Latinoamericana de Ciencias Sociales, FLACSO)\(^93\), she investigates the consequences of privatisation of several infrastructure sectors on the Argentine labour market in the 1990s. One of her key findings is huge reductions in privatisation-related employee numbers for all sectors considered: telecommunications, postal services, air transport, water and sewerage, electricity, and rail services. Seven public infrastructure companies are included in her research\(^94\), which, by the end of the period under consideration, had been transformed into 33 private entities.

In her 2002 study, moreover, she differentiates between two stages of employment reduction, a pre-privatisation period when the decision had already been made but privatisation not yet taken place, and a post-privatisation period.\(^95\) In addition, she finds that the unemployment rate moves according to changes in employment numbers for the infrastructure sector and that part of the increase in the unemployment rate can be explained by huge employment reductions in the seven infrastructure companies she investigated.\(^96\) Based on annual panel data on the 500 biggest Argentine companies from the national statistics and censuses institute (Instituto Nacional de Estadística y Censos, INDEC), she presents further data for companies in the electricity, gas, and water infrastructure sectors, as well as telecommunications, from 1993 to 1998, indicating a strong increase in productivity;

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\(^{93}\) FLACSO is an independent organisation conducting research in the area of social sciences.
\(^{94}\) The companies considered by Duarte were ENTel, Encotel, Aerolíneas Argentinas, Obras Sanitarias de la Nación, Segba, Ferrocarriles Argentinos, and Gas del Estado.
Duarte combines this with her findings that the same companies’ workforces reduced and concludes that workload must have risen for the remaining employees. She discovers, moreover, that the productivity increase is not reflected by an equal increase in salaries. Relating privatisation-related infrastructure sector employment reductions to the national unemployment rate, the aforementioned studies by Duarte allow for a different weighting of employment reductions caused by privatisation. Focussing on unemployment and company productivity at the national and sector level, however, she forgoes an investigation of the impact of privatisation on employees at the corporate micro level.

In contrast, an ILO working paper by the Asociación del Personal Jerárquico del Agua y la Energía, APJAE (2005) on Argentine energy sector losses and gains in the privatisation context focuses on the impact on employees at this micro level, investigating several cases, and supplementing findings with sector-wide data. The authors investigate how energy sector privatisation was implemented in the 1990s, and how workers, their families, and society as a whole were affected, identifying the causes of privatisation and companies involved, as well as methods chosen and action taken. APJAE emphasises that, at the time of privatisation, efforts were made to protect employment and transfer all staff to the new companies. In practice, however, companies almost always downsized, and working conditions deteriorated.97 Within the results of Argentine power service privatisation, the paper focuses on employment levels, working conditions, and affected worker morale, referring additionally to changes in industrial relations and the introduction of outsourcing, as well as voluntary retirement schemes in the context of privatisation. Also introduced is time-series data for the period 1990 to 1999 on employment levels in privatised Argentine energy companies, as well as data on different types of workforce reduction such as dismissal, retirement (and “voluntary” retirement), resignation, and outsourcing. For some energy companies, APJAE also publishes numbers on the situation of laid-off workers a few years after privatisation, showing longer-term effects of redundancies on workers, many of whom remained unemployed. In this context, individual worker’s fates are described; an increase in divorce and suicide is reported.98 The paper overall provides a detailed analysis of the impact of privatisation on Argentine energy sector workers and gives insights with respect to process; it does not provide any details on the regulatory framework nor a comparison to other privatisation processes; the analysis remains limited to the Argentine energy sector.

97 See APJAE (2005), pp. 17, 41.
Hall (2005) provides a comparative analysis of employment and labour issues in the context of privatisation and restructuring for several Latin American countries, focusing on the three areas of privatisation and multinational companies, the impact on labour, and social, political, and economic impacts. The author introduces data from 2005 on the involvement of multinational companies in the Latin American electricity sectors, pointing to the leading role of Spanish electricity companies, but also mentioning holdings of companies from other European countries and the USA. Reviewing existing published evidence with data from the 1990s to 2005, Hall categorises the main effects of privatisation in Latin America on labour under four headings: background, including protection agreements; impact on pay and conditions, especially through outsourcing; effects on employment and employees; and other issues, including union rights. The data presented indicates that similar backgrounds and effects of privatisation on labour can be observed across different Latin American countries. Workers’ shareholdings were introduced in the context of almost all privatisation projects in Latin America. Efforts to protect workers’ pre-privatisation employment conditions were made not only in Argentina, but also in Colombia. The separation of workers from the protection of a sector-wide agreement, deterioration of working conditions, outsourcing, job losses, and the introduction of voluntary retirement schemes were common in several Latin American countries. Concerning social, economic, and political issues, Hall points out that privatisation and liberalisation processes led to six main types of problems, observed not only in Latin America but also in the rest of the world: the failure to deliver promised new investment, the absence of competition even after liberalisation, economic crisis and unsustainable dollarisation clauses, cost to governments and consumers, performance failures, and popular and political resistance. In summary, the author provides a solid framework for the comparative analysis of employment and labour issues related to privatisation and restructuring but does not go into much detail concerning the impact of privatisation on employees; Hall does not investigate privatisation processes apart from the involvement of multinational companies, nor does he refer to regulatory contexts.

99 The paper was published by Public Services International Research Unit (PSIRU), a research institute based in London investigating privatisation and restructuring of public services around the world, with special focus on water, energy, waste management, and healthcare. PSIRU is part of the Business School of the University of Greenwich.

100 See Hall, D. (2005), p. 10ff, for the data presented on the effects of privatisation on labour in different Latin American countries.

Instituto Observatório Social, IOS\textsuperscript{102} (2001) provides an extensive report on the performance of the Brazilian electricity company, Light, with respect to fundamental workers’ rights after privatisation. Giving an overview of electricity sector transformation, including the introduction of new legislation, a regulatory body, and a wholesale energy market, the study explores the consequences of privatisation for Light employees. The research is based on the collection and analysis of secondary as well as primary data, in the context of which an employee survey, including interviews with Light employees and union representatives, was conducted. In addition to numbers on dismissals at Light, and pre- and post-privatisation employment data per area of work, findings for the following six areas are presented: a) freedom of association; b) collective bargaining; c) child and forced labour; d) all forms of discrimination; e) environment and occupational health and safety; and f) satisfaction, privatisation, and productive restructuring.\textsuperscript{103} Overall, the data presented by IOS indicates a considerable post-privatisation decrease in union membership and a tendency for deteriorating working conditions, as well as a negative perception of the working atmosphere at Light. No evidence on child or forced labour and discrimination is found. Concerning collective bargaining, the majority of Light employees state that they were neither well nor badly represented by their union. When presenting the survey findings, the authors differentiate between outsourced and directly employed workers, stressing that some of the consequences of privatisation, such as an increase in work-related accidents, were more pronounced for outsourced workers. Moreover, data on the post-privatisation shareholder structure of Light and the tendering process is published. Summing up, the survey results explore many details concerning the impact of privatisation on employees neglected by other studies. In addition, IOS provides a better overview of the regulatory context in which privatisation took place than other studies. Referring to only one case study, however, limits its explanatory power. Conclusions for other companies or the electricity sector are not therefore easily derived.

Public Services International, PSI (2006), published ten case studies in a detailed report on the impact of privatisation on four infrastructure sectors in Brazil: health, electricity, gas, and water and sanitation. Similar to Duarte (2001) and Cifarelli (1999) for Argentina, this study first provides an overview of the political and economic contexts in which privatisations were carried out in Brazil, stressing the importance of international organisations in influencing policy. The study goes on to give more specific information on sector reform, including the introduction of legislation enabling privatisation and the creation of a new

\textsuperscript{102} The Brazilian Social Observatory Institute, Instituto Observatório Social, is an independent research institute investigating social and labour law issues contributing to universal workers’ rights.

\textsuperscript{103} See IOS (2001), p. 36ff, for details on the findings presented.
regulatory framework, as well as on the impact of privatisation for each sector considered. Based on data from the International Federation of Chemical, Energy, Mine, and General Workers’ Union (ICEM)\textsuperscript{104} on the electricity sector, the study lists all firms privatised between 1995 and 1999, together with the date of privatisation, main shareholders, and market shares held after privatisation. Concerning the impact on electricity sector employees, the authors emphasise massive employment reductions as well as the introduction of more flexible working contracts, presenting quite similar findings for several electricity distribution companies: dismissals, outsourcing, and an increase in work-related accidents in outsourced activities in the context of privatisation. They note that Light probably underwent one of the most radical dismissal programmes associated with Brazilian electricity sector privatisation. Employment reductions are also demonstrated for the gas sector; even though that sector expanded in subsequent years, pre-privatisation employment levels were no longer achieved.\textsuperscript{105} Privatisation of water and sanitation services in Brazil did not reach the same level as that of the other sectors mentioned; the impact on workers was, however, similar to that above: workforce reduction, outsourcing, and a reduction of rights.\textsuperscript{106} Concerning health services, the PSI study focuses more on social impact.\textsuperscript{107} Overall, the study reveals a tendency for negative consequences of privatisation for workers in different infrastructure sectors in Brazil, providing additional details on processes in comparison to previously mentioned studies. However, no link is established between the consequences for employees of privatisation and processes and regulatory contexts, which could be expected to be quite similar within one country.

The empirical studies considered so far underline the complexity of the phenomenon of privatisation impact, which can be approached in various forms, depending on the authors’ research interests. They reveal a tendency to focus on certain aspects of the impact on employees at the expense of providing a broad picture. Moreover, they all somehow take privatisation processes and regulatory contexts into account, mentioning different aspects which contributed to the observed outcomes, but without going into detail: a deep contextual analysis is missing. The complexity of the impact of privatisation on employees remains, thus, yet to be fully explored for Argentina and Brazil.

In order to draw policy conclusions for future privatisation or renationalisation projects, it is essential to capture not only what policy outcomes were observed but also how

\begin{footnotesize}
\textsuperscript{104} Since June 19, 2012, the ICEM is part of IndustriALL Global Union.
\textsuperscript{105} See PSI (2006), p. 91f.
\textsuperscript{107} See PSI (2006), p. 28ff, for the social consequences of private sector participation in the Brazilian health system.
\end{footnotesize}
and why these came about. Which factors contributed to the observed negative outcomes and how could things change to avoid these?

A summary report by Privatisation of Public Services and the Impact on Quality, Employment, and Productivity, PIQUE (2009), addresses some of the shortcomings of the aforementioned studies by contextualising privatisation outcomes in their investigation of the relationship between employment, productivity, and the quality of public services in the process of liberalisation and privatisation across four sectors and six European countries. Its main hypothesis is that decent employment and working conditions have a positive impact on productivity and service quality, while their provision depends on the regulation of liberalisation and privatisation processes and the resulting market and ownership structures. According to the findings presented, the evolution towards more competitive market structures was rather modest overall, whereas liberalisation and privatisation processes in European public services were generally more successful with regard to changing ownership structures. The ability to enhance competition varied across countries and depended largely on the powers of the regulatory agencies. Based on an analysis of sector level employment data, the authors further demonstrate large employment reductions in network industries relating to liberalisation and privatisation. These findings are confirmed by company case studies, in the context of which, the authors stress considerable job losses at the incumbent monopolists for the electricity sector, which could not be compensated for by job outsourcing or creation by new competitors. Reduced staff numbers, growing diversity of employment conditions, and fragmentation of bargaining were commonly observed, posing major challenges to the public-sector unions. In addition, new human-resource management strategies led to more complex management systems reflecting the profit interests of private shareholders. Concerning work organisation and working conditions, the report demonstrates that lower staff levels in many cases resulted in work intensification, further increased by the

108 PIQUE is a European research project based in Vienna investigating the relationship between employment, productivity, and the quality of public services in the process of the liberalisation and privatisation of public services in Europe with focus on four sectors (electricity, postal services, local public transport, and health services/hospitals) and six European countries (Austria, Belgium, Germany, Poland, Sweden, and the UK). The project was funded under the European Commission’s 6th Framework Programme. It was carried out from 2006 to 2009 by a consortium of six partners and coordinated by Forschungs- und Beratungsstelle Arbeitswelt (FORBA) in Vienna, Austria. Further partners included the Working Lives Research Institute (WLRI) at London Metropolitan University in the UK, the Higher Institute for Labour Studies (HIVA) and Public Management Institute of the Catholic University of Leuven in Belgium, the Institute of Sociology at Warsaw University in Poland, the Institute for Economic and Social Research (WSI) of the Hans-Böckler Foundation in Germany, and the Department of Work Science at Göteborg University in Sweden.

109 See PIQUE (2009), p. 3.

110 See PIQUE (2009), p. 10ff, for ownership and market structures of the privatised companies.

introduction of new control mechanisms and use of benchmarking. The substantial reductions in employee numbers, moreover, led to increased productivity in most of the reported case studies, which thus emerged as a by-product of a general attempt to cut production expenses, and also led to the lowering of labour costs by means of smaller wages or atypical forms of employment. The authors further stress that social dumping became a reality for some sectors and countries. In addition, PIQUE presents the main results of a survey, according to which, citizen-users moderately support liberalisation, reject full privatisation, and favour a universal service obligation. The authors explore the role of regulation, particularly that which impacts on service quality and labour. They emphasise that overall, it plays an important role in explaining differences between countries and companies in responding to privatisation and liberalisation, and point to “a pressing need for social (re-)regulation in liberalised and privatised sectors.” The authors stress that the regulatory agencies could contribute to strengthening social regulation in liberalised markets and providing “fair competition,” and propose a regular monitoring of the impact of liberalisation and privatisation on labour relations and working conditions for the European Union. The report concludes by demanding public service regulation which guarantees important quality aspects while maintaining the universal character of public services.

In contrast to the aforementioned studies on Latin America, the PIQUE report does not only provide a very detailed analysis of the impact on employees of liberalisation and privatisation by applying various quantitative as well as qualitative research methods; it also outlines the privatisation processes and regulatory contexts for different sectors and European countries, linking them to the consequences of privatisation for employees.

In summary, this section has introduced the main research foci and findings of selected empirical studies on the impact of privatisation on employees, privatisation processes, and regulatory contexts. Table 2 provides an overview of the different methodological approaches used by the empirical studies considered, highlighting areas of interest, time frames, and data sets. All studies adopt quantitative research methods, complemented by qualitative data where company case studies were conducted (APJAE, 2005, IOS, 2001, and PIQUE, 2009). Most studies apply a comparative research design, contrasting different companies, sectors and / or

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113 See PIQUE (2009), p. 106.
114 See PIQUE (2009), pp. 97, 46.
115 Competition, which is not run at the expense of the employees. See PIQUE (2009), p. 48.
116 See PIQUE (2009), pp. 48, 106.
117 See PIQUE (2009), p. 98.
countries (apart from Cifarelli, 1999, Cifarelli, 2000, and IOS, 2001) over the 1990s (Hall, 2005 and PIQUE, 2009 also consider the period 2000-2005).

Tables 3 and 4 provide further insights on the different dimensions of the privatisation processes, regulatory contexts, and employee impact considered by the empirical studies. As shown in Table 3, the criteria for privatisation processes they identify include reasons for privatisation, role models taken into account, political and economic contexts, sector reforms and / or restructuring, timeframe and scope of privatisation, the different actors involved in privatisation processes—international organisations, national governments, (multinational) companies, and economic groups, as well as unions—resistance to privatisation, chosen privatisation methods, price and method of payment, ownership structures, and market shares and / or structures. The main criteria for regulatory contexts identified by the authors are the introduction of new legislation enabling privatisation, the newly established regulatory regimes / agencies, existing regulation to protect employment, emergency employment programmes introduced in the context of privatisation, and company-level changes in workers’ rights.

Concerning privatisation processes, all authors regard sector reforms / restructuring as noteworthy, with all but one study mentioning political and economic contexts, timeframe and scope of privatisations, and new legislation introduced to enable privatisation. Among all other criteria for processes and regulatory contexts mentioned by the different authors, a variety of approaches exists. Only PSI (2006) refers to privatisation role models, while Duarte (2001, 2002) is alone in mentioning an emergency employment programme, and IOS (2001) unique in exploring worker rights at corporate level in the privatisation context. Regarding the criteria for privatisation processes and regulatory contexts shown in Table 3, Hall (2005) and Duarte (2001, 2002) refer to comparatively few, whereas all other studies consider more than ten. However, criterion number considered is not an indicator for an in-depth analysis. As mentioned above, there are not only differences between the studies with respect to what and how many criteria they include but also regarding scale and scope. PIQUE (2009) alone does not only provide details on privatisation processes and regulatory contexts, but also establishes a link between regulation and impacts of liberalisation and privatisation.
<table>
<thead>
<tr>
<th>Author</th>
<th>Sector/s Considered</th>
<th>Country/ Region</th>
<th>Data and Method of Investigation</th>
<th>Time Frame Chosen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duarte, M. (2001) and Duarte, M. (2002)</td>
<td>Electricity, water and sewerage, telecommunications, postal services, air transport, rail services</td>
<td>Argentina</td>
<td>Quantitative analysis of time series data for the selected companies; employment data on ENTel, Encotel, Aerolíneas Argentinas, Obras Sanitarias de la Nación, Segba, Ferrocarriles Argentinos, and Gas del Estado; annual panel data on the 500 biggest Argentine companies to measure productivity; 1991-1993 data on voluntary retirements; 1985-1998 data on employment levels.</td>
<td>1990s</td>
</tr>
<tr>
<td>APJAE (2005)</td>
<td>Energy sector; several company case studies</td>
<td>Argentina</td>
<td>Quantitative analysis of case-study and sector-wide data (time series); data on employment levels in the privatised companies over time (for Segba 1992-1999); data on types of workforce reduction; privatisation figures 1990-1999; qualitative data on the situation of laid-off workers a few years after privatisation.</td>
<td>1990s</td>
</tr>
<tr>
<td>Hall, D. (2005)</td>
<td>Electricity sector</td>
<td>Latin America (Argentina, Brazil, Chile, Colombia, and Panama)</td>
<td>Quantitative data analysis and literature review; data on holdings of multinational companies in 2005 (PSIRU data + company data), secondary data on labour, mainly from the 1990s.</td>
<td>1990s to 2005</td>
</tr>
<tr>
<td>IOS (2001)</td>
<td>Electricity sector; company case study on Light</td>
<td>Brazil</td>
<td>Quantitative and qualitative data collection and analysis; secondary and primary data; employee survey, and interviews with company employees and union representatives; data on dismissals at Light in August 1996 per area of work; pre and post privatisation employment data in 1996 per area of work; data on shareholder structure after privatisation.</td>
<td>1990s</td>
</tr>
<tr>
<td>PSI (2006)</td>
<td>Health, electricity, gas, water and sewerage; several company case studies</td>
<td>Brazil</td>
<td>Quantitative analysis of sector-wide and case study data; data on total number of privatisations from 1990-1999; list of privatised electricity companies 1995-2000 (Source: ICEM); pre- and post-privatisation employment data on Light.</td>
<td>1990s</td>
</tr>
<tr>
<td>PIQUE (2009)</td>
<td>Electricity, postal services, local public transport, health services / hospitals</td>
<td>EU (Austria, Belgium, Germany, Poland, Sweden, UK)</td>
<td>Broad variety of methods, including quantitative as well as qualitative; extensive review of the existing literature; a series of case studies; data from PIQUE sector reports: case study data from interviews conducted in 2007 and 2008, academic literature, press coverage of the companies, company documents, and company internet presentations; employment data: comparable EU wide data and national data (if available) from 1995 to 2005.</td>
<td>1995 to 2005</td>
</tr>
</tbody>
</table>

Source: Author's own compilation
<table>
<thead>
<tr>
<th>Author</th>
<th>Criteria for Privatisation Processes Considered</th>
<th>Criteria for Regulatory Contexts Considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cifarelli, V. (1999) and Cifarelli, V. (2000)</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Duarte, M. (2001) and Duarte, M. (2002)</td>
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<td>-</td>
</tr>
<tr>
<td>APJAE (2005)</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Hall, D. (2005)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IOS (2001)</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>PSI (2006)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>PIQUE (2009)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation
<table>
<thead>
<tr>
<th>Author</th>
<th>Employment Levels</th>
<th>Unemployment Rate</th>
<th>Types of Employment Reduction</th>
<th>Wages</th>
<th>Benefits</th>
<th>Workers' Shareholdings</th>
<th>Working Conditions</th>
<th>Working Contracts</th>
<th>Trade Unions</th>
<th>Collective Bargaining</th>
<th>Fragmentation</th>
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Source: Author’s own compilation
As illustrated by Table 4, the empirical studies presented also identified divergent criteria for employee impact, including a) unemployment rate, b) employment levels and reduction methods such as (early) retirement, voluntary severance, outsourcing, and remunerated dismissals, c) wages and benefits, d) workers’ shareholdings, e) working conditions such as hours, workload, intensity, environment, flexibilisation, training, and health and safety, and contracts, f) trade union aspects such as density and / or membership, rights and collective bargaining, as well as workforce fragmentation, and g) changes in company management in the context of privatisation. All studies examine employment levels, and all but one mention the four types of employment reduction given in Table 4. All but one also include impact on wages, working hours, and health and safety. With respect to the remaining impact criteria considered, the studies show a wide variation in approaches. Unemployment rate is considered only by Duarte (2001, 2002) and APJAE (2005). Duarte (2001, 2002), however, considers fewer other impact criteria in comparison to the remaining studies. Only IOS (2001) refers to the working environment, and only two studies consider union rights (Hall, 2005, IOS, 2001). All authors consider at least ten impact criteria. PIQUE (2009) includes most of the impact criteria presented in Table 4, followed by IOS (2001) and Hall (2005).

The criteria for privatisation processes, regulatory contexts, and impacts identified by the empirical studies and summarised in Tables 3 and 4 overall offer good starting points for analysing privatisation processes, regulatory contexts, and the impact of privatisation on electricity sector employees in Argentina and Brazil outlined in chapter three. The empirical privatisation studies with an explicit labour focus, however, also reflect a tendency to analyse the impact of policies without theorising them. The studies presented all forgo a deep contextual analysis, which would focus not only on outcomes but also on the processes leading to the implementation of privatisation policies. Only by analysing such processes within their historical, political, economic, and ideational contexts can deeper insights with respect to why such policies came about and how the different structural and agential factors involved in the process contributed to the empirically observed negative outcomes of privatisation for employees be gained and conclusions for future privatisation policies drawn. The following section, therefore, introduces further theoretical approaches to privatisation and neoliberal reform, with the aim of deriving a theoretical framework to analyse the impact of privatisation on employees in the Latin American context.
2.3. Further Theoretical Approaches to Privatisation and Neoliberal Reforms

The empirical studies’ revelation that privatisation has different social impacts implies it should be investigated as a political phenomenon. Since these studies lack a theoretical underpinning, this section consults recent social science approaches to privatisation and neoliberal reform in search of an appropriate frame for the analysis of privatisation processes in Argentina and Brazil. It concentrates on approaches applied to the Latin American context with particular focus on new institutionalist approaches, since it is these—in contrast to the aforementioned economic theories—that pay increasing attention to the processes of policy change as defined in the author’s approach to privatisation and allow for a combination of economic and political analysis. Section one introduces historical institutionalism, one of the new paradigms aiming to address the shortcomings of economic privatisation theory by rejecting methodological individualism and seeking middle-range explanations which emphasise history and context. Since historical institutionalism focuses heavily on structure, and thus tends to neglect agential accounts, section two presents two types of actor-centred approach applied to privatisation processes in Latin America. Section three then summarises the theoretical approach used by Hay (2001) to account for the dynamic interplay of contexts, institutions, actors, and ideas in the process of policy change. Hay’s approach is outlined in more detail because the author adopted it to analyse privatisation processes in Argentina and Brazil. Section four further presents a comparative sociological approach to neoliberal reforms in Latin America, providing hints on the application of a comparative institutional analysis to the Latin American context as well as to a multilevel analysis, such as the one chosen for this study. The four theoretical approaches introduced are all of relevance to the author’s own approach, outlined later, helping in the search for an adequate framework to examine what policy outcomes were observed as a consequence of privatisation, as well as how and why these outcomes came about.

2.3.1. Historical Institutionalism and Its Application to Neoliberal Reforms in Latin America

Historical institutionalism is an analytical approach within new institutionalism. The term was coined in the 1990s, but the approach dates back to earlier research. Renewed interest in the analysis of institutions emerged after the 1970s. Hall and Taylor (1996) differentiate between three different schools of thought within new institutionalism: historical, rational choice, and sociological institutionalism. Campbell and Pedersen (2001a), moreover, refer to discursive institutionalism as a fourth new paradigm. The distinctive feature of historical institutionalism in comparison to the other three is that it addresses empirical questions within their historical contexts, placing particular emphasis on the role of institutions in structuring behaviour and outcomes. Historical institutionalists define institutions most commonly as rules; some scholars focus on formal rules and organisations. Institutions are seen as structuring behaviour since they inform the choices available to interested groups and parties. Whereas rational choice institutionalists regard institutions as important in framing individual strategic behaviour, and sociological institutionalists focus on them as framing worldviews, according to Steinmo (2008), historical institutionalists stand between these two approaches, recognising that behaviour depends on the individual, the context, and the rules.

Campbell (2010) stresses that comparative institutional analysis focused for a long time on how institutions vary across countries but neglected the issue of institutional change. Comparative historical institutionalist analyses of neoliberal reforms in Latin America thus largely concentrated on the countries’ different historical paths after neoliberal reforms were initiated, as well as on their institutional configurations. The concept of path dependency has been used by many historical institutionalists; assuming that a policy choice at $t_1$ impacts on a policy choice at $t_2$, it implies that subsequent events are largely dependent on previous ones. Institutions, thus, tend to be relatively persistent in the course of history. Institutional change in this perspective is difficult to explain, and institutions are assumed stable until

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disrupted by exogenous shocks, or so called critical junctures.\textsuperscript{126} According to Campbell (2010), the concept of critical junctures can explain neither incremental or evolutionary institutional change nor that triggered by internal inconsistencies and contradictions. Campbell, moreover, stresses that the concept neglects the complex search process that follows the pressure for institutional change and is determined by actors’ choices.\textsuperscript{127} As Hay (2001) points out, “Yet if historical institutionalism certainly has the potential to offer crucial insights into complex and uneven processes of political change […] that potential is still as yet largely unrealised.”\textsuperscript{128} Hay distinguishes between three aspects neglected by historical institutionalists:

1. the processes and mechanisms which cause institutional change,
2. the conditions which make policy-paradigm shifts likely, and
3. the relationship between the evolution and transformation of policy paradigms on the one hand, and institutional change on the other.

He further stresses that the framework of path dependence requires accounting for the complex interplay of strategy involved in the process of institutional design and innovation.\textsuperscript{129} More recent theories of institutional change pay more attention to the involvement of actors in the process.\textsuperscript{130} Their main research focus remains, however, on institutions. In overemphasising factors related to institutional formation in the explication of policy outcomes, historical institutionalism, therefore, has difficulties in accounting for the formation of interests and the motivation of actors.\textsuperscript{131}

In accordance with historical institutionalist approaches, this paper investigates privatisation processes from a contextualised, historical perspective, taking the different development paths of the chosen country cases, Argentina and Brazil, into account. However, since the aim is to conceptualise privatisation as a process of change, this paper seeks to focus not only on institutional aspects in the countries’ privatisation processes, but also take the role of actors and ideas into account. Unfortunately, historical institutionalism is not of much help regarding the latter aspects.

2.3.2. Actor-Centred Approaches to Latin American Privatisation Processes

In her analysis of privatisation processes of the health sectors of Argentina and El Salvador, Tittor (2012) differentiates between two types of actor-centred approaches to privatisation in Latin America: (A) those emphasising the role of international organisations in initiating and shaping privatisation processes, and (B) those stressing the importance of different social groups and political processes within societies. These two ideal types of actor-centred approach are depicted in Figure 5 below.

Figure 5: Two Types of Actor-Centred Approach to Latin American Privatisation Processes

A     B

Source: Author’s own compilation, based on Tittor (2012)

Authors of type-A approaches attribute a critical role to the International Monetary Fund and World Bank in initiating privatisation processes in Latin American countries by means of promoting new forms of state organisation through ideological proposals and operational activities. Such a narrow focus, however, neglects the role of national factors. Type-A approaches, thus, cannot explain differences between countries in the political choices involved in privatisation processes. In contrast, type-B approaches focus on the role of different national interest groups and political processes within societies, recognising the scope of action of the national actors involved in the political decision-making process. Similar to type-A, type-B approaches, however, tend to have a rather narrow focus on privatisation processes by concentrating on certain causal agential factors, while neglecting structural and other agential factors.

In sum, actor-centred approaches demonstrate the importance of accounting for the different actors involved in privatisation processes, but, similarly to historical institutionalist

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approaches, often fail to capture the dynamic interplay of structural and agential (national and international) factors in influencing outcomes. In accordance with actor-centred approaches, this paper includes an investigation of the role of national and international actors in the analysis of privatisation processes in Argentina and Brazil. However, as stressed before, the approach adopted here goes beyond actor-centrism and aims to capture contextual institutional and historic factors, of which actor-centred approaches do not take account.

2.3.3. An Ideational Institutionalist Approach to Neoliberal Reforms in Britain

Explaining neoliberal reforms in Britain, Hay (2001) combines insights from discursive and historical institutionalism in order to capture the dynamic relationship not only between context and conduct but also between the ideational and the material, the discursive and the political. Drawing on Hall’s (1993) work on policy paradigms, social learning, and institutional change, Hay stresses the key role of ideational factors in determining institutional outcomes and adopts the historical institutionalist argument that policy is made within the context of a policy paradigm. Based on these assumptions, Hay distinguishes two periods of policy making, a period of “normal” policy making (and change) and a period of “exceptional” policy making (and change). Whereas in the former, the paradigm remains largely unaltered, and change is considered as mostly incremental and evolutionary, the latter implies that previous policy options are no longer available and therefore replaced.

In accordance with Jessop (1990), policy makers in Hay’s approach are conceptualised as reflexive and strategic actors placed within a complex and constantly transforming context, engaging in a process of social learning. Hall (1993) refers to policy making as a process of social learning which involves three central variables, “the overarching goals that guide policy in a particular field, the techniques or policy instruments used to attain these goals, and the precise settings of these goals,” and differentiates between three corresponding levels of policy change, which Hay (2001) names first-order, second-order, and third-order change. Figure 6 shows the two policy development cycles according to Hay (based on Hall, 1993). Hay names the presented model of policy development “punctuated evolution.”

A first-order change, according to Hay, implies the modification of the specific settings of policy instruments (with the instruments themselves being unaltered), a second-order change involves changes in both settings and instruments, and a third-order change occurs when a paradigm-shift takes place. Whereas first- and second-order changes can be regarded as normal policy making, a third-order change corresponds to exceptional policy making.  

Within the first policy cycle, which Hay terms an “incremental cycle,” policy changes occur within the parameters of the existing paradigm as a response to policy makers’ strategic learning; within the second policy cycle, the “punctuating cycle,” parameters of the policy-making process are periodically redefined. The incremental policy cycle might be repeated several times before policy development changes to a punctuating cycle, resulting in a paradigm shift.  

Hay (2001) tries to amend the historical institutionalist conception of institutional change by theorising crisis and institutional transformation. The author presents his contribution to the literature as follows:

“[…] the historical institutionalist conception of paradigmatically mediated institutional change provides a powerful heuristic devise, sensitising us to the uneven

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temporality of institutional change. Yet it remains essentially that—a heuristic devise—for while it is premised upon a highly sophisticated and dynamic conception of the dynamic relationship between ideas and institutions, in the end, lacks a theory of crisis and institutional transformation, telling us little about the process by which a paradigm emerges, accumulates anomalies, is challenged and ultimately replaced. My aim [...] has been to begin to rectify that oversight.”

Applying his approach to the neoliberal reforms in Britain, Hay operationalises the notion of “punctuated evolution” by investigating the paradigm shift from Keynesianism to monetarism. Contrasting evolutionary and punctuated theories of institutional change, he finds a more evolutionary process of change towards neoliberalism in Britain with some dimensions of the neoliberal reforms being implemented long before others. The author detects three cycles of second-order policy change or strategic learning before a paradigm shift from Keynesianism to Monetarism was secured in Britain:

1. a contradictory “proto-Thatcherite Keynesianism” from 1970 until 1971;
2. a restoration of more “orthodox Keynesianism” from 1971 until 1976; and

Hay, moreover, points to the importance of a “crisis narrative” to the rise of neoliberalism in Britain and points out that the paradigm shift was only secured with Thatcher taking office in May 1979. The author concludes that the process of a paradigm shift and the institutionalisation of a paradigm are complex phenomena.

In summary, Hay tries to account for the complexity of the process of paradigm shift by blending elements of discursive and historical institutionalism. His theoretical approach to neoliberal reforms, however, also turns out to be rather complex. Nevertheless, Hay’s approach seems very useful in providing a framework for explaining the adoption of privatisation policies in Argentina and Brazil since it allows for conceptualising the interplay of contextual, structural, agential, and ideational factors in the process of policy change. This analysis, therefore, integrates Hay’s ideational institutionalist approach in order to investigate privatisation processes in chapter four.

2.3.4. Industrial Relations, the Sociology of Work and their Application to Neoliberal Reforms in Latin America

In their comparative analysis of industrial relations in Latin America, Dombois and Pries (1999) investigate the implementation of neoliberal reform in three Latin American countries (Brazil, Colombia, and Mexico) and three industries (automobiles, textiles, and telecommunication), focusing their case-study based research on the company micro level. The authors stress important differences in the development processes among Latin American countries despite the general tendency of change to the new neoliberal model of export orientation after the crisis of import substitution in the early 1980s. They deduce that the countries’ very different political and institutional preconditions, different development paths, and inconsistencies and continuities must therefore be considered in the analysis of their economic and political transformation processes. According to the authors, not only the specific form of the implementation of the new economic model but also the political and institutional conditions have to be taken into account.  

In accordance with their theoretical assumptions, the authors find that companies responded very differently to the challenges posed by globalisation, depending on specific contexts and traditions. However, some patterns emerged, such as the quantitative and qualitative flexibilisation of employment, as well as changes in participation and social integration. Concerning industrial relations, the authors again find very different national configurations and underline that these differences persisted, concluding that unions were not defenceless against restructuring in the context of globalisation and privatisation, but show different strategies and reactions.

Based on their empirical findings, Dombois and Pries propose a model of interaction between company labour policies and changes in the company-wide understanding of industrial relations, oriented towards the different stakeholders on the micro level, as well as between this and the macro level of globalisation and privatisation on the one hand, and national regulatory regimes and industrial relations on the other.  

In summary, like Hay (2001) and other new institutionalist approaches, Dombois and Pries regard neoliberal reforms as a complex phenomenon requiring a rather complex theoretical model. The comparative approach adopted further allows them to stress national differences in neoliberal reform implementation. In accordance with the authors’ approach,

this paper considers different levels of analysis, from global to company micro, in order to assess privatisation processes and the institutional changes they implicate. Moreover, a comparative approach to several Latin American countries (in this case, Argentina and Brazil) is used to account for their specific responses to the global neoliberal model by pointing to differences in the adoption of privatisation policies and implementation of new regulatory frameworks. From the theoretical approaches introduced here, the conclusion is that adopting a broad and dynamic conception of neoliberal reforms and privatisation also implies applying a rather complex theoretical approach to account for the various structural, agential, and ideational factors, as well as the national contexts in which privatisation processes take place. This approach is described in the next section.
2.4. A Comparative Institutional Approach to Privatisation in Latin America

The focus of analysis—privatisation—has been perceived primarily as an economic phenomenon. This chapter, therefore, started by introducing the economic rationale for privatisation, followed by the mainstream economic studies which dominated the early literature. The author’s understanding of privatisation, however, goes beyond the economic rationale for privatisation and its policy implementation stage; to capture its impact on employees, section two also introduced empirical privatisation studies with an explicit labour focus. These studies identified different actors and institutions relevant to the processes considered. Criteria for processes and regulatory contexts as well as impact on employees were derived from these studies and serve as a basis for the author’s own empirical approach, which aims to assess the relative importance of the various factors involved in the institutional change associated with electricity sector privatisation. The methodological approach towards privatisation adopted is outlined in chapter three.

Throughout this study, privatisation is not seen as static but as a policy process that entails changes determined by structural and contextual factors as well as by the different actors involved. In order to conceptualise a broad, dynamic definition of privatisation, the author consulted different theoretical approaches towards privatisation and neoliberal reforms, paying particular attention to recent social science approaches on Latin America as well as to new institutionalist approaches. These were briefly introduced in section three of this chapter. New institutionalist approaches commonly stress the importance of institutions in determining policy outcomes. Providing a systematic process analysis, historical institutionalism aims at delivering profound insights with respect to how policy outcomes came about. The approach implies that institutions matter in determining policy outcomes and that history matters, too. According to historical institutionalism, thus, privatisation outcomes should be embedded in historical contexts and institutional settings. Adopting such a perspective, moreover, allows for implementing a concept of social and political change, further enabling aspects of economics to be combined with political analysis. In accordance with historical institutionalist approaches, this paper, therefore, considers historical contexts as well as institutional changes when analysing privatisation outcomes in the course of analysis, taking into account the different development paths of the chosen country cases. The concept of path dependent institutional evolution is amended by Hay’s (2002) notion of contested moments of crisis and paradigm shift. As proposed by Hay (2002) in his approach towards a critical political analysis, the aim is to conceptualise privatisation as a process of change so as to capture the
dynamic interplay of structure, international economic and political contexts, and national / sectorial historical contexts and institutional settings, on the one hand, and agencies involved in the privatisation processes of the 1990s in Argentina and Brazil, on the other. In accordance with the adoption of a rather complex approach towards the issue of structure and agency, this paper also acknowledges the complex interaction of material and ideational factors. In his ideational institutionalist approach, Hay (2001) shows how elements of the historical institutionalist school can be blended with others from discursive institutionalism to account for the role of ideas in explaining institutional change. Since, as pointed out by Campbell and Pedersen (2001a), “institutions and institutional change are more complex than any [of the four new institutionalist] paradigm portrays by itself,” combining elements of historical and discursive institutionalism promises to enrich the analysis of privatisation processes in Argentina and Brazil, even if at the expense of a more parsimonious approach.

Accordingly, actors are not defined as rational players, as suggested by economic theory, since “rationalism dispenses with the ‘problem’ of ideas in political analysis,” but as strategic and selective, as suggested by Hay (2001 and 2002) based on Jessop (1990). Jessop proposes a relational, strategic-theoretical approach to account for “the relation between state structures and the strategies which various forces adopt towards it.” He suggests using such an approach to develop middle-range concepts for analysing the state. Within Hay’s ideational institutionalist approach, actors are situated in a complex and constantly transforming context; the knowledge on which they base their decisions is incomplete and the range of options available restricted by the context. Policy makers’ actions are, thus, likely to be shaped by the current paradigm; ideas are assumed to influence policy making, particularly in moments of crisis, since policy makers seek solutions while involved in a process of social learning. Policies and institutions evolve in response to the feedback which policy makers receive. Policy evolution is, hence, characterised by successive stages of strategic learning within an evolving paradigm. Hay’s approach consequently allows for identifying different stages in which neoliberal concepts are translated into institutional practices.

Applying Hay’s ideational institutionalist approach to the analysis and comparison of privatisation processes in Argentina and Brazil, this paper aims to:

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1. analyse the countries’ processes of paradigm shift by identifying the conditions that trigger such a shift and the mechanisms that determine the degree to which this shift occurs, as well as the different factors involved\textsuperscript{152} (chapter four),

2. investigate how the privatisation paradigm was translated into institutional practices in the electricity sector in the two countries by differentiating between different stages and degrees of policy implementation (chapters four and five),

3. examine the impact of privatisation policies on employees (chapter six), and

4. link impact of privatisation on employees to processes and regulatory contexts in the electricity sector (chapter seven).

Hay’s approach provides a way of investigating the relationship between ideas, privatisation policies, and institutional effects of such policies and thus accounts for the possibility that “the social or discursive construction of globalisation [and hence privatisation] may have an effect on political and economic dynamics independently of the empirics of globalisation itself.”\textsuperscript{153} Since apart from looking at what policy outcomes were observed as a consequence of privatisation, the focus is on how and why these outcomes came about, the main research questions used for the investigation are the following:

1. What was the impact of privatisation on electricity sector employees in Argentina and Brazil during the 1990s?
2. How did this come about?
3. Why did this come about?

The research design was chosen in such a way as to allow for a certain degree of openness. Overall, the paper tends towards a more interpretative approach in answering the above questions by adopting a contextualised perspective aimed at middle-range theorising and analysis, while also drawing on quantitative data from the empirical studies presented, particularly regarding the first question. Moreover, a comparative approach is adopted, based on two country and two company case studies. The approach is, therefore, probably best described as \textit{eclectic}. It further combines insights from economic and political analysis; Campbell and Pedersen (2001b) claim that “theoretical cross-fertilisation may also facilitate methodological diversity.”\textsuperscript{154}

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\textsuperscript{152} See Campbell, J. L. & Pedersen, O. K. (2001b), p. 267, for an identification of the problems shared by different new institutionalist approaches to neoliberal reforms.


\textsuperscript{154} See Campbell, J. L. & Pedersen, O. K. (2001b), p. 255f, for the differentiation between interpretive, positivist, and eclectic approaches among new institutionalist analyses.
The literature discussed in this chapter produces the following two claims:

1. Privatisation processes and regulatory contexts influence the impact of privatisation on employees.

Figure 7 illustrates the research focus chosen for this study based on these two assumptions.

**Figure 7: Research Focus**

The following two hypotheses were also derived from the literature:

1. A slow, less pronounced privatisation process is likely to cause less radical impact.
2. Certain forms of regulation should alleviate possible negative privatisation effects.

As proposed by Dombois and Pries (1999) in their study on industrial relations and the sociology of work in Latin America, this paper strives to account for the interaction between different levels of analysis, and hence does not only look at changes at the company micro level, but also at the macro level of globalisation and privatisation and the level of national and sectorial regulatory regimes. The different levels of analysis of the privatisation process considered in this study are depicted in Figure 8.
Figure 8: Different Levels of Analysis of the Privatisation Process

- **Global Level**: international privatisation tendencies and promotion of privatisation policies
- **National Level**: process of translating privatisation policies into institutional practice in two country cases
- **Sector Level**: process of translating privatisation policies into institutional practice in one industry; impacts on employees in that industry
- **Company Level**: impacts on employees at two company cases

**Source**: Author’s own compilation

Looking at the global macro level of privatisation facilitates the investigation of general international tendencies and their influence on privatisation processes in Latin America in general and on Argentina and Brazil in particular, notably the role of the international financial institutions in promoting such policies. At the national level, the perception of privatisation policies by different national actors and the process of translating them into national legislation enabling the application of privatisation policies to different industrial sectors are examined. At the sector level, this paper also considers the process of privatisation policy translation and the resulting institutional changes, such as the establishment of regulatory agencies, further depicting general tendencies of privatisation impact on employees, which are then concretised at the company micro level, where privatisations result in changing ownership.

Shifting back and forth across levels of analysis from country to industry and firm allows different developments to be placed within a broader context. Comparing outcomes for Argentina and Brazil demonstrates that the responses to the global neoliberal model with respect to privatisation policies are country-specific.\textsuperscript{155}

2.5. Contributions to Knowledge

Employment issues were often neglected or trivialised by mainstream economic literature dealing with the impact of privatisation. However, even if employment effects were only short-term, they have to be addressed not only because of humanitarian issues, but also because of their potential consequences in political practice. Only a deep contextual analysis of different country-specific privatisation processes, including institutional settings and agential factors, allows a deeper understanding of the ways in which the negative impact of privatisation on employees came about and how it could be avoided in future. This paper, therefore, takes a comparative, more interpretative policy analysis looking at two country cases, examining privatisation processes and regulatory regimes from a contextualised perspective, with the aim of demonstrating country-specific responses to privatisation and establishing conditions which allow particular privatisation outcomes. The negative impact on employees is illustrated by two company cases which show ranging effects. Various studies provide empirical evidence on the different forms in which employees were affected by privatisations.

The aim of this study is to summarise systematically the results of the empirical studies on Argentina and Brazil and the two chosen company cases, the Argentine electricity company Servicios Eléctricos del Gran Buenos Aires (Segba) in Buenos Aires and the Brazilian electricity company Light Serviços de Eletricidade S.A. (Light) in Rio de Janeiro, in order to contrast the findings and amend them according to the chosen theoretical frame. Applying insights from discursive and historical institutionalism to Latin American countries, this book further aims to contribute to a second movement in institutional analysis, “an effort to stimulate dialogue among [new institutionalist] paradigms in order to explore the possibilities for theoretical cross-fertilisation, rapprochement, and integration.” The ideational institutional approach adopted by Hay (2001) seems particularly fruitful for the analysis of privatisation processes in Argentina and Brazil, since it may account for the different structural, agential, and ideational factors that contributed to the introduction of privatisation policies in the two countries. The author, hence, seeks political explanations for a phenomenon perceived mainly as economic but in practice dependent largely on policy choices.

Chapter 3. Methodology and Methods

This chapter details the research methodology and methods chosen to investigate the impact of privatisation on electricity sector employees in Argentina and Brazil. Section one describes the methodological approach, detailing the different dimensions of privatisation process, regulatory context, and employee impact investigated. In section two, the applied comparative method is introduced, with particular focus on the selection of the two case countries, as well as the two companies Segba and Light. Section three provides a brief overview of the chosen timeframe, section four presents a short research chronology, and section five introduces the data used, differentiating between primary and secondary sources.

3.1. Methodological Approach to Privatisation in Argentina and Brazil

The starting point of analysis for this study was the following hypothesis: The impact of privatisation on electricity sector employees depends on the ways in which privatisation processes are carried out, as well as on national regulatory contexts, and may impose changes in salaries, working conditions, and employee numbers. Figure 9 below shows the main variables considered.

Figure 9: Main Variables Considered in the Analysis of Privatisation Processes

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Privatisation          Companies          Employees
                      Privatisation Process; Regulatory Context
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Source: Author’s own compilation

Privatisation impacts on companies by introducing a profit motivation in the delivery of public services. The objective of increasing company efficiency in the context of privatisation directly affects employees. However, these effects may vary depending on the privatisation processes and regulatory contexts which shape companies’ actions.

In order to assess the impact of privatisation on electricity sector employees, the following steps will be followed:
1. Identifying relevant ideational and structural factors in the Argentine and Brazilian privatisation processes of the 1990s, with the aim of assessing their relative significance

2. Identifying relevant regulatory dimensions in order to provide a contextual picture

3. Exploring the impact of privatisation on employees

4. Relating impact to privatisation processes and regulatory contexts

5. Drawing conclusions

Overall, more weight is given to the role of national privatisation processes and regulatory contexts in determining the impacts of privatisation on employees than was afforded by the empirical studies introduced in chapter two. National development paths are expected to impact on the way in which an emerging privatisation paradigm is translated into institutional practice. In accordance with institutional analysis, institutions are assumed to influence the impact of privatisation on employees by “structuring interests and providing capacities for action.”157 The criteria of processes given in Table 3 are amended to include the privatisation dialogue in order to account for the discursive dimension in the policy shift towards a privatisation paradigm. As illustrated by Table 5, the different actors considered in the analysis of privatisation processes in Argentina and Brazil in chapter four include international organisations, national governments, and (multinational) economic groups, as well as unions. The aim is, thus, to account for the role of international as well as national actors in the two countries’ privatisation processes, including advocacy for, and resistance to, privatisation, as well as the issue of corruption. Moreover, the reasons for privatisation and possible role models are explored in addition to the countries’ political and economic contexts. The study next looks at differences in sector reform and restructuring, privatisation timeframes and scope, chosen methods, prices, and methods of payment, before finally considering privatised market ownership structures as well as post-privatisation company market shares.

Table 5: Privatisation Process Dimensions Considered in this Study

<table>
<thead>
<tr>
<th>Privatisation Processes</th>
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<tbody>
<tr>
<td>Historical, Political, Economic, and Ideational Contexts</td>
</tr>
<tr>
<td>Reasons for Privatisation</td>
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<tr>
<td>Privatisation Dialogue</td>
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<tr>
<td>Union Responses and Resistance to Privatisation</td>
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<tr>
<td>Role Models</td>
</tr>
<tr>
<td>Timeframe and Scope</td>
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<tr>
<td>Different Actors Involved</td>
</tr>
<tr>
<td>• International Organisations</td>
</tr>
<tr>
<td>• National Governments</td>
</tr>
<tr>
<td>• (Multinational) Economic Groups</td>
</tr>
<tr>
<td>• Unions</td>
</tr>
<tr>
<td>Corruption</td>
</tr>
<tr>
<td>Sector Reforms / Restructuring</td>
</tr>
<tr>
<td>Privatisation Methods, Prices, and Methods of Payment</td>
</tr>
<tr>
<td>Ownership Structures and Market Shares</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation

Compared to the aforementioned empirical studies, more attention is given to the role of the regulatory agencies, focussing on their responsibilities and functionality. To evaluate whether these institutions can make a difference to electricity sector employees faced with privatisation, chapter five considers the following in the analysis of Argentina and Brazil’s regulatory contexts:

- the existence, functionality, and competences of the regulatory agencies (assumed to indirectly affect employees / unions through their impact on electricity markets and companies);
- the application of national labour legislation (assumed to directly affect employees / unions).

Differentiating between national legislation and electricity sector regulatory institutions, a two-level institutional analysis is applied in accordance with Guiraudon (2002), defining institutions as formal rules and as organisations with the aim of identifying the specific regulatory settings of the two countries. It seeks, thus, to explore the adoption of new regulatory regimes in the electricity sector, including changes in sector legislation as well

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See Rothstein, B. & Steinmo, S. (2002), p. 10f; Guiraudon, V. (2002), p. 129ff. Guiraudon applies a two-level institutional analysis to immigrants’ social and political rights, and to the courts that implement such rights in France and Germany. Institutions are understood as dynamic, experiencing a process of change over time. Guiraudon’s approach hence allows for differentiating between regulatory rules and their application by the regulatory agencies in a changing institutional environment.
as responsibilities and functionality of the newly established regulatory agencies. Changes in national legislation which allowed the implementation of privatisation programmes, as well as labour regulation, is also investigated. The following table shows the dimensions of regulatory contexts considered in this study.

**Table 6: Regulatory Context Dimensions Considered in this Study**

<table>
<thead>
<tr>
<th>Regulatory Contexts</th>
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<tbody>
<tr>
<td>Changes in Legislation Allowing for Privatisation</td>
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<tr>
<td>New Regulatory Framework of the Electricity Sector</td>
</tr>
<tr>
<td>Establishment of Regulatory Regimes / Agencies</td>
</tr>
<tr>
<td>- Responsibilities</td>
</tr>
<tr>
<td>- Functionality</td>
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<tr>
<td>National Labour Regulation</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation

The impact of privatisation on employees can be divided into three main categories:

- number of employees (distinguishing between compulsory lay-offs—such as dismissals or outsourcing—and voluntary lay-offs, including early retirement and voluntary severance),
- working conditions (looking at changes in working hours and intensity, changes in the working environment and flexibilisation, health and safety, and wages and benefits), and
- union membership and collective bargaining.

Particular attention is, thus, given to the impacts mentioned most frequently by the empirical studies: employment levels and different types of employment reduction, and among the impacts on working conditions, hours, health and safety, as well as wages. Another question discussed is whether different groups of workers were affected differently by electricity service privatisation (i.e., were engineers affected differently from other workers?).

To investigate the impact of privatisation on electricity sector employees, the following levels of analysis are used:

- Infrastructure Sector Employees
  - Electricity Sector Employees
  - Employees at Selected Companies
Wherever possible, both pre- and post-privatisation employment numbers are considered when examining privatisation-context employment level changes. Moreover, the impact on union membership and collective bargaining are given particular attention, since they are assumed to affect employees directly. In accordance with Dombois and Pries (1999), unions are assumed not to be defenceless against the introduction of privatisation policies, and the authors’ differentiation between three general options in responding to challenges—ignore or accept, blockade, and negotiate—is adopted. Exploring the effects of electricity sector privatisation on trade unions, levels of analysis considered are as follows:

Trade Unions at National Level
↓
Trade Unions at Sector Level
↓
Trade Unions at Company Level

Table 7 below summarises the different dimensions of employee impact considered in chapter six of this study.

Table 7: Employee Impact Dimensions Considered in this Study

<table>
<thead>
<tr>
<th>Impacts on Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Levels</td>
</tr>
<tr>
<td>Unemployment Rate</td>
</tr>
<tr>
<td>Employment Reduction Types</td>
</tr>
<tr>
<td>Working Hours</td>
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<tr>
<td>Work Tasks</td>
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<tr>
<td>Work Load</td>
</tr>
<tr>
<td>Working Atmosphere</td>
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<tr>
<td>Wages and Benefits</td>
</tr>
<tr>
<td>Employment Contracts</td>
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<tr>
<td>Outsourcing</td>
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<tr>
<td>Workforce</td>
</tr>
<tr>
<td>Health and Safety</td>
</tr>
<tr>
<td>Employee Stock Ownership</td>
</tr>
<tr>
<td>Union Density / Membership</td>
</tr>
<tr>
<td>Collective Labour Agreements</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation

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3.2. Comparative Method

Since this paper seeks to establish conditions which enable particular privatisation outcomes, it adopts a case-oriented comparative approach; however, since a further aim is to capture the dynamic interaction of actors and institutions involved in privatisation processes and so link them to outcomes, research design is based on only two cases (small-N). Looking at privatisation as a complex phenomenon in the research logics of Weber, the aim is to study these two cases in depth by acquiring knowledge of historical contexts and of country-specific details concerning privatisation processes, regulatory contexts, and employee impact.\(^{160}\)

3.2.1. Case Study Selection

Argentina and Brazil, two geographical neighbours with similar historical traditions, cultural characteristics, and economic developments, were chosen for the analysis in order to reduce the number of interfering variables and concentrate on the differences in the variables adopted for this study.\(^ {161}\) From the 1930s to the 1970s, both countries relied on import substituting industrialisation\(^ {162}\) as a development strategy, and gradually started introducing liberalisation policies towards the end of the last military dictatorships in the late 1970s and early 1980s. In 1983 and 1985, new democratic civilian governments took office in Argentina and Brazil, respectively. These inherited economic stagnation, increasing fiscal deficits and external debt, and high inflation rates; the 1980s were characterised by increasing efforts to combat inflation, successful in neither country. Both suffered from hyperinflation and severe economic as well as social crises in the late 1980s, leading to changes in government and the adoption of more liberal economic policies, deregulation, and privatisation during the 1990s. As described in the introduction, Argentina and Brazil both played an important role in the Latin American privatisation process.

Apart from the aforementioned historical, political, and economic similarities, the two countries show very different development paths, reflected in their privatisation policies. They hence reveal major differences in privatisation process and regulatory context with regard to timing / time frame, scope / consistency of new policy, new regulatory frameworks, as well as


\(^{161}\) See Steinmo, S. (2008), p. 124f, for the advantages of a similar systems design.

\(^{162}\) Import substituting industrialisation is an economic strategy which encourages domestic production in order to replace imports. It was commonly applied in Latin American countries for many decades. The next chapter provides some further information on the topic.
in economic and social consequences. Whereas privatisation policies were implemented abruptly in Argentina, Brazil only selectively, occasionally, and inconsistently implemented such policies, taking an extremely long time to complete its regulatory framework, maintaining strong state regulation, and only partially introducing a policy of opening up the economy.\textsuperscript{163} As a consequence, the private sector share in electricity generation, transmission, and distribution is higher in Argentina than in Brazil.\textsuperscript{164} The process in Argentina was facilitated by the fact that almost the entire generation capacity, as well as the transmission system, was owned by central government, and the former public companies consisted of only a few large firms; privatisation and restructuring of the electricity industry in Brazil was exacerbated because an important share of generation and transmission as well as the major part of distribution activities were in the hands of Brazil’s states.\textsuperscript{165}

In accordance with institutionalist approaches, this study aims to investigate the two countries’ specific paths for introducing electricity sector privatisation policies as well as the specific institutional conditions under which they were introduced, as these are expected to influence outcomes. Argentina and Brazil were selected since they show substantial differences in these variables of interest.

At the company micro level, country-specific responses to privatisation are also reflected by the chosen case studies. For Argentina, Segba in Buenos Aires and for Brazil, Light in Rio de Janeiro were selected for investigation—both major companies with respect to the size of the population dependent on their services, in the hands of national government before privatisation and among the first to be privatised. Whereas Segba was not only divided into separate entities according to geographic criteria, but also according to the different electrical supply stages before privatisation, Light remained an integrated company, continuing its operating activities in generation, transmission, and distribution.\textsuperscript{166} Segba was privatised in 1992, and Light in 1996. Initially, only 51% of the successor companies of the distribution units of Segba (Edenor S.A., Edesur S.A., and Edelap S.A.) were in private hands; by the end of the 1990s, this had risen to 100%. The private sector share in Light amounted to 60% during the 1990s, increased to 82% then 94.5% in subsequent years, and decreased again to 70% thereafter. The distribution units of Segba and Light were privatised

\textsuperscript{163} Dombois, R. & Pries, L. (1999), p. 54f, refer to neoliberal reforms in general but this argument also holds for privatisation policies in particular. See also Millán, J., Lora, E. & Micco, A. (2001), p. 15.


\textsuperscript{166} Light was, however, restructured and divided into different business units ten years after privatisation.
via international tendering procedures. Whereas concession contracts with terms of 95 years were agreed for Edenor, Edesur, and Edelap, Light was partially divested.\(^{167}\)

In summary, the impact of privatisation on employees is investigated on the basis of a sectorial inquiry, considering two country cases with different privatisation processes and regulatory contexts and different policy outcomes with respect to scope and scale at the sector level, but similar outcomes at corporate level. The research aims to contrast the two countries’ different paths to privatisation outcomes.

### 3.3. Timeframe

Major privatisation programmes were introduced during the 1990s in Argentina and Brazil. The time period considered for the analysis of the implementation of privatisation policies (chapter four), establishment of new regulatory frameworks (chapter five), and consequences of privatisation for employees (chapter six), therefore, is that decade. In Argentina, the analysis concentrates on the first presidency of Carlos Menem (1989-1995), since most privatisation was undertaken during this period; in Brazil, most infrastructure privatisation was carried out under the government of Fernando Henrique Cardoso (1995-2003) during the second half of the 1990s, and the analysis thus concentrates on this later period. The early- and mid-1990s in both countries were a period of relative economic and political stability. Before the 1990s, there were no important privatisation programmes in Argentina and Brazil; in 2001, privatisation in the electricity sector came to a standstill in both countries for different reasons. Whereas Argentina suffered from a severe economic and social crisis at the turn of the century, Brazil faced a huge energy crisis in 2001, including major blackouts and electricity rationing, interrupting the privatisation of electricity companies.

Investigating privatisation processes of Argentina and Brazil in chapter four requires a step further back in time to assess the historical contexts and reasons for a paradigm change towards privatisation in both countries, summarising their major economic and political changes in the course of the 20\(^{th}\) century.

3.4. Research Chronology

The research was conducted in the context of the international doctoral programme Global Social Policies and Governance at the University of Kassel, where presentations were held on a regular basis and entailed the following steps:

1. Collection of secondary data, mainly through online research (sources included papers published by universities, unions, and international organisations)
2. Data analysis and formulation of hypotheses
3. Choice of research tools and case studies (preparation of field research and design of a preliminary questionnaire)
4. Field research in Argentina and Brazil: collection of further secondary data (literature and data research in libraries, bookshops, at universities, statistical institutes, and unions), collection of primary data (expert interviews with unions, universities, and ministries)
5. Data analysis and interpretation

3.5. Data

The different research questions posed in the previous sections are addressed by an extensive review of the academic, as well as political, literature on privatisation processes, regulatory contexts, and employee impact in Argentina and Brazil, supplemented by qualitative data (semi-structured interviews with experts in the field).

3.5.1. Secondary Data

Secondary data used in this study is based on literature in German and from the English-speaking world, as well as Argentine and Brazilian literature gathered during a field research period from November 2008 till May 2009. The empirical literature on the impact of privatisation on employees presented in chapter two is amended by data on the economic and political history of Argentina and Brazil and on their privatisation processes (chapter four), and by energy policy literature on electricity sector reforms and regulation (chapter five). Since no access to databases on employment numbers, salary levels, and working conditions
in Argentina and Brazil was available, the data given in chapter six is based on that published in the empirical literature. Since this is gathered from different sources, the absolute numbers presented are not always comparable. However, they are good indicators for the magnitude of changes in the context of privatisation in Argentina and Brazil.

3.5.2. Primary Data

Eight semi-structured interviews in both Argentina (Buenos Aires and Córdoba) and Brazil (São Paulo and Rio de Janeiro) were carried out and a few additional informal conversations held with experts in the field during a research period in Argentina and Brazil from November 2008 till May 2009. The interviews were conducted to gather information on aspects neglected by the literature available and to acquire deeper knowledge and additional insights on aspects already captured by the literature. The questionnaire used for the interviews comprised 20 questions concentrating on privatisation processes and impact and regulatory aspects. The interview questions were derived from the literature and from Haselip’s (2007) pilot work on electricity market reform in Argentina. A sample size of eight interviews in each country was regarded as sufficient to capture varying positions on privatisation processes, regulatory contexts and impacts of privatisations.

Interview partners included electricity sector trade union representatives, scholars of important research institutes and universities in the field, and representatives of regulatory agencies or relevant ministries. They were selected on the basis of the relevant national literature and a conversion held with Professor Stephen Thomas at the Public Services International Research Unit (PSIRU), based in the Business School of the University of Greenwich in London, in autumn 2008. The research design taken to the field allowed for a certain degree of openness and flexibility and for concepts to “emerge from the field.” A few interview partners were, thus, added during the research period, since they were recommended as experts in the field by the first interviewees. Experts in this context are defined as *professionals with specific knowledge and information in the areas investigated*.

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168 Informal conversations in Buenos Aires were held, inter alia, with several electricity sector engineers, a former employee of Segba, a lawyer specialised in labour legislation and a member of the Argentine socialist party. In Rio de Janeiro an informal conversation with a former employee of a public electricity company, who participated in an early retirement scheme, was also held.

169 Gray, D. (2004), p. 219, points to a sample size of eight as being sufficient when complemented by other data.


A complete list of institutes, interview partners, their professions at the time of interview conduction, and the dates when the interviews were carried out in Argentina and Brazil is shown below. The interviews were based on a main questionnaire for each country, adjusted to suit interviewees’ fields of expertise and revised during the research period. Some questions were added since they turned out to be relevant during the first interviews; others were omitted as being of no importance. The two main questionnaires used for conducting interviews in Argentina and Brazil are shown in the appendix.

The interviews were conducted in awareness of the different problems which might arise. Possible issues were addressed by extensive preparation, which aimed to make the interviews as skilful, tactful, safe, and ethical as possible, paying particular attention to cultural differences between the interviewer and the interviewees. The interviews were conducted in Spanish and Portuguese, the majority taking place in the interviewee’s office or workplace, lasting on average 65 minutes in Argentina and 45 minutes in Brazil. All interviews were digitally recorded and transcribed by two locally engaged professionals in Buenos Aires. Paraphrasing and preliminarily coding were carried out during the period of field research, with further coding, as well as analysis, undertaken thereafter.

The broad aim of the interviews was to gain further insight into Argentina and Brazil’s privatisation processes, including electricity sector regulatory contexts, and employee impact. The comparative institutional analysis undertaken in the following chapters primarily relies on information captured from the existing literature, and is supplemented by information taken from the interviews.

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172 One question dropped in the course of the research was on the importance of technological change in the privatisation process of the 1990s since none of the interviewees regarded this as relevant in the Argentine and Brazilian electricity sectors. This issue returns in chapter four. Another question removed referred to the role of non-governmental organisations in the Argentine privatisation process since these organisations only started to be of importance after the implementation of Menem’s privatisation programme.

173 See Gray, D. (2004), p. 213ff, for issues which may arise when conducting interviews.

174 One interview in Argentina could not be carried out personally, and the questionnaire was answered in writing by the interviewee.
In Argentina, interviews at the following institutes were carried out:

**Trade Unions:**
- Asociación de Profesionales Universitarios del Agua y la Energía Eléctrica (APUYAE), interviewee: anonymous; date: 18/5/09.
- Luz y Fuerza Mar del Plata, interviewee: José Rigane, Secretary General of Luz y Fuerza Mar del Plata and cofounder of the Central de Trabajadores de la Argentina (CTA); dates: 5/12/08 and 28/4/09.
- Luz y Fuerza Córdoba, interviewee: Juan Leyría, Secretary General of Luz y Fuerza Córdoba; date: 8/1/09.

**Ministries / Regulatory Agency:**
- Ministerio de Economía y Finanzas Públicas, interviewee: Juan Legisa, from 1997 to 2003 President of ENRE, at the time of the interview Consultant in the Argentine Ministry of Economic Affairs; date: 6/1/09.

**Research Institutes / Universities:**
- Sede Argentina de la Facultad Latinoamericana de Ciencias Sociales (FLACSO), interviewee: Daniel Azpiazu\(^\text{175}\), Professor for Political Economy at FLACSO; date: 17/12/08.
- Instituto de Economía Energética (IDEE), Fundación Bariloche, interviewee: Daniel Bouille, Director of IDEE; date: 30/12/08.
- Instituto Argentino de la Energía “General Mosconi” (IAE), interviewee: Jorge Lapeña, President of the IAE; date: 28/5/09.
- Asociación de Distribuidores de la República Argentina (ADEERA), interviewee: anonymous; date: 25/5/09.

\(^{175}\) Daniel Azpiazu was a well-known investigator and critic of the neoliberal reforms in Argentina. He passed away in August 2011.

In Brazil, interviews were conducted at the following institutes:

**Trade Unions:**
- Federação Nacional dos Urbanitários (FNU), interviewee: anonymous; date: 24/3/09.
- Sindicato dos Engenheiros no Estado do Rio de Janeiro (Senge-RJ), interviewee: anonymous; date: 27/3/09.

**Ministries / Regulatory Agency:**
- Camara de Comercialização de Energia Elétrica, interviewee: Elbia Melo, from 2000 to 2001 Assessor at ANEEL, at the time of the interview Member of the Board of the Electricity Energy Commercialization Chamber; date: 29/3/09.

**Research Institutes / Universities:**
- Instituto para o Desenvolvimento da Cooperação e Relações Internacionais (IDECRI), interviewee: Kjeld Jakobsen, Consultant at IDECRI, date of the interview: 10/3/09.
- Instituto de Eletrotécnica e Energia (IEE), Universidade de São Paulo, interviewee: José Goldemberg, Professor at IEE; date: 12/3/09.
- Instituto de Economia (IE), Universidade Federal do Rio de Janeiro, interviewee: Helder Queiroz Pinto Jr., Professor at IE; date: 25/3/09.
- Instituto Alberto Luiz de Coimbra de Pós-Graduação e Pesquisa de Engenharia (COPPE), Universidade Federal do Rio de Janeiro, interviewee: Luiz Pinguelli Rosa, Director of COPPE; date: 27/3/09.
Chapter 4. Privatisation Processes in Argentina and Brazil

This chapter provides an analysis of privatisation processes in Argentina and Brazil during the 1990s, with the aim of gaining an insight into how and why negative impacts on electricity sector employees came about. The first section gives an overview of the historical, political, and macroeconomic context of these processes in Latin America. Section two explores the historical, political, economic, and ideational background of privatisation in Argentina, analysing the country’s process of paradigm shift by identifying the conditions that triggered it and the mechanisms that determine the degree to which such a shift occurs. It further investigates how the privatisation paradigm was translated into institutional practices in Argentina, differentiating between different stages and degrees of policy implementation. Section three applies the same approach to the Brazilian context, and section four summarises similarities and differences between the two countries’ privatisation processes.

4.1. Privatisation Processes in Latin America

This section provides an overview of the historical, political, and economic context of privatisation processes in the region, stressing the reasons for adopting privatisation policies.

Until the beginning of the 20th century, Latin American economies relied mostly on the exploitation and extraction of resources and the production of agricultural products for export to industrial countries. The Great Depression of 1929 led to a considerable decline in such exports, as well as a shortage of foreign exchange. In the aftermath of this global economic crisis, Latin America generally abandoned the previously pursued free-trade policy aiming at catching-up in industrialisation. Against this background, the idea of introducing a social welfare state inspired by Keynesianism emerged in Latin America. The so-called State of Commitment was initiated in the 1930s and consolidated after the Second World War in the Southern Cone of Latin America. It was characterised by an increasing development of social welfare, active state participation in the economy, and the recognition of union rights, and led to significant income redistribution. The overall relationship between the state and workers improved considerably as a consequence. In the context of the State of

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177 The Southern Cone of Latin America comprises Brazil, Paraguay, Uruguay, Argentina, and Chile.
178 There is some disagreement as to whether these policies were inspired by Keynesianism or not. See Schamis, H. (1993), p. 58.
Commitment, the development model based on the export of primary goods was replaced by the concept of import substituting industrialisation.\textsuperscript{179} Until the 1970s, Latin America relied predominantly on state promoted economic development.

In the 1970s, the import substituting strategy crisis became acute, reopening a debate on the political economy, resulting in the end of the Latin American developmental state’s social and economic reforms, and its replacement by the doctrine of laissez-faire.\textsuperscript{180} The end of the 1970s onwards saw changes to the dominant economic system, which increased during the 1980s and further intensified during the 1990s.\textsuperscript{181} The crisis of 1982 delivered a fatal blow for the region’s economic strategy of import substituting industrialisation; income distribution worsened and social inequality increased. The 1980s were characterised overall by international financial and economic instability, showing huge fluctuations in growth rates, prices, and trade and capital flows, leading to a periodical readjustment of exchange and interest rates. The latter increased considerably, causing a deepening fiscal crisis in developed and developing areas. Latin American countries, which up until then had received more inflows than outflows, reversed their capital movement direction in the mid-1980s.\textsuperscript{182} Recovery began in the second half of the 1980s, with many countries in the transition process towards democracy.

However, the debt problem persisted; in the mid-1980s, the Baker Plan\textsuperscript{183} promoted a recovery of the indebted economies as a condition for re-establishing their capacity for debt repayment, but without much success. Towards the end of the 1980s, the World Bank became very prudent regarding the negotiation of new credits, while demanding further adjustments of the indebted countries. The indebtedness of Latin American countries again became more critical and, together with adverse global economic conditions, resulted in deepening fiscal crises and particularly severe episodes of hyperinflation in Brazil, Argentina, and Peru between 1988 and 1990. Several Latin American countries defaulted on their debt. In March 1989, the Brady Plan\textsuperscript{184} was launched, initiating a process of debt restructuring at reduced rates of interest.\textsuperscript{185} In the context of the economic crises of the 1980s, structural adjustment and stabilisation measures were implemented in the majority of Latin American countries—

\textsuperscript{183} The Baker Plan was suggested by then US Finance Minister James Baker at a world monetary conference in October 1985 in Seoul as a proposed solution to the international debt crisis.
\textsuperscript{184} The Brady Plan was proposed by former US Secretary of the Treasury Nicholas Brady. It included issuing bonds of Latin American countries in US dollars, which became known as “Brady Bonds.” Many of these bonds were guaranteed by US Treasury bonds and hence more attractive to investors.
earlier than elsewhere. These policies included significant structural changes concentrating on liberalisation and deregulation and on the promotion of a subsidiary role of the state. The privatisation of public companies was one of the central focus areas of the new economic strategy adopted in the region.\textsuperscript{186}

Public companies had historically played a valuable role in the region’s economic activity, adding about 5\% of GDP in Argentina and Brazil before the 1982 crisis. At the beginning of the 1990s, virtually all Latin American governments—with the exception of Cuba—had initiated or announced major privatisation programmes. Most countries introduced such programmes without first conducting a complex cost benefit assessment, and privatisation was often approached in a short-term manner.\textsuperscript{187} Many infrastructure companies had pre-privatisation investment needs due to the increasing demand for public services as a consequence of population growth and urbanisation. (Latin America has exceptionally high rates of the latter in comparison to other regions of the world; in 2011, the region’s urbanisation rate amounted to 79\%, and Latin America now has four megacities—Ciudad de México, São Paulo, Buenos Aires, and Río de Janeiro—which have all shown very high rates of population growth during the last decades, thus exerting considerable pressure on existing public infrastructure.\textsuperscript{188}) The lack of public funds available for financing infrastructure services against the background of the fiscal crisis of the 1980s exacerbated the situation, with the result that many Latin American public companies made losses.

In the light of the above, it might seem rather surprising that public companies running a deficit would attract private investors willing to assume operational activities. These investors, however, saw a chance to make profits in taking over loss-making Latin American infrastructure companies and increasing efficiency through cost cutting strategies.\textsuperscript{189} Moreover, Latin American markets, in contrast to those in Europe and the US, displayed considerable growth rates.\textsuperscript{190}

The following section further outlines the main reasons for privatisation in Latin America in order to identify the country specifics in the process of adopting privatisation policies in Argentina and Brazil.

\textsuperscript{188} See UN (2012), p. 6ff.
\textsuperscript{190} Information based on interviews held in Argentina in the period 5/12/08 to 28/5/09.
4.1.1. Reasons for Privatisation in Latin America

Numerous arguments were raised in the late 1980s and early 1990s in favour of privatisation. Devlin (1993) summarises the main driving forces of privatisation in Latin America, distinguishing between structural and cyclical factors. Among structural factors, he mentions the following:

- the emergence of a new ideology,
- the desire to increase efficiency in public companies,
- technological and administrative changes in strategic sectors,
- the repositioning of the private sector, and
- the perceived need to demonstrate political coherence.

According to Devlin (1993), the new ideology—emerging inter alia from the perceived success of privatisation policies introduced by the British Thatcher government—stresses the importance of private sector initiatives as well as the need to reduce the size of the state and limit the public sector to essential activities. The emergence of this new ideology played a role in influencing political decision making for almost all Latin American governments but was not always considered of primary importance. All governments of the region justified privatisation of state owned enterprises by reference to the argument that company efficiency would increase via the change from public to private ownership. Both arguments—the new ideology and the efficiency argument—draw on the economic privatisation theory introduced in chapter two. Further arguments, according to Devlin, relate to technological and administrative advances enabling competition in sectors such as infrastructure, previously characterised by monopolies, and to the feeling that the national private sectors in Latin America had reached a degree of maturity which would allow participation in sectors formerly dominated by state-owned enterprises. Moreover, with the transition to a new economic model, regional governments felt the need to demonstrate coherence in their economic policies, demonstrating their accordance with the new consensus of dividing labour between the public and private sectors.

Among the cyclical factors, Devlin (1993) specifies

- the aim of establishing political credibility,
- the presence of fiscal crises and the need for fiscal stabilisation,
- investment constraints of the public companies,
- catalytic effects, as well as
the perceived need for reassuring foreign creditors.

In order to improve the expectations of national and international economic agents, Latin American governments demonstrated their commitment to the new ideological model by adopting privatisation policies. Establishing political credibility is particularly important for newly elected governments confronted with economic crisis. Public company privatisation was further appreciated by Latin American governments due to the immediate financial transfers they implied. Privatisation also affected future fiscal flows especially positively in the case of public companies running a deficit. In such cases, negative yearly fiscal transferences could be replaced by an inflow of tax revenue as a result of privatisation, contributing to fiscal stabilisation. The use of these proceeds for financing government expenditure, moreover, allowed for the postponing of fiscal adjustment policies. In addition, the fiscal crises of the 1980s posed serious obstacles for public investment, leading to constraints within public companies and an increasing bottleneck in public service provision. In the midst of economic recession, privatisation was perceived as the last resort to escape economic stagnation; it was believed to reactivate the economy in different ways, such as buying time to ensure more permanent financing, providing dividends to serve as an exchange rate anchor, encouraging the private sector to make investments, amplifying equity markets and improving expectations, and fostering economic growth, etc., thus having catalytic effects. Finally, privatisation was heavily encouraged by international financial institutions and was therefore seen as an instrument for improving external economic relations by reassuring foreign creditors.\textsuperscript{191}

\textsuperscript{191} See Devlin, R. (1993), p. 180ff, for a summary of the different reasons for privatisation in Latin America.
4.2. The Argentine Privatisation Process of the 1990s

The analysis of privatisation in Argentina begins with the historical, political, economic, and ideational contexts which led to its adoption, paying particular attention to the role of structural, agential, and ideational factors, striving to answer the question of why such policies were introduced there. The process of paradigm shift in Argentina is explored with the aim of identifying the conditions which triggered such a shift, the mechanisms that determine the degree to which the shift occurred, and the different factors involved in the process. Section two assesses resistance to privatisation in Argentina, further investigating the role of unions, exemplifying the issue via an electricity company case where unions successfully prevented a privatisation programme. Section three gives an overview of the privatisation of infrastructure services in Argentina during the 1990s, providing insights with respect to how privatisation policies were introduced in the country. Section four introduces some particularities of the Argentine electricity sector, on the basis of which section five explores the translation of privatisation policies into institutional practices in this sector. Section six provides information on the restructuring of privatised infrastructure companies and electricity sector reform. Privatisation methods, prices, and forms of payment in electricity distribution are presented in section seven. Section eight briefly introduces the issue of corruption in the Argentine process. Finally, section nine considers Argentine electricity distribution companies’ ownership structures.

4.2.1. The Historical, Political, Economic, and Ideational Context of Privatisation in Argentina

“Argentina has a long history of ephemeral administrations” (APJAE, 2005)

In the early 20th century, Argentina was prosperous, boasting the world’s sixth highest per capita income. This wealth was achieved by a strategy of export-led growth, making Argentina the world’s tenth largest trading country, sending wool, leather, and grain to European markets. At that time, domestic wage levels were comparatively high, the country’s infrastructure was expanded, and, in the 1920s and 1930s, some manufacturing and new industries were established, financed by both domestic and foreign investment. The agro-export model adopted left the country, however, vulnerable to fluctuations in international demand for its goods. With the Great Depression, Argentine exports fell by 36% from 1929 to
1930; the country’s ability to import decreased considerably, and public expenditures were drastically reduced.\textsuperscript{192}

In response to the global economic crisis, Argentina’s economic strategy was changed and import-substituting policies implemented by the military government that took over power in 1930. The import-substituting strategy deepened and extended during the subsequent years, particularly during the governments of Juan Domingo Perón. In 1943, Perón took part in a military coup and was put in charge of the Labour Department, winning the presidential elections in 1946. During his first government, the country experienced a significant increase in industrial production and economic growth rates of about 8\%.\textsuperscript{193} Many former private infrastructure companies were nationalised; a massive state intervention took place. Moreover, social programmes were expanded and labour reforms introduced. The Argentine trade union confederation, Confederación General del Trabajo de la República Argentina (CGT), was founded, and wages experienced a strong increase in real terms. Whereas the government intervened with trade unions which did not conform to the system or even prohibited them, those complying with the system were strengthened, gaining important political influence. During Perón’s first two governments, significant concessions to the country’s labour force were made and corporatist structures established. However, Perón’s populist policies were opposed by conservative forces, the Argentine Catholic Church, and the political opposition. Argentina’s economic situation worsened considerably during his second term in office, when the country faced fiscal and trade deficits, as well as growing inflation; this government ended with another military coup, in 1955.\textsuperscript{194}

In the years that followed, Argentina experienced several semi-democratic governments, alternating with authoritarian ones; the political instability was reflected by economic fluctuations. The period 1955 to 1976 was characterised overall by the conflict between Peronist and anti-Peronist parties attempting to reintegrate the country in the world economy. Import-substituting industrialisation, however, remained Argentina’s principal economic strategy at the time.\textsuperscript{195}

From 1976 to 1983, Argentina experienced its last military dictatorship. A junta took power by a coup on March 24, 1976, ending the government of President María Estela Martínez de Perón, and appointing lieutenant general Jorge Rafael Videla as president. Within hours, leaders of different left-wing sectors, political representatives, and union leaders had

been murdered. Repressive measures were introduced immediately in the employment and political spheres, such as the removal of trade union and striking rights. Other union leaders were arrested; a significant number of public employees were made redundant and replaced by military personnel. The army’s anti-subversive fight led to the detention and disappearance of those considered subversive, who became known as los detenidos-desaparecidos. According to estimates, at the end of 1976, about 15 people were being killed per day; a total of about 30,000 people were detained and disappeared under Argentina’s last military government. \(^{196}\) When news of these acts of state terrorism spread, international pressure was exerted calling for the prosecution of human rights violators and economic sanctions applied. The country experienced economic recession, high rates of inflation, and decreasing real wages during the dictatorship. \(^{197}\) In the industrial sector, in 1976, real wages fell by almost a third in comparison to the previous year, continued to deteriorate in 1977 and 1978 by 1.4% in each year, increased by 14% and 11% in 1979 and 1980 respectively, and decreased again by 10% in 1981 overall, leading to a much lower salary level for industrial workers by the end of the period, in comparison to 1975. \(^{198}\)

The years of military government were marked overall by a process of economic concentration and capital centralisation. Income distribution became more regressive and employment more precarious. Labour conquests of previous decades were abandoned; trade unions were infiltrated by the government. Social and political conflicts arose which led to mass demonstrations and the appearance of radical groups. \(^{199}\) Moreover, an increasing deindustrialisation took place. \(^{200}\) A programme of economic and social change was adopted, including the introduction of liberalisation policies. \(^{201}\) Direct import controls were dismantled and tariffs decreased, prices and salaries liberalised, and restrictions on foreign exchange transactions reduced. \(^{202}\) In addition, an inter-ministerial committee on the privatisation of public companies was established. In June 1978, the committee provided a detailed report to the president which listed about 120 companies to be privatised. The national cabinet approved basic criteria and terms for policies, paving the way for privatisation and a first process was initiated. \(^{203}\)

\(^{198}\) See Azpiazu, D. & Schorr, M. (2010), p. 33f. 1975 was taken as the base year.  
\(^{203}\) Information taken from the website of the Ministry of Economics and Public Works, retrieved on September 20, 2013, from infoleg.mecon.gov.ar.
However, apart from a few minor transfers during the administration of the Minister of Economic Affairs, José Alfredo Martinéz de Hoz, state-owned enterprises remained in public hands during the military government; the majority of public companies even experienced a period of extraordinary growth. It was only during the democratic government of Rául Alfonsín that privatisation turned into a socially significant issue.\textsuperscript{204} In the context of the Malvinas / Falklands War defeat, economic stagnation, increasing social pressure, and discord within the army, the military government resigned and the dictatorship came to an end.\textsuperscript{205}

On October 30, 1983, democratic elections were held. The \textit{Unión Cívica Radical} (UCR) party won 52\% of the votes, and Rául Alfonsín assumed the presidency in December. The newly elected government was confronted with high rates of inflation, increasing external debt, and rising levels of unemployment.\textsuperscript{206} Throughout the 1980s, Argentina was running fiscal deficits and showed a huge increase in its external debt; this amounted to about 5 billion US dollars in 1973, and increased to almost 44 billion US dollars in 1982 and just over 46 billion US dollars in 1986. Annual inflation rates reached 433.7\% in 1983, 688.0\% in 1984, and 385.4\% in 1985.\textsuperscript{207} At the beginning of his presidency, Alfonsín introduced a heterodox economic programme as an instrument for combating inflation. The Austral Plan, launched in June 1985, froze prices, public service tariffs, salaries, and the exchange rate. It reduced fiscal deficit by way of contracting public spending and public sector investment, increasing trade-related levies and fuel taxes, and raising direct taxes. In addition, a new currency, the Austral, was introduced and a conversion table for existing debt adopted.\textsuperscript{208} The economic policies applied following the Austral Plan were initially successful in reducing inflation to 81.9\% in 1986; however, success was of only limited duration, and in the third trimester of 1986, inflation started to surge again, reaching an annual rate of 174.8\% in 1987 and 387.7\% in 1988.\textsuperscript{209} In the 1987 elections, the UCR party lost its House of Representatives majority, and the Alfonsín government started to lose momentum. The economic policies adopted by the government after the 1987 elections became more orthodox and characterised by short-term pragmatism.\textsuperscript{210} In August 1988, the Primavera Plan was launched as a further attempt to combat inflation. The country was experiencing an enormous increase in external debt, and the government tried to reduce public spending and generate income by promoting the privatisation of public companies. These attempts were vehemently opposed by the political

\textsuperscript{207} See Rapoport, M. (2005), p. 707. Inflation rates are based on consumer prices.
\textsuperscript{208} See Azpiazu, D. & Schorr, M. (2010), p. 83.
opposition and trade unions at the time, and failed during the UCR government. Fiscal deficits and external debt increased further at the end of the 1980s; the inflation rate and foreign exchange market went out of control. Argentina experienced hyperinflation with tremendous annual rates of 4,923.6% in 1989 and 1,343.9% in 1990. As a consequence, the country stopped serving its debts in 1988 and only marginally started debt repayment again in 1989. The severe deterioration of economic and social conditions, moreover, resulted in a spate of lootings and the declaration of a state of emergency for 30 days. Due to the severity of the crisis, at the end of the 1980s, the Alfonsín government resigned six months before the official end of its administration. At the time, the country’s governability was questioned. Overall, the Alfonsín governments seem to have been more successful with respect to restoring democracy than with economic policies. The regressive income distribution persisted, and employment contracted significantly.

On May 14, 1989, presidential elections were held, and Carlos Menem won with 49% of the vote. He took office several months ahead of schedule, amidst economic crisis, in July 1989. His election campaign had been based on the two slogans, salaríazo (increase in salaries) and revolución productiva (productive revolution), promising neo-Keynesian policies, thus reaffirming the Peronist political tradition. Intentions to privatise were not announced during the election campaign; in the political debates preceding his election, Menem had opposed it. The newly elected government had a parliamentary majority and a trade union basis. Contrary to the promises made during his election campaign, Menem appointed several liberal economists to his cabinet and staff. The government was seeking political support for implementing a neoliberal economic programme by conservative liberal forces, approaching local and international economic groups, as well as external creditors, such as the IMF and the World Bank. In this context, Azpiazu (2005) refers to a “Triple Alliance” (triple alianza) between the most important local economic groups, a few transnational companies, and foreign and local banks. Economic reforms implemented by the Menem government during the early 1990s affected money and banking, the state budget, state-owned enterprises, trade, and regulation; thus, virtually every aspect of the economy.

214 See Azpiazu, D. & Schorr, M. (2010), p. 97f; information based on interviews held in Argentina in the period 5/12/08 to 28/5/09.
Under Menem’s first government, Argentina launched one of the most ambitious privatisation programmes in the world. The abruptly introduced policy changes implied a redefinition from within of the ruling political party, the Partido Justicialista (PJ). The profound ideological change in favour of privatisation had a certain impact of surprise and astonishment and was not reflected by a public debate. Menem admitted later in an interview: “If I said what I was planning to do, nobody would have voted for me.” Society was neither consulted in the drafting of the privatisation strategy nor included in its planned implementation. The fact that privatisation policies were launched rapidly further prevented strong political opposition. Moreover, there was an important media campaign in favour of privatisation. The government tried to prevent worker opposition by establishing an employee stock ownership plan, Programa de Propiedad Participada (PPP), introducing workers’ shareholdings of mostly 10% of the privatised public companies. This strategy appears to have had reasonable initial success, since, in contrast to policies introduced under the government of Alfonsín, no major union opposition took place in response to the PJ government’s first privatisations.

During its first term, the Menem government received widespread support from the business community, and was quite successful in achieving capital inflow as well as increasing domestic consumption, renegotiating external debt, and consolidating a new basis for the country’s economic and social-political development. On April 1, 1991, the convertibility plan established, by law, a fixed exchange rate of 10,000 Austral to the US dollar. On January 1, 1992, the peso was introduced as national currency, replacing the Austral, and the exchange rate was fixed at the rate of 1 ARS$ = 1 US$. The convertibility plan was a centrepiece of the PJ government’s economic programme and immediately generated a reaction of credibility. It was, thus, successful in terms of its immediate effects with respect to achieving price stability. The annual rate of inflation decreased from 1,344% in 1990 to 84% in 1991, 18% in 1992, and 7% in 1993, then went to less than 1% during the second half of the 1990s, even turning negative in 1999. Moreover, relatively high rates of

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221 See Iazzetta, O. (1996), pp. 67, 73. The lack of a public debate on privatisation was also outlined during several interviews.
222 Information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.
223 Various sources mention the introduction of workers’ shareholdings in the Argentine privatisation process as a means of avoiding opposition to privatisation. In this regard, the way in which privatisations were launched by the government of Margaret Thatcher in Britain served as an example.
224 Information based on an interview with D. Azpiazu on 17/12/08.
economic growth were achieved for most of the 1990s. Thus, the Argentine society at the time welcomed the government’s economic programme. Privatisations in this context were regarded as inevitable, due to the publicly perceived inefficiencies of the public sector. The perceived success of the economic policies introduced during Menem’s first term in office led to his re-election in 1995.

During the end of his second term in office, the country’s economic situation worsened considerably. In the 1990s, Argentina’s public debt rose significantly, increasing by 75% from 1993 to 1999, and moving from 29% to 43% of GDP in the same period. The convertibility plan and income generated by privatisation temporarily alleviated the problem of making interest payments; this, however, returned during the second term of the PJ government, when privatisation-generated income declined in tandem with increases in interest payments. Menem’s second government ended in December 1999 and was succeeded by the government of Fernando de la Rúa. The latter would only stay in office for two years, at which point another severe economic and social crisis hit the country. Hence, Menem’s first term started in the midst of a crisis and his second term paved the way to another crisis. In the meantime, however, Argentina experienced a period of relative stability and economic growth.

Table 8 below provides an overview of Argentine governments, including those preceding and following the two Menem governments.

Table 8: Overview of Argentine Governments from the 1980s to the Early 2000s

<table>
<thead>
<tr>
<th>Term of Office</th>
<th>President</th>
<th>Political Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/12/83−8/7/89</td>
<td>Raúl Ricardo Alfonsín</td>
<td>Unión Cívica Radical, UCR</td>
</tr>
<tr>
<td>8/7/89−10/12/99</td>
<td>Carlos Saúl Menem</td>
<td>Partido Justicialista, PJ</td>
</tr>
<tr>
<td>10/12/99−21/12/01</td>
<td>Fernando de la Rúa</td>
<td>Alianza por el Trabajo, la Justicia y la Educación, Alianza</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation.

The further analysis of different aspects of the Argentine privatisation process presented in the rest of this chapter concentrates on Menem’s two terms, particularly his first government.

226 See Rapoport, M. (2005), p. 791ff. Inflation rates are based on consumer prices. Only in 1995 and 1999 were negative rates of economic growth achieved. During the rest of the period, growth rates varied between 4% and 11%.


228 The constitution was changed to allow for presidential re-election beforehand and the term of presidency was reduced from six to four years.

229 See Rapoport, p. 797f.
Reasons for Privatisation in Argentina

Turning to the question of why privatisations were introduced in Argentina, Saravia (1996) distinguishes between five objectives of privatisation formally expressed by the Argentine government at that time:

1. Reducing the fiscal deficit
2. Decreasing external debt
3. Encouraging investment in order to improve public services and modernise national industries
4. Providing additional funds to the public sector for investment with a high social rate of return
5. Increasing companies’ productive efficiency by means of reducing costs, corporate pressures by the different factors of production, and political interference

The official justification for privatisation policies, thus, relied mainly on economic considerations. Devin (1993) affirms some of the official reasons given above. Among the structural arguments in favour of privatisation outlined, he finds that the efficiency criterion was fundamental in justifying privatisation policies in Argentina. According to the author, among the cyclical arguments, the establishment of political credibility was crucial to the newly elected government of Menem. Privatisation, in the context of the country’s payment problems, also served as an instrument for improving the relationship with the IMF and World Bank as well as for changing the Argentine government’s image. The intention of giving a political signal to the international community seems to have been of particular importance for the decision to privatise in Argentina. Azpiazu (2005) stresses a primary political objective of privatisation, contradicting the official economic discourse. Ideological reasons were often used for justifying privatisation, but in practice, the objective of generating proceeds for financing public expenditure as well as paying external debt seem to have been of comparatively more importance. The first privatisations, undertaken in the period 1989 to 1990, directly implied the reduction of debt, since an important part of the payment was

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232 This argument was also stressed during interviews held in Argentina in the period 5/12/08 to 28/5/09.
234 The political objective for privatisation in Argentina is not only stressed by various authors, it was also mentioned frequently by the interviewed experts in the field.
235 Information based on an interview with Jorge Lapeña on 28/5/09.
made in the form of promissory notes in secondary markets. Further privatisations launched in 1992 were initially designated for financing general expenditure but were also used for reducing public debt.

In sum, privatisation in Argentina was undertaken for a variety of reasons; both economic and political objectives probably played a crucial role in the case of Menem’s first government. With a background of profound economic crises and structural adjustment programmes, the influence of international creditors should not be underestimated.236

Application of Hay’s Theoretical Model to the Argentine Context of Paradigm Shift towards Privatisation

Before the role of unions and resistance to privatisation in Argentina in the 1990s is discussed in the next section, it is worth going back to Hay’s ideational institutionalist theoretical schema outlined in chapter two. Applying his theoretical model of “punctuated evolution” to the Argentine process of adopting privatisation policies, it is possible to identify two cycles of second-order policy change or strategic learning before a paradigm shift towards privatisation was secured:

1. A first, ambiguous237 move towards privatisation during Argentina’s last military government under the administration of the Minister of Economic Affairs Martínez de Hoz.

2. A further tentative move towards privatisation on the part of the democratic UCR government under the presidency of Alfonsín.

During Argentina’s last military dictatorship, an economic outwards orientation commenced. In 1977, financial reforms were implemented, liberalisation measures progressively introduced, and ties to international markets established. In this context, the role of the state in the economy was also reduced. Public spending decreased considerably under the administration of Martínez de Hoz, public investment was drastically reduced, and substantial staff cuts were made in the public sector, where many companies had already been running deficits during the 1970s. State-owned companies were plunged into debt because the military government used them as a means of generating foreign exchange, which was not

237 The military government carried out some privatisations, but at the same time also nationalised firms.
used for investing in the companies, but utilised at the foreign exchange market in order to avoid speculation. After a significant number of public companies were listed for privatisation in 1978, some minor privatisation of public companies was undertaken. However, a few private firms were also nationalised during the same period.\footnote{238}

The democratic government of Alfonsín struggled with the legacy of the military government’s economic mismanagement. Even though the government firstly introduced heterodox economic measures—by means of launching the Austral Plan under the administration of Sourrouille—in order to address the acute economic difficulties, it rapidly switched to standard measures as economic problems became more severe. At the time when the Austral Plan was launched, the UCR government had already announced a cutback in public spending, freezing of public sector vacancies, increase in tariffs and prices of fuels and transport, freeze in public investment, and privatisation of public companies. With the deterioration of the Austral Plan, the government intended to deepen structural reforms, proposing a set of measures to parliament, including the deregulation of public services and the 40% sale of Aerolíneas Argentinas. The UCR government’s privatisation attempt was, however, highly contested by the labour movement. A series of industrial action, including a general strike, was carried out against the UCR government by public service employees. Together with that of the Peronist party, the unions’ political opposition to privatisation at the time prevented the implementation of major privatisations. Nevertheless, the UCR government undertook some minor privatisations, mostly reprivatisations.\footnote{239}

In summary, similar to the transition from Keynesianism to neoliberalism in Britain analysed by Hay (2001), the transition to the adoption of the privatisation paradigm in Argentina can be seen as a complex and contested process of change involving various internal and external factors; it entailed political and economic considerations. The process was initiated in the second half of the 1970s, yet it was only when Menem took office that the paradigm shift was guaranteed. His decision to embark resolutely on the implementation of privatisation marked a turning point in Argentina’s economic policy. The extensive programme launched by his government stands in sharp contrast to the privatisation attempts of preceding governments and the statist past of the Peronist political tradition. Menem’s policy change was implemented rapidly and without major opposition.

\footnote{239}{See Rapoport, M. (2005), p. 742ff. The opposition to privatisation policies by the UCR government was also pointed out to the author in an interview with Juan Leyría on 8/1/09, who stressed the importance of the Peronist party to the union movement since the first two governments of Perón.}
Society at the time had a favourable attitude towards privatisation, since it promised to function as a means of ending the perceived crisis of the state and public services. Furthermore, when the programme was launched by the PJ government under the administration of Minister of Economic Affairs, Domingo Felipe Cavallo, there was no strong political opposition. Initial union struggles against privatisation, moreover, were repressed; the exercise of the right to strike by public employees was regularised by a proposed law at the beginning of 1990. As a consequence, there were only isolated cases of strikes by public sector unions. In addition, Peronist unionists were in control of the majority of union organisations, including the CGT, limiting union opposition to the PJ government during its first years in office. When the CGT started mobilising again, staging its first general strike at the end of 1992, major privatisations had already been completed.²⁴⁰

The following section provides an overview of union responses to privatisation in the 1990s with a focus on electricity sector unions and provides evidence on collaboration and resistance to privatisation in the Argentine electricity sector.

4.2.2. Union Responses and Resistance to Privatisation in Argentina during the 1990s

As mentioned before, when privatisation became an issue in Argentina, the society was largely in favour due to a general deterioration of public services in the previous years.\textsuperscript{241} Non-governmental organisations, moreover, did not yet play an important role in Argentine society. In addition, there was only one union confederation at the time, the CGT, which was aligned with the Peronist party and thus, at first, supported the PJ government.\textsuperscript{242} Privatisation was perceived as a decision imposed by the government that could not be avoided. The CGT, hence, did not oppose privatisation, but accompanied the process, trying to improve the terms under which privatisation was launched for employees from within. The employee stock ownership plan, PPP, introduced in the context of privatisation, moreover, initially reduced worker opposition by implementing workers’ shareholdings of mostly 10% of the privatised public companies. Workers’ representatives, however, generally did not participate in the management of the companies or the distribution of benefits. The programmes therefore largely diminished prematurely.\textsuperscript{243}

Some CGT members were not satisfied with the acceptance of the privatisation programme initiated by the Menem government and showed a stronger determination to confront the PJ government. In December 1991, several unions grouped around the Asociación de Trabajadores del Estado (ATE), the Confederación de Trabajadores de la Educación de Argentina (CTERA), and naval workers, therefore separated from the CGT. A further union confederation, confronting the governments’ policies, the Central de Trabajadores de la Argentina (CTA), was founded. The policies pursued by the government of Menem, thus, led to a division of the country’s central union confederation.\textsuperscript{244}

The favourable attitude of the CGT towards the government changed with the new Secretary General, Oscar Lescano, in 1992. Lescano at first expressed willingness to negotiate, but his demands were not accepted by the government. On November 9, 1992, the CGT held a general strike, increasing strike activity during the first months of 1993. At the end of the year, several social protests erupted in the interior of the country. In August 1994, when CGT protests were exhausted, the CTA organised a mass demonstration as well as a general strike against PJ government policies, but social protests decreased once again.

\textsuperscript{242} See Rapoport, M. (2005), p. 763f; information based on interviews held in Argentina in the period 5/12/08 to 28/5/09.
\textsuperscript{244} See Rapoport, M. (2005), p. 763f.
thereafter. From late 1994 onwards, protests were renewed in the context of fresh economic adjustments and spillover effects from the Mexican Tequila crisis.245

The Phenomenon of Piqueteros

An abrupt increase in unemployment in the mid-1990s, furthermore, gave rise to the phenomenon of *piqueteros*, unemployed demonstrators claiming jobs. The *piqueteros* drew attention to their precarious situation by way of protesting in the form of a so-called *piquetes*, route cutting. The phenomenon started in the province of Neuquén among unemployed construction workers and employees laid off following the privatisation of *Yacimientos Petrolíferos Fiscales* (YPF), Argentina’s main oil and gas company, and spread to different parts of the country. In April 1997, a roadblock in Neuquén was repressed by the gendarmerie, leading to the death of Teresa Rodríguez, a 20-year old protestor. In the province of Buenos Aires, unemployed workers started *piquetes* in autumn 1995, requiring employment schemes. On September 6, 1996, the movement of the unemployed launched a demonstration against hunger, unemployment, and repression at the famous Buenos Aires square, Plaza de Mayo. In the Greater Buenos Aires area, an organisation of unemployed workers was founded in the same year, the *Movimiento de Trabajadores Desocupados* (MTD). 246 It is worth noting that *piquetes* started in the aftermath of the extensive privatisation programme launched during the first term of the Menem government, sometimes as a direct response to dismissals in the context of privatisation, such as in the case of YPF.

Responses of Electricity Sector Unions to Privatisation

Overall, unions seem to have reacted too late to confront and prevent privatisation in the early 1990s; resistance in Argentina emerged as a response to privatisation, and thus ex post instead of ex ante. Nevertheless, there were some exceptions. In the electricity sector, privatisation in the province of Buenos Aires was heavily opposed by the local union, *Luz y Fuerza Mar del Plata*, whose Secretary-General, José Rigane, was a co-founder of Argentina’s second union confederation, CTA. The mobilisation of electricity workers against privatisation resulted in the union’s expulsion from the electricity sector union federation, and could not prevent the division and privatisation of the local electricity company, *Empresa*

The Union Federation of the Electricity Sector, Federación Argentina de Luz y Fuerza (FATLyF), was in favour of privatisation at the time, whereas it had been opposed before the process started and after completion at the federal level. The electricity sector union of the city of Buenos Aires, Luz y Fuerza de Capital Federal, also chose not to oppose privatisation, but cooperated in the privatisation of Segba. Drolas (2009) points to the union’s historic tradition of collaborating with different governments, including the military dictatorships, maintained during the Menem governments.

By contrast, an electricity workers’ union in the city of Córdoba, Luz y Fuerza de Córdoba, successfully hindered the privatisation of the local electricity company, Empresa Provincial de Energía de Córdoba (EPEC). This union was founded on February 5, 1944 and from the beginning, showed a confrontational attitude, which inter alia resulted in its taking part in a historic civil uprising against the military dictatorship of Juan Carlos Onganía in the city of Córdoba on May 29, 1969, the so-called Cordobazo. The union was strongly suppressed during Argentina’s last military dictatorship, suffering from various desaparecidos-detenidos. During the 1990s and early 2000s, Luz y Fuerza de Córdoba frustrated as many as three attempts to privatise EPEC. The struggle against privatisation took the union about ten years of mobilising, demonstrating, and confronting public authorities. According to union officials, EPEC employees show a very high rate of affiliation to the union, as well as a high degree of identification with the union and the company. On various occasions, union members have been arrested due to their fight against privatisation; one struggle led to the arrest of 219 people. The Secretary General of Luz y Fuerza Córdoba, Juan Leyría, was imprisoned several times. However, the union was ultimately successful, and EPEC remained an integrated state-owned company, whereas Segba was transformed into seven separate private entities.

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247 Information based on an interview with José Rigane, carried out on 15/12/08 and 28/4/09. As of today, the union continues struggling for the re-nationalisation of the three successor companies of ESEBA. Even though privatisation could not be prevented, improvements in working conditions were achieved and union leaders were not dismissed. See Cifarelli, V. (2000), p. 11; Murillo, M. V. (2008), p. 213ff.
248 See Cifarelli, V. (2000), p. 11; information based on interviews held in Argentina in the period 5/12/08 to 28/5/09.
252 Information based on an interview with Juan Leyría on 8/1/09.
253 The first privatisation attempt was made under UCR governor Córdoba Eduardo Angelóz in 1992; a further privatisation initiative was launched under UCR governor Ramón Mestre in 1996; and, lastly, the PJ government of José Manuel de la Sota tried to privatise EPEC in 2001.
254 Drolas, M. A. (2009), p. 7, points to an affiliation rate of almost 100%.
255 Information based on an interview with Juan Leyría on 8/1/09.
The example of *Luz y Fuerza Córdoba* proves that unions were not defenceless against the introduction of privatisation policies, supporting the findings of Dombois and Pries (1999) for the adoption of neoliberal policies by various Latin American countries and industries (see (Sections 2.4. and 3.1.).

Adapting the authors’ categories of union responses to challenges—ignore or accept, blockade, negotiate—to the Argentine context of electricity sector privatisation, the unions *Luz y Fuerza Mar del Plata* and *Luz y Fuerza Córdoba* can surely be assigned to the blockade category, while *Luz y Fuerza de Capital Federal* and FATLyF would most likely fall in the ignore-or-accept category.

Concerning Argentina’s union confederations, the CTA was created to oppose privatisation and can therefore also clearly be included in the blockade category, whereas the CGT in the early 1990s would probably best be assigned to the ignore-or-accept category, despite changing its attitude in the course of the 1990s, at first approximating the negotiate and finally the blockade category.

Summing up, in its early and most important phase, strong union opposition to the Argentine privatisation process remained an exception. Overall, unions assumed a more passive than proactive role, which might be explained partly by the repressive dictatorship, which had lasted until 1983. Democracy was only just being re-established at the time, and privatisation was given higher priority on the political agenda. Most privatisations during the early 1990s were, hence, neither strongly opposed nor prevented.

The subsequent section provides insights with respect to the extent to which infrastructure privatisation was undertaken in 1990s Argentina.

### 4.2.3. The Privatisation of Infrastructure Services in Argentina

“The traumatic Argentine privatisations” (Azpiazu, 2005)

“Privatisation fever” (Peñalva, 2000)

“A hollowed-out state” (Muchnik, 1993)

As already mentioned, the 1930s to 1970s in Argentina were characterised by strong state intervention in the economy. During Perón’s government, many infrastructure companies were nationalised, and the import-substituting strategy, implemented following the

---

256 However, it is also important to bear in mind that preventing the privatisation of Segba would have probably been comparatively more difficult to achieve, due to its size and relevance, than the privatisation of a provincial company.

257 Drolas, M. A. (2009), p. 9, stresses the union’s support of the privatisation of Segba.

258 It should be noted that during Menem’s second term the privatisation of important hydroelectric and nuclear power plants could not be realised by the government because they were heavily opposed.
Great Depression, was deepened and extended. State intervention remained strong in the subsequent decades, and several important public companies were founded. During the 1970s, state-owned company performance, however, started to deteriorate. Public companies were largely running deficits from the end of the 1970s onwards, because the military government used them as a macroeconomic policy tool to generate foreign exchange, needed in the foreign exchange market. Some minor privatisations were undertaken in the end of the 1970s, after an inter-ministerial committee had identified about 120 public companies fit for privatisation in 1978, but a few private firms were also nationalised during the same period. The democratic government of Alfonsín also undertook some minor privatisations during the 1980s, but these were mostly reprivatisations and were not given political priority.

The privatisation programme launched under Menem, on the contrary, was comprehensive and ambitious, and involved all industrial sectors in which the state participated in the production and provision of goods and services. From the beginning, public infrastructure companies were included. In contrast to standard recommendations, the first wave of privatisations in Argentina was launched at an especially rapid pace. Initial sales of public companies were carried out by the Ministerio de Economía y Obras y Servicios Públicos (Ministry of Public Works and Services), under the administration of Roberto Dromi, the architect of the general privatisation strategy and its legal framework. Instead of starting with minor public companies, the Argentine programme was initiated with the privatisation of two major national infrastructure companies, Aerolíneas Argentinas (the public airline) and ENTel (the public phone company). As mentioned above, the privatisation of these two major companies had already been proposed by the government of Alfonsín, but was frustrated at the time by the Peronist party in its opposition role and by massive protests by labour unions. The Menem governments faced no major obstacles in launching privatisations, particularly during its first term. During the 1990s, almost all national state-owned enterprises were transferred to private hands; a total of 154 contracts were signed during the period. Privatisations started at national level in the greater Buenos Aires area and were followed by more at provincial level. Most national level privatisations were carried out in the period 1989 to 1993. Azpiazu (2005) lists the following, transferred from public to private hands during the 1990s:

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262 See Galiani, S., Gertler, P. & Schergrodsky, E. (2005), p. 89f. 84
- the national oil and gas company, YPF;
- numerous hydrocarbon exploration areas;
- electrical energy generation, transmission and distribution services;
- transport and distribution of natural gas;
- an important part of the road infrastructure;
- dredging of the waterway in the port of Santa Fe;
- postal services;
- the national airport system;
- railways, including passenger and cargo rail services;
- telephony services;
- the control of radio broadcasting;
- the main port terminals;
- the water and sewerage system;
- public steel and petrochemical companies.\(^{263}\)

Table 9 lists industries and names of major companies privatised between 1990 and 1992, highlighting the extent to which privatisation was undertaken in Argentina.

**Table 9: Privatised Argentine Companies, 1990-1992**

<table>
<thead>
<tr>
<th>National Telephone Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National Airline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerolíneas Argentinas</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TV and Radio Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV Canal 11</td>
</tr>
<tr>
<td>TV Canal 13</td>
</tr>
<tr>
<td>LRI 450 Canal 9 Paraná, Entre Ríos</td>
</tr>
<tr>
<td>LR3 Radio Belgrano, Capital</td>
</tr>
<tr>
<td>LR5 Radio Excelsior, Capital</td>
</tr>
<tr>
<td>LV3 Radio Córdoba, Córdoba</td>
</tr>
<tr>
<td>LU33 Emisora Pampeana, La Pampa</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Petrochemical Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polisur</td>
</tr>
<tr>
<td>Petropol</td>
</tr>
<tr>
<td>Induclor</td>
</tr>
<tr>
<td>Monómeros Vinílicos</td>
</tr>
<tr>
<td>Petroquímica Río III</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oil and Gas Exploration</th>
</tr>
</thead>
</table>

---

In the following years, further privatisations were undertaken. In the course of the 1990s, Argentina’s most important infrastructure companies were handed over from public to private hands, including essential services. As a result, among Latin American countries, Argentina went furthest in applying privatisation policies during the 1990s.\textsuperscript{264}

\begin{table}
\begin{center}
\begin{tabular}{|l|}
\hline
YPF S.A.—Main Areas \\
\hline
Tordillo, Chubut \\
\hline
El Huemul-Koluel Kalike, Santa Cruz \\
\hline
Puesto Hernández, Neuquén \\
\hline
Vizcacheras, Mendoza \\
\hline
Santa Cruz I \\
\hline
Santa Cruz II \\
\hline
Tierra del Fuego \\
\hline
YPF S.A.—Minor Areas \\
\hline
Electricity \\
\hline
Segba \\
\hline
Central Puerto S.A. \\
\hline
Central Costanera S.A. \\
\hline
Edenor S.A. \\
\hline
Edesur S.A. \\
\hline
Central Dock Sud \\
\hline
Central Pedro de Mendoza \\
\hline
Water and Electrical Energy \\
\hline
Central Alto Valle \\
\hline
Central Güemes \\
\hline
Railways \\
\hline
Ramal Rosario-Bahía Blanca \\
\hline
General Mitre \\
\hline
Delta-Borges, Cargo Service of the Railway Ferrocarril Roca \\
\hline
Roads \\
\hline
Concession of 10,000 km of national roads; the tranches correspond to 34 roads of the country \\
\hline
Grain Elevators at Ports \\
\hline
Quequén \\
\hline
Buenos Aires \\
\hline
Steel Industry \\
\hline
Somisa \\
\hline
Water and Sewerage \\
\hline
Obras Sanitarias de la Nación \\
\hline
\end{tabular}
\end{center}
\caption{Main and minor areas of YPF S.A.}
\end{table}

In the next section, some characteristics of the Argentine electricity sector are introduced in order to provide an overview of privatisation in this during the 1990s in the following.

### 4.2.4. Characteristics of the Argentine Electricity Sector

Electricity sectors in many European countries experienced significant changes in technology and the balance of fuel sources, due to a shift away from coal-fired electricity to nuclear power production from the mid-1970s onwards. These changes all predate any moves towards privatisation or liberalisation. In the UK, however, another big technological change followed privatisation due to increasing new investment in gas-fuelled power stations. Higher labour productivity levels in the UK in the 1990s could therefore be attributed to the shift from coal to gas in the context of marketisation.\(^{265}\) As shown in Table 10 below, the Argentine electricity industry saw no major changes in fuel source balance in the first half of the 1990s, the period in which the major part of electricity sector privatisation was carried out.

Table 10: Composition of Electricity Generation, Argentina, 1990-1995

<table>
<thead>
<tr>
<th>Year</th>
<th>Nuclear</th>
<th>Hydro</th>
<th>Thermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>15%</td>
<td>38%</td>
<td>47%</td>
</tr>
<tr>
<td>1991</td>
<td>15%</td>
<td>33%</td>
<td>52%</td>
</tr>
<tr>
<td>1992</td>
<td>14%</td>
<td>37%</td>
<td>49%</td>
</tr>
<tr>
<td>1993</td>
<td>13%</td>
<td>42%</td>
<td>45%</td>
</tr>
<tr>
<td>1994</td>
<td>14%</td>
<td>44%</td>
<td>42%</td>
</tr>
<tr>
<td>1995</td>
<td>11%</td>
<td>43%</td>
<td>46%</td>
</tr>
</tbody>
</table>


Considering the evolution of electricity generation by fuel in Argentina over a longer period, from 1971 to 2009, as shown in Figure 10, a shift from oil-fired plants to natural gas and hydroelectric power production during the 1980s becomes apparent. This can be interpreted as a response to the first oil crisis of 1973, as a consequence of which Argentina diversified energy sources by constructing hydroelectric and nuclear power plants.\(^{266}\) In 1994,  

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Argentina had 17,717 megawatts of installed capacity.\textsuperscript{267} From the 1990s onwards, electricity production in Argentina relied mainly on natural gas and hydroelectric energy.

The graph also shows that modern sources, such as geothermal, solar, and wind energy or biofuels and waste, have played a very minor role in electricity generation in Argentina to date. Electricity provision still heavily relies on fossil sources; private investment in electricity generation in Argentina during the 1990s, thus, did not result in any major changes with respect to the balance of fuel sources. No new hydroelectric plants were built after electricity sector privatisation.\textsuperscript{268}

**Figure 10:** Evolution of Electricity Generation by Fuel, Argentina, 1971-2009

Similar to other infrastructure sectors in Argentina at the end of the 1980s, electricity faced important challenges. During the 1980s public investment decreased considerably, public companies became highly indebted, and service quality dipped. At the same time, the sector was confronted with increasing demand for electricity. As a consequence, in the years 1988 and 1989, the country experienced a major energy crisis due to insufficient generation capacities, resulting in power shortages and blackouts on a daily basis. In the context of this crisis, consumers were demanding improvements in electricity provision. Even though the major part of the population had already obtained access to electricity before privatisation, unmet demand in the interior of the country, as well as among the poor, also required service

\textsuperscript{268} Information based on an interview with Jorge Lapeña on 28/5/09.
expansion. Privatisation seemed at first a plausible alternative, since private entities were expected to improve electricity provision by raising investment activities.

However, private investment expectations in the Argentine electricity sector were not fulfilled. Major power cuts also occurred after privatisation. Buenos Aires was particularly affected in the late 1990s; in February 1999, large parts of the city experienced the longest blackout in its history, an 11-day power cut affecting 10 neighbourhoods and about 600,000 people in the height of summer. This was caused by a fire in one of the electrical substations held by Edesur, an electricity distribution company succeeding Segba, which faced fines or penalties amounting to 70 million pesos by the regulatory agency, Ente Nacional Regulador de la Electricidad (ENRE), as a result. The population reacted with angry demonstrations. Then president of ENRE, Juan Legisa, stated that Edesur was no longer reliable and expressed his opinion about the company’s capacity of dealing with the issue at the time as follows: “They did not have a contingency plan which offered alternatives facing a failure like this.”

Electricity transmission enjoyed state investment during the 1990s, leading to increased efficiency in the transmission network. There was also high initial investment in electricity generation, resulting in a boom of new thermoelectric projects and an oversupply of electricity. The associated price reduction, however, led to underinvestment thereafter.

Hence, the planning of sector expansion was lost in the context of privatisation. There was no additional investment in hydroelectric power plants since they require large, long-term investment, which takes a long time to recover. Private investment in generation activities concentrated on combined-cycle gas turbines. Electricity distribution, moreover, faced a severe lack of investment throughout the 1990s. Distribution capacity, hence, did not increase sufficiently with demand. In addition, the Argentine distribution network is rather old—in the city of Buenos Aires, for instance, distribution cables up to 60 years old are still in operation. As is the case for public services in general, the process of deterioration of electricity services had already started before the 1990s. However, Daniel Bouille stressed during a 2008 interview that the Argentine energy system was not facing a structural crisis, but cyclical

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269 Information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.
271 The price decrease associated with electricity generation was not passed on to residential consumers. Consumer tariffs did not change significantly during the 1990s.
272 Information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.
problems at the time of privatisation. In his opinion, privatisation was not caused by, but led to, a structural crisis, which the sector was currently facing.  

The subsequent section gives further insights into the number of privatisations carried out in the Argentine electricity sector over the 1990s and the way in which they were implemented.

4.2.5. The Argentine Electricity Sector Privatisation Process

In the end of the 19th century, the first electricity generating plant was built in Argentina, in the city of La Plata. In the beginning of the 20th century, electricity was provided mainly by British and German investors. In the aftermath of the Second World War, Argentine infrastructure companies, including electricity companies were largely nationalised. Some energy companies of minor importance, however, stayed in private hands. Increasing demand for electricity led to a considerable sector expansion and the formation of major public electricity companies in the following decades. Before privatisation was launched, access to electricity services was comparably high; 93.5% of the households were connected by the early 1990s. Table 11 depicts the structure of the Argentine electricity sector before privatisation. As shown by the table, 84% of electricity generation capacity, 100% of high voltage transmission, and 55% of distribution activities were in state hands in the pre-privatisation period. In electricity distribution, provincial companies accounted for 34% of the activities and cooperatives for 11%. Government-owned companies, thus, dominated before the introduction of the privatisation programme by the first Menem government.

Table 11: Structure of the Argentine Electricity Sector before Privatisation

<table>
<thead>
<tr>
<th>Activities</th>
<th>Companies</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation and transmission</td>
<td>4 national and 2 bi-national companies</td>
<td>84% of generation and 100% of high voltage transmission</td>
</tr>
<tr>
<td>Distribution</td>
<td>2 national companies, 21 provincial companies, 580 cooperatives</td>
<td>55%, 34%, 11%</td>
</tr>
</tbody>
</table>

Source: Ximénez Sáez (1997)

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274 Information based on an interview with Daniel Bouille on 30/12/08.
The three most important national-level companies at the time were Segba, operating in generation and distribution, Agua y Energía Eléctrica (AyE), active in generation, transmission, and distribution, and Hidronor, a power generation and transmission company.\(^{277}\)

Rosa, Tolmasquim, and Pires (1998) list some sector-specific reasons for the privatisation of electricity companies in Argentina:

- the financial deterioration of public companies,
- the low quality and lack of supply,
- corruption and mismanagement, and
- high rates of technical losses.\(^{278}\)

Moreover, there was an important delay in tariffs; since these were used as an anti-inflationary instrument, they never covered costs.\(^{279}\) Even though the electricity sector experienced a major crisis at the end of the 1980s, the main reasons for its privatisation were not sector specific, but mostly the same as those outlined above for privatisation in general. Privatisation in the electricity sector was undertaken in the context of the general privatisation wave of the 1990s, and most companies were in a comparatively deteriorated condition before privatisation.\(^{280}\) Privatisation was launched in electricity generation, transmission, and distribution activities. Before this was undertaken, the sector was restructured and vertically integrated companies unbundled. In the distribution segment, the process was initiated at national level with the privatisation of Segba (see Table 12 below), broken up into four generation and three distribution companies, these all being privatised in 1992.

### Table 12: Privatised Argentine Electricity Distribution Companies of National Jurisdiction, 1990s

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Acronym</th>
<th>Date of Transfer</th>
<th>Former Provider</th>
<th>Regulatory Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empresa Distribuidora La Plata</td>
<td>Edelap</td>
<td>12/92</td>
<td>Servicios Eléctricos del Gran Buenos Aires (Segba)</td>
<td>Law no. 24.065 of 1992</td>
</tr>
</tbody>
</table>

**Source:** Azpiazu, Bonofiglio & Nahón (2008)

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\(^{279}\) Information based on an interview with Jorge Lapeña on 28/5/09.

\(^{280}\) See Bonfanti, F. A. (2004); information based on interviews held in Argentina in the period 5/12/08 to 28/5/09.
The distribution segment of Segba at the time was divided into three different companies according to geographic location, Edenor, Edesur, and Edelap.

The privatisation of electricity distribution at national level was followed by numerous privatisations at provincial level in the years 1993 to 1998 (see Table 13), peaking between 1995 and 1996. Privatisation of electricity distribution companies was completed in more than half of the country; 13 out of 23 provinces privatised their companies by means of concession contracts. Privatisation was carried out mostly within one year after the establishment of a new regulatory frame by provincial law; local jurisdiction regulatory agencies were established simultaneously or ex-post.\(^{281}\)

Despite the numerous distribution company privatisations at provincial level, it should be noted that, in various jurisdictions, distribution stayed in public hands or continued to be provided by cooperatives. Hence, the group of providers is very heterogeneous today. In the early 2000s, 66% of electricity distribution was provided by private entities and 18.6% by public companies.\(^{282}\)

Extra-high voltage transmission lines belonging to Hidronor, Segba, and AyE, were also privatised. Six transmission companies were founded in the context of electricity sector restructuring in order to be privatised thereafter: TRANSENER, responsible for transmission lines of 500kV (kilovolt), TRANSNOR for transmission lines in the Northeast of the country, TRANSPA for transmission lines in Patagonia, TRANSNEA for transmission lines less than 220kV, and DISTROGUYO and TRANSCOMAHUE in charge of the transmission systems of certain provinces.\(^{283}\)

---


<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Company Name</th>
<th>Acronym</th>
<th>Date of Transfer</th>
<th>Former Provider</th>
<th>Regulatory Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catamarca</td>
<td>Empresa Distribuidora de Energía Catamarca</td>
<td>EDECAT</td>
<td>1/96</td>
<td>Dirección de Energía de Catamarca (DECA)</td>
<td>Law no. 4.834 of 1995</td>
</tr>
<tr>
<td>Formosa</td>
<td>Empresa Distribuidora de Electricidad de Formosa</td>
<td>EDEFOR</td>
<td>2/95</td>
<td>Agua y Energía Eléctrica / Dirección de Energía de la Provincia de Formosa (DPEF)</td>
<td>Law no. 1.121 of 1994</td>
</tr>
<tr>
<td>Jujuy</td>
<td>Empresa Jujeña de Energía</td>
<td>EJESA</td>
<td>12/96</td>
<td>Dirección de Energía de Jujuy (DEJ)</td>
<td>Law no. 4.888 of 1996</td>
</tr>
<tr>
<td>La Rioja</td>
<td>Empresa Distribuidora de Electricidad de la Rioja</td>
<td>EDELAR</td>
<td>6/95</td>
<td>Empresa Provincial de la Rioja (EPELAR)</td>
<td>Law no. 6.038 of 1994</td>
</tr>
<tr>
<td>Mendoza</td>
<td>Empresa Distribuidora de Electricidad de Mendoza</td>
<td>EDEMSA</td>
<td>8/98</td>
<td>Energía Mendoza Sociedad del Estado</td>
<td>Law no. 6.497 of 1997</td>
</tr>
<tr>
<td>Río Negro</td>
<td>Empresa de Energía de Río Negro</td>
<td>EdERSA</td>
<td>8/96</td>
<td>Energía de Río Negro Sociedad del Estado (ERSE)</td>
<td>Law no. 2.882 of 1995</td>
</tr>
<tr>
<td>Salta</td>
<td>Empresa Distribuidora de Electricidad de Salta</td>
<td>EDESA</td>
<td>8/96</td>
<td>Dirección de Energía de Salta (DES)</td>
<td>Law no. 6.819 of 1996</td>
</tr>
<tr>
<td>San Juan</td>
<td>Energía San Juan</td>
<td>ESJ</td>
<td>1/96</td>
<td>Servicios Eléctricos Sanjuaninos Sociedad del Estado</td>
<td>Law no. 6.668 of 1995</td>
</tr>
<tr>
<td>Santiago del Estero</td>
<td>Empresa Distribuidora de Electricidad de Santiago del Estero</td>
<td>EDESE</td>
<td>1/95</td>
<td>Agua y Energía Eléctrica</td>
<td>Law no. 6.054 of 1994</td>
</tr>
<tr>
<td>Tucumán</td>
<td>Empresa de Distribución de Electricidad de Tucumán</td>
<td>EDET</td>
<td>8/95</td>
<td>Empresa de Energía de Tucumán</td>
<td>Law no. 6.608 of 1994</td>
</tr>
</tbody>
</table>

Source: Azpiazu, Bonofiglio & Nahón (2008)
Moreover, in the electricity generation segment, many companies were handed over from public to private hands. Table 14 gives an overview of Argentine power companies privatised during the 1990s.

Table 14: Privatised Argentine Power Companies, 1990s

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Geographical Location</th>
<th>Date of Privatisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alto Valle</td>
<td>Neuquén</td>
<td>25/8/92</td>
</tr>
<tr>
<td>Güemes</td>
<td>Salta</td>
<td>30/9/92</td>
</tr>
<tr>
<td>Sorrento</td>
<td>Santa Fe</td>
<td>2/2/93</td>
</tr>
<tr>
<td>San Nicolás</td>
<td>Buenos Aires</td>
<td>8/5/93</td>
</tr>
<tr>
<td>Central Térmica Mendoza (Luján de Cuyo—Cruz de Piedra)</td>
<td>Mendoza</td>
<td>1/11/94</td>
</tr>
<tr>
<td>Centrales Térmicas Patagónicas</td>
<td>Chubut, Santa Cruz</td>
<td>4/12/93</td>
</tr>
<tr>
<td>Centrales Térmicas Noroeste</td>
<td>Tucumán, Salta, Jujuy, Sgo. del Estero</td>
<td>21/5/93</td>
</tr>
<tr>
<td>Centrales Térmicas Noreste</td>
<td>Formosa, Corrientes</td>
<td>20/5/93</td>
</tr>
<tr>
<td>Centrales Térmicas Litoral (Sta. Fe Oeste, Calchines, Paraná)</td>
<td>Santa Fe, Entre Ríos</td>
<td>17/4/94</td>
</tr>
<tr>
<td>H.T. San Juan (Ullum Sarmiento)</td>
<td>San Juan</td>
<td>18/3/96</td>
</tr>
<tr>
<td>Florentino Ameghino</td>
<td>Chubut</td>
<td>1/11/94</td>
</tr>
<tr>
<td>Diamante (Agua del Toro, El Tigre Los Reyunos)</td>
<td>Mendoza</td>
<td>19/10/94</td>
</tr>
<tr>
<td>Río Juramento (Cabra Corral, El Tunal)</td>
<td>Salta</td>
<td>1/12/95</td>
</tr>
<tr>
<td>Tucumán</td>
<td>Tucumán</td>
<td>2/7/96</td>
</tr>
<tr>
<td>Río Hondo (Río Hondo, Los Quiroga)</td>
<td>Santiago del Estero</td>
<td>29/12/94</td>
</tr>
<tr>
<td>Río Grande</td>
<td>Córdoba</td>
<td>31/3/96</td>
</tr>
<tr>
<td>Futaleufú</td>
<td>Chubut</td>
<td>15/6/95</td>
</tr>
<tr>
<td>Transnoa S.A.</td>
<td>North-western trunk line distribution</td>
<td>26/1/94</td>
</tr>
<tr>
<td>Transpa S.A.</td>
<td>Patagonia trunk line distribution</td>
<td>15/6/94</td>
</tr>
<tr>
<td>Transnea S.A.</td>
<td>North-eastern trunk line distribution</td>
<td>10/11/94</td>
</tr>
<tr>
<td>Distrocuyo S.A.</td>
<td>Western trunk line distribution</td>
<td>16/1/95</td>
</tr>
<tr>
<td>General Aislada</td>
<td>Santiago del Estero</td>
<td>31/12/94</td>
</tr>
<tr>
<td>General Aislada</td>
<td>Formosa, Corrientes</td>
<td>31/1/95</td>
</tr>
<tr>
<td>Los Nihuiles</td>
<td>Mendoza</td>
<td>30/4/94</td>
</tr>
<tr>
<td>Transener S.A.</td>
<td>–</td>
<td>16/7/93</td>
</tr>
<tr>
<td>Laboratorio Central</td>
<td>–</td>
<td>28/3/94</td>
</tr>
<tr>
<td>Evarsu</td>
<td>Neuquén/Río Negro</td>
<td>31/8/93</td>
</tr>
<tr>
<td>Emasa</td>
<td>Neuquén/Río Negro</td>
<td>31/8/93</td>
</tr>
<tr>
<td>Proinsa</td>
<td>Buenos Aires</td>
<td>31/8/93</td>
</tr>
<tr>
<td>Tranelsa</td>
<td>Corrientes/Chaco</td>
<td>7/5/93</td>
</tr>
<tr>
<td>Idese</td>
<td>Mendoza</td>
<td>1994</td>
</tr>
<tr>
<td>Talleres Mendoza</td>
<td>Mendoza</td>
<td>3/10/94</td>
</tr>
</tbody>
</table>

Source: APJAE (2005)
In sum, major national electricity companies were all privatised in the early 1990s—except bi-national power plants and nuclear power stations—and followed by a large number of privatisations at provincial level. Privatisation was undertaken in electricity generation, transmission, and distribution after sector restructuring and division of major companies.

In the following section, further information on company restructuring and sector reforms is given, focussing on electricity distribution and Segba.

4.2.6. Restructuring of Privatised Infrastructure Companies and Electricity Sector Reform

“Vertical integration may hinder privatisation” (Bortolotti, Fantini, and Siniscalco, 1998)

Public Argentine electricity companies were traditionally vertically integrated monopolies, oriented on the European—mainly French—system. In the context of privatisation, these companies were divided into different entities according to geographical area and operational activity.

Table 15: Segmentation of Argentine Utility Companies, Early 1990s

<table>
<thead>
<tr>
<th>Public Company</th>
<th>Private Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTel</td>
<td>Telecom Argentina S.A.</td>
</tr>
<tr>
<td></td>
<td>Telefónica de Argentina S.A.</td>
</tr>
<tr>
<td>Encotel</td>
<td>Correo Argentino S.A.</td>
</tr>
<tr>
<td>Aerolíneas Argentinas</td>
<td>Aerolíneas Argentinas S.A.</td>
</tr>
<tr>
<td>Obras Sanitarias de la Nación</td>
<td>Aguas Argentinas S.A.</td>
</tr>
<tr>
<td>Segba</td>
<td>Edesur S.A.</td>
</tr>
<tr>
<td></td>
<td>Edenor S.A.</td>
</tr>
<tr>
<td></td>
<td>Edelap S.A.</td>
</tr>
<tr>
<td></td>
<td>Central Costanera S.A.</td>
</tr>
<tr>
<td></td>
<td>Central Puerto Nuevo S.A.</td>
</tr>
<tr>
<td></td>
<td>Central Dock Sud S.A.</td>
</tr>
<tr>
<td></td>
<td>Central Pedro de Mendoza S.A.</td>
</tr>
<tr>
<td>Ferrocarriles Argentinos</td>
<td>Trenes de Bs. As. S.A.</td>
</tr>
<tr>
<td></td>
<td>Ferrocarril Metropolitano S.A.</td>
</tr>
<tr>
<td></td>
<td>Ferroviás S.A.</td>
</tr>
<tr>
<td></td>
<td>Metrovías S.A.</td>
</tr>
<tr>
<td></td>
<td>Ferrocarril General Belgrano S.A.</td>
</tr>
</tbody>
</table>

285 Information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.
Table 15 gives an overview of the unbundling of the major public infrastructure companies privatised in Argentina during the 1990s. The seven companies considered in the table, ENTel (public telephone), Encotel (postal services), Aerolíneas Argentinas (national airline), Obras Sanitarias de la Nación (water and sewerage system), Segba (one of three major national electricity companies), Ferrocarriles Argentinos (national railway company), and Gas del Estado (national gas transportation and distribution company), were transformed into 24 private entities.

In the electricity sector, the previous privatisation experience of Chile and Britain served as a role model for sector restructuring; the vertically integrated public monopolies in Argentina, accordingly, were unbundled into the different electricity supply stages, regulatory agencies established, a price-cap introduced, and company management handed over to private entities. Argentina’s major federal level electricity companies were divided into several independent units. AyE was separated into twelve business units, of which nine were thermal and three hydroelectric, while Hidronor was broken up into four hydroelectric companies, and the country’s transmission lines were divided into six independent companies. As illustrated by Figure 11 below, Segba was split into three distribution and four generation units in order to be privatised thereafter; before restructuring, it had been a state-owned limited company, whereas its successors are joint stock companies.

---

Source: Duarte (2002)

---

286 Several interviewees pointed to Chile and Britain as role models for Argentine electricity sector privatisation.

In summary, after electricity sector restructuring, the three major Argentine electricity companies were transformed into three distribution, six transmission, and 21 generation companies.  

**Figure 11: Restructuring of Segba before Privatisation**

![Diagram of Segba restructuring](image)

*Source:* Author’s own compilation

Figure 12 below depicts the structure of the Argentine electricity sector at national level after privatisation and restructuring measures were applied. The new regulatory framework was established by Law no. 24,065 in 1991, which implied both privatisation and a restructuring of the sector. The national regulatory agency, ENRE, was founded and started work in 1993, and an electricity wholesale market was established. This is now administered by an independent body, the *Compañía Administradora del Mercado Mayorista Eléctrico* (CAMMESA). Different private and public electricity generation, transmission, and distribution companies, as well as industrial users, coexist in the new model. The state enters through the Energy Secretariat, which defines sector policies.

No planning agency or commission for coordinating investments exists in the new Argentine electricity model.

---

At the time, international financial institutions exerted considerable pressure for sector reforms to be adopted. Sector restructuring and privatisation facilitated Argentina’s access to loans. The reform of the Argentine electricity sector, hence, was pushed through in only about four months.

**Figure 12:** Post-Privatisation Structure of the Argentine Electricity Sector at the National Level

![Diagram](image)

Source: Legisa (2000)

The next section introduces further details on privatisation methods, prices, and methods of payment, focussing on electricity distribution companies and Segba.

### 4.2.7. Privatisation Methods, Prices, and Forms of Payment in Electricity Distribution

The Argentine government launched international invitations to tender for the privatisation of public services. There was one round of bids, often preceded by negotiations. Different transfer methods were used for electricity generation, transmission, and distribution activities; whereas the direct sale of assets was the preferred method for generation, concession contracts were chosen for transmission and distribution.

---

292 Information based on an interview with Jorge Lapeña on 28/5/09.
In the electricity distribution segment, the award of a concession contract depended on the firm’s background and technical expertise, as well as on the best offer in financial terms; other aspects such as investment plans were disregarded. In practice, the best offer in financial terms was the decisive criterion.

Concession contracts were awarded for a period of between 30 and 95 years, with most contracts falling in the latter range. As indicated in Table 16, concession contracts for Edenor, Edesur, and Edelap were all awarded for a period of 95 years.

**Table 16: Award Criterion, Concession Period and Residential Users of Edenor, Edesur, and Edelap**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Award Criterion</th>
<th>Concession Period</th>
<th>No. of Users in 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edenor</td>
<td>best offer in financial terms</td>
<td>95 years</td>
<td>1,982,979</td>
</tr>
<tr>
<td>Edesur</td>
<td>best offer in financial terms</td>
<td>95 years</td>
<td>1,814,614</td>
</tr>
<tr>
<td>Edelap</td>
<td>best offer in financial terms</td>
<td>95 years</td>
<td>240,391</td>
</tr>
</tbody>
</table>

*Source: Azpiazu, Bonofiglio & Nahón (2008)*

The privatisation of Segba was supervised by the Ministry of Economics and the Energy Secretariat, which established bidding procedures; the seven succeeding companies were privatised within one year.

The privatised electricity distribution companies varied considerably in size, ranging from about 66,000 users at the provincial level in La Rioja to 1.8 and 1.9 million users for Edesur and Edenor in Buenos Aires, respectively; the number of users of Edelap amounted to about 240,000 (see Table 16 and Table 17).

**Table 17: Award Criterion, Concession Period, and Residential Users of Distribution Companies at Provincial Jurisdiction**

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Acronym</th>
<th>Award Criterion</th>
<th>Concession Period</th>
<th>No. of Users in 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catamarca</td>
<td>EDECAT</td>
<td>best offer in financial terms</td>
<td>50 years</td>
<td>71,339</td>
</tr>
<tr>
<td>Entre Ríos</td>
<td>EDEERSA</td>
<td>best offer in financial terms</td>
<td>40 years</td>
<td>201,199</td>
</tr>
<tr>
<td>Formosa</td>
<td>EDEFOR</td>
<td>best offer in financial terms</td>
<td>40 years</td>
<td>88,903</td>
</tr>
<tr>
<td>Jujuy</td>
<td>EJESA</td>
<td>best offer in financial terms</td>
<td>55 years</td>
<td>90,306</td>
</tr>
<tr>
<td>La Rioja</td>
<td>EDELAR</td>
<td>best offer in financial terms</td>
<td>95 years</td>
<td>66,091</td>
</tr>
<tr>
<td>Mendoza</td>
<td>EDEMSA</td>
<td>best offer in financial terms</td>
<td>30 years</td>
<td>243,493</td>
</tr>
<tr>
<td>Buenos Aires</td>
<td>EDEA</td>
<td>best offer in financial terms</td>
<td>95 years</td>
<td>370,281</td>
</tr>
</tbody>
</table>

Bidders presented two sealed envelopes: a first envelope with information on the firm’s background and technical expertise, and a second envelope with the financial offer.

The province of Salta was an exception. Here investment plans were considered as a criterion for awarding the concession contract, see Table 15.


Information based on an informal conversation held in Buenos Aires at the end of 2008.

<table>
<thead>
<tr>
<th>Province</th>
<th>Company</th>
<th>Offer Type</th>
<th>Duration</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buenos Aires</td>
<td>EDEN</td>
<td>best offer in financial terms</td>
<td>95 years</td>
<td>262,279</td>
</tr>
<tr>
<td>Buenos Aires</td>
<td>EDES</td>
<td>best offer in financial terms</td>
<td>95 years</td>
<td>138,858</td>
</tr>
<tr>
<td>Río Negro</td>
<td>EdERSA</td>
<td>best offer in financial terms</td>
<td>95 years</td>
<td>113,842</td>
</tr>
<tr>
<td>Salta</td>
<td>EDESA</td>
<td>best offer in financial terms + best investment plan</td>
<td>50 years</td>
<td>188,987</td>
</tr>
<tr>
<td>San Juan</td>
<td>ESJ</td>
<td>best offer in financial terms</td>
<td>50 years</td>
<td>134,725</td>
</tr>
<tr>
<td>San Luis</td>
<td>EDESAL</td>
<td>best offer in financial terms</td>
<td>95 years</td>
<td>95,016</td>
</tr>
<tr>
<td>Santiago del Estero</td>
<td>EDESE</td>
<td>best offer in financial terms</td>
<td>95 years</td>
<td>111,028</td>
</tr>
<tr>
<td>Tucumán</td>
<td>EDET</td>
<td>best offer in financial terms</td>
<td>90 years</td>
<td>280,773</td>
</tr>
</tbody>
</table>

**Source:** Azpiazu, Bonofiglio & Nahón (2008)

As outlined in Section 1.4., market competition does not exist in the case of natural monopolies such as electricity distribution; in addition, it was rather limited, particularly at provincial level, since in none of the Argentine privatisations of the 1990s were many firms interested in taking over public service companies. As a consequence, several concessions were made to private investors in order to make public companies more attractive, including a financial clean-up of the companies, their internal restructuring, a renegotiation of collective bargaining agreements, and dismissals. In many cases, tariffs were increased before public infrastructure companies were handed over to private hands. In addition, privatisation contracts permitted subsequent price renegotiations, allowing for tax decreases and price indexation in dollar terms.  

The rapid pace and lack of gradualism of the Argentine privatisation process, moreover, did not permit a proper valuation of the public companies before privatisations were launched and often led to understated asset values. Baer (1994) stresses: "In the case of Argentina, the excessive rapidity of the privatisation process may have resulted in the sale of a number of enterprises below their fair value." Nevertheless, due to the extent to which privatisations were undertaken, the proceeds generated during the 1990s were high, and the government budget deficit of 4.7% of GDP in 1988 turned into a surplus of 1.8% of GDP in 1991, since a large part of capital spending obligations was transferred to the private sector. Table 18 illustrates the level of proceeds generated by early privatisations in Argentina during the period 1990 to 1992.

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301 See Rapoport, M. (2005), p. 800. It should be noted, however, that some companies were also overpriced. In cases where higher prices were paid by investors than the company’s value, private companies had difficulties recovering.
Table 18: Proceeds Generated by Privatisation in Argentina, 1990-1992 (in US$ Million)

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Cash</th>
<th>Debt Recovered</th>
<th>Debt Transferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTel</td>
<td>2,270.9</td>
<td>5,000.0</td>
<td></td>
</tr>
<tr>
<td>Aerolíneas Argentinas</td>
<td>260.0</td>
<td>1,610.0</td>
<td></td>
</tr>
<tr>
<td>TV and Radio Channels</td>
<td>13.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polisur</td>
<td>14.1</td>
<td>41.0</td>
<td></td>
</tr>
<tr>
<td>Petropol</td>
<td>4.5</td>
<td>12.1</td>
<td></td>
</tr>
<tr>
<td>Induclor</td>
<td>17.8</td>
<td>50.6</td>
<td></td>
</tr>
<tr>
<td>Vinyl Monomers</td>
<td>9.3</td>
<td>26.5</td>
<td></td>
</tr>
<tr>
<td>Petrochemical Company Rio III</td>
<td>7.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Oil Exploration Areas</td>
<td>1,387.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Oil Exploration Areas</td>
<td>458.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotel Llao-Llao</td>
<td>3.7</td>
<td>12.0</td>
<td></td>
</tr>
<tr>
<td>Tandanor</td>
<td>59.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Altos Hornos Zapla</td>
<td>3.3</td>
<td>29.7</td>
<td></td>
</tr>
<tr>
<td>Elevadores</td>
<td>6.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somisa</td>
<td>140.0</td>
<td>12.1</td>
<td>250.0</td>
</tr>
<tr>
<td>Gas (seven companies)</td>
<td>218.0</td>
<td>1,095.0*</td>
<td>823.0</td>
</tr>
<tr>
<td>Segba-Central Costanera</td>
<td>90.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segba-Central Puerto Caminos</td>
<td>92.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roads</td>
<td>Canon (100 per year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Railways</td>
<td>Canon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate</td>
<td>107.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercado de Liniers</td>
<td>Canon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segba-Edenor</td>
<td>30.0</td>
<td>397.9*</td>
<td></td>
</tr>
<tr>
<td>Segba-Edesur</td>
<td>30.0</td>
<td>481.0*</td>
<td></td>
</tr>
<tr>
<td>Silos Buenos Aires</td>
<td>Canon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silos Quequén</td>
<td>Canon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Alto Valle</td>
<td>22.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hipódromo Palermo</td>
<td>61.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Dock Sud</td>
<td>25.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Pedro de Mendoza</td>
<td>8.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segba-Edelap</td>
<td>5.0</td>
<td>134.0*</td>
<td></td>
</tr>
<tr>
<td>Central Güemes</td>
<td>10.0</td>
<td>76.2*</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,455.7</td>
<td>6,794.9</td>
<td>1,073.0</td>
</tr>
</tbody>
</table>

*Debt recovered valued at market value

Source: Muchnik (1993)

By the end of 1992, privatisation proceeds had totalled about US$ 15 billion, of which about US$ 5 billion was in the form of cash payments, about US$ 7 billion in debt assumed by the buyer or concessionaire at nominal value, and US$ 2 billion in debt at market value. The two infrastructure companies privatised first, Aerolíneas Argentinas and ENTel,
accounted for the largest share of payments made in the form of retired debt at nominal value and privatisations in the gas sector for the largest share of payments made in the form of debt assumed by the buyer or concessionaire at market value. Over the entire decade of the 1990s, proceeds amounted to about US$ 24 billion, of which almost 70% was foreign investment, and the remaining 30%, national investment.

The privatisation proceeds generated by the three distribution segments of Segba (Edenor, Edesur, and Edelap) together amounted to about US$ 1 billion, the major part being paid in the form of retired debt at nominal value (see Table 18).

As mentioned above, the rapid pace of privatisation and the lack of a functioning regulatory framework gave the potential for corruption, an issue briefly introduced in the subsequent section.

4.2.8. Corruption and Illegal Processes in the Context of Argentine Privatisation

“The process of privatisation is linked in nearly all cases to corruption.” (Altvater, 2003)

The political decision to launch privatisation rapidly influenced negotiations on concessions and the sale of public companies negatively, giving rise to several cases of corruption. Complaints were made particularly during the first wave of privatisation. About 15 trials against the then Minister of Public Works and Services, Roberto Dromi, were initiated, along with about half a dozen against the auditor of the telephone company, ENTel.

Moreover, several cases of irregularities in the quorum required for approving a privatisation law were documented. The gas sector is a well-known example, where five of the “deputies” who voted in favour of the privatisation law were, in fact, not deputies. The case later became known as deputrucho (fraudulent deputy). Without the presence of such imposters, the privatisation law would not have been passed. Even after the issue became known, the law was not cancelled.

So far, no major cases of corruption in the context of electricity sector privatisations during the 1990s have surfaced, although this does not mean that such cases did not exist.

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308 See Vidal, A. (2002); information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.
The following section gives an overview of the ownership structures of privatised Argentine electricity distribution companies.

### 4.2.9. Ownership Structures of Argentine Electricity Distribution Companies

Foreign companies—particularly from Europe and the United States—participated actively in the competitive bidding processes for Argentine infrastructure companies. As a result, the bulk were transferred to foreign private entities. Paradoxically, some of the companies investing in Argentine services were owned by the state of their origin. In many cases, foreign companies took over the provision of public services in conjunction with private Argentine companies, which acquired minority shareholdings. Among the Argentine investors participating in the bidding processes were the country’s most important local economic groups; Argentina’s national entrepreneurship mostly favoured privatisation.\(^{309}\)

Overall, the process led to a phenomenon later called *extranjerización*, implying the transfer of public companies to foreign hands—a phenomenon observed in most strategic infrastructure and public service areas.\(^{310}\) Table 19 shows the composition of the consortia of Argentine electricity distribution companies of provincial jurisdiction immediately after privatisation. The table demonstrates the important involvement of foreign investors, and particularly of US, Spanish, and Chilean companies.

#### Table 19: Composition of Consortia of Electricity Distribution Companies of Provincial Jurisdiction in Argentina

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Company Name</th>
<th>Acronym</th>
<th>Post-Privatisation Shareholder Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catamarca</td>
<td>Empresa Distribuidora de Energía Catamarca</td>
<td>EDECAT</td>
<td>IATE: 90.0%, PPP: 10.0%.</td>
</tr>
<tr>
<td>Entre Ríos</td>
<td>Empresa Distribuidora de Electricidad de Entre Ríos</td>
<td>EDEERSA</td>
<td>CMS Electric &amp; Gas Company (USA): 36.0%, Astra: 18.9%, Banco de Galicia y Buenos Aires: 10.8%, Gualtieri: 9.9%, Williams International investment Vent. (Cayman): 6.8%, Latin American Energy and Electricity Fund (Cayman): 5.4%, Cooperativa Electrica de Bariloche: 2.3%, PPP: 10.0%.</td>
</tr>
<tr>
<td>Formosa</td>
<td>Empresa Distribuidora de Electricidad de Formosa</td>
<td>EDEFOR</td>
<td>IATE: 30.0%, Argon (France): 30.0%, Eleprint: 30.0%, PPP: 10.0%.</td>
</tr>
<tr>
<td>Jujuy</td>
<td>Empresa Jujeña de Energía</td>
<td>EJESA</td>
<td>EDET: 48.0%, Cartellone Construcciones: 6.0%, Cía Gral de Electricidad (Chile): 6.0%, FATLyF: 30.0%, PPP: 10.0%.</td>
</tr>
<tr>
<td>La Rioja</td>
<td>Empresa Distribuidora de</td>
<td>EDELAR</td>
<td>Exxel Group (USA): 81.0%, Unión</td>
</tr>
</tbody>
</table>

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\(^{309}\) See Margheritis, A. (2000), p. 64; information based on an interview with Jorge Lapeña on 28/5/09.

\(^{310}\) Information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.
<table>
<thead>
<tr>
<th>Province</th>
<th>Company Name</th>
<th>Participating Entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mendoza</td>
<td>Empresa Distribuidora de Electricidad de Mendoza</td>
<td>FENOSA (Spain): 9.0%, PPP: 10.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EDEMSA EdF Int. (France): 23.0%, Crédit Lyonnais (France): 14.2%, Saur International (France): 7.7%, IADE: 6.1%, Provincial State: 39.0%, PPP: 10.0%</td>
</tr>
<tr>
<td>Buenos Aires</td>
<td>Empresa Distribuidora de Energía Atlántica</td>
<td>EDEA United Utilities International Limited (GB): 41.0%, Camuzzi (Belgium-Luxembourg): 29.0%, CEI Citicorp (USA): 10.0%, Loma Negra: 10.0%, PPP: 10.0%</td>
</tr>
<tr>
<td>Buenos Aires</td>
<td>Empresa Distribuidora de Energía Norte</td>
<td>EDEN AES Corp. (USA): 57.0%, CEA Operating Argentina SA (USA): 33.0%, PPP: 10.0%</td>
</tr>
<tr>
<td>Buenos Aires</td>
<td>Empresa Distribuidora de Energía Sur</td>
<td>EDES AES Corp. (USA): 57.0%, CEA Operating Argentina SA (USA): 33.0%, PPP: 10.0%</td>
</tr>
<tr>
<td>Río Negro</td>
<td>Empresa de Energía de Río Negro</td>
<td>EdERSA SAESA (Chile): 45.0%, Camuzzi (Belgium-Luxembourg): 27.0%, CEI Citicorp (USA): 9.0%, Cemento Portland: 9.0%, PPP: 10.0%</td>
</tr>
<tr>
<td>Salta</td>
<td>Empresa Distribuidora de Electricidad de Salta</td>
<td>EDESA Exxel Group (USA): 81.0%, Unión FENOSA (Spain): 9.0%, PPP: 10.0%</td>
</tr>
<tr>
<td>San Juan</td>
<td>Energía San Juan</td>
<td>ESJ Emec (Chile): 66.0%, Hidoandes (Chile): 34.0%</td>
</tr>
<tr>
<td>San Luis</td>
<td>Empresa Distribuidora de San Luis</td>
<td>EDESAL Exxel Group (USA): 81.0%, Unión FENOSA (Spain): 9.0%, PPP: 10.0%</td>
</tr>
<tr>
<td>Santiago del Estero</td>
<td>Empresa Distribuidora de Electricidad de Santiago del Estero</td>
<td>EDESE Houston Power (USA): 90.0%, PPP: 10.0%</td>
</tr>
<tr>
<td>Tucumán</td>
<td>Empresa de Distribución de Electricidad de Tucumán</td>
<td>EDET Cartellone Construcciones: 64.5%, Cía. Gral. De Electricidad (Chile): 12.75%, Cía. Nacional de Fuerza Eléctrica (Chile): 12.75%, PPP: 10.0%</td>
</tr>
</tbody>
</table>

**Note:** PPP = Programa de Propiedad Participada (Employees Stock Ownership Plan)

**Source:** Azpiazu, Bonofiglio & Nahón (2008)

The table further illustrates that employee stock ownership plans were applied in almost all privatisation programmes in the electricity distribution segment at provincial level. In addition, the provincial state only participated in one of the listed companies as a major shareholder (EDEMSA). Moreover, in one case, the electricity sector union, Luz y Fuerza, acquired a shareholding of 30% (EJESA). Overall, it becomes clear that, in most cases, transnational foreign companies held a majority of the shares, sometimes in combination with Argentine investors, forming a so-called *privatisers club*. The tariff level authorised by the government indicated a good business opportunity. In a few cases, financial institutions and investment funds were also present.

At national level, a similar picture emerged for the three distribution companies succeeding Segba. Figure 13 shows the composition of the consortia of Edenor, Edesur, and Edelap immediately after privatisation. Foreign investors were initially major shareholders in

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312 Information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.
all three companies. The composition of the consortia, however, varied. Whereas French investors were the largest shareholders within Edenor, Chilean investors held the major part of Edesur, and US investors were the biggest shareholders of Edelap. It should be noted that, in most cases, the Argentine government did not initially transfer 100% of the capital of the privatised companies; the proportion mostly ranged from 51% to 90% for the different privatised activities. In the cases of Edenor, Edesur, and Edelap, 51% of company capital was transferred (class “A” shares)\(^\text{313}\), 39% was retained by the government to be subsequently offered on the Buenos Aires stock exchange (class “B” shares), and 10% was distributed among company employees (class “C” shares) in the context of the Employee Stock Ownership Plan.\(^\text{314}\)

During the second half of the 1990s, important capital concentrations occurred in Edenor, Edesur, and Edelap. As a result, at the end of the 1990s, the French state-owned company EdF\(^\text{315}\) and the largest Spanish electricity company, Endesa, exercised control over Edenor; Endesa also became the majority shareholder, holding 90% of its capital.\(^\text{316}\) In December 1995, the remaining 39% of Edesur capital, initially retained by the government, was acquired by Chilcetra, a subsidiary of the Chilean company Enersis, which presented the only offer. Moreover, in April 1996, all class “B” Edelap shares were acquired by Houston Argentina S.A., which subsequently sold part of the holding to Inversora Catalinas S.A.\(^\text{317}\)

In addition to the capital concentration among the electricity distribution companies in the second half of the 1990s, international investors also showed a tendency to diversify holdings and invest in different stages of electricity supply, as well as in other economic activities, such as oil and gas. This diversification eliminated company fragmentation and reintroduced vertical integration to the sector.\(^\text{318}\)


\(^{315}\) EdF had participated in the engineering of the distribution system and thus knew the system.

\(^{316}\) In 2001, Endesa sold its shareholdings in Edenor to EdF after disputes with ENRE.


Figure 13: Composition of Consortia of Edenor, Edesur, and Edelap after Privatisation, 1992

**Edenor**
- EdF International (France) - 29%
- Astra - 10%
- Hidroeléctrica del Ribagorzano (Spain) - 20%
- Morgan Guaranty Trust (USA) - 7%
- Saur Int. (France) - 9%
- Endesa (Chile) - 4%
- Other - 3%

**Edesur**
- Pérez Companco - 33%
- Chillectra (Chile) - 26%
- Enersis (Chile) - 10%
- Endesa (Chile) - 5%
- Chispa (Chile) - 5%
- Los Almendros (Chile) - 3%
- Luz y Fuerza - 1%
- Esur (Chile) - 1%
- Energy Power (USA) - 0%
- PPP - 0%

**Edelap**
- Houston Power Co. (USA) - 62%
- Techint - 28%
- PPP - 10%

**Note:** Figures rounded

**Source:** Author’s own compilation, based on Azpiazu, Bonofiglio & Nahón (2008)
In the context of the 2001 financial and economic crisis, further changes in the shareholder structures of the distribution companies took place. When the pegging of the Argentine currency to the US dollar was abolished, foreign companies started renegotiating their concession contracts, and many companies withdrew their investments in Argentina. Overall, shareholder structures of privatised Argentine electricity distribution companies were not particularly stable over the 1990s and early 2000s. In recent years, there have even been a few renationalisations of electricity companies at provincial level.

At the time of the first privatisations in Argentina, an open market and competition were not guaranteed. The new regulatory framework was not yet in place and the formation of monopolistic markets could not, thus, be prevented.

Summing up, the Argentine privatisation programme of the 1990s was launched one decade after that of Britain, in the context of a favourable international climate. At the time, Argentina faced a severe economic crisis including considerable pressure from international creditors, and was undertaking structural adjustment policies. Soon after Menem assumed the presidency, the government initiated a large-scale privatisation programme without major opposition within a short period of time, and the country’s most important infrastructure companies were handed over to private investors. Electricity companies were no exception. Privatisation was undertaken in electricity generation, transmission, and distribution, initiated at national level and followed by more than half of the country’s provinces. Due to the sense of urgency, public calls for tender were initiated while the regulatory framework was still being drawn up Many foreign companies participated in the competitive bidding processes and took over electricity service provision of the most important Argentine companies of the sector. Former public monopolies were not only privatised but also divided according to activity and geographic location. The Argentine electricity sector is now, as a result, characterised by a large number of public and private actors.
4.3. The Brazilian Privatisation Process of the 1990s

This section explores the Brazilian privatisation process of the 1990s, analogous to the analysis of the Argentine process presented above, beginning with its historical, political, economic, and ideational contexts. The role of the different structural, agential, and ideational factors involved is investigated, with the aim of providing an answer to the question of why privatisation policies were launched. Hay’s theoretical framework is applied to the process of paradigm shift towards privatisation in Brazil in order to identify the conditions which triggered such a shift, the mechanisms that determined the degree to which it occurred, and the different factors involved in the process. Section two provides an overview of union responses and resistance to privatisation in Brazil. Section three investigates how policies were introduced in Brazil by summarising the process of infrastructure privatisation. Section four introduces some peculiarities of the Brazilian electricity sector, and section five explores electricity service privatisation in Brazil. Section six gives an overview of company restructuring and electricity sector reform in the context of privatisation. Section seven then provides further information on privatisation methods, prices, and forms of payment for privatised electricity distribution companies, after which section eight briefly introduces the issue of corruption. Finally, section nine describes the post-privatisation ownership structure of Brazilian electricity companies.

4.3.1. The Historical, Political, Economic, and Ideational Contexts of Privatisation in Brazil

At the end of the 19th and beginning of the 20th centuries, Brazil experienced substantial industrial growth. Until the end of the 1920s, agricultural exports were the leading sector, with coffee exports accounting for the largest share. Due to its dependence on crop exportation, Brazil was severely affected by the Great Depression, which impacted negatively on the county’s exports. By 1930, Brazil was very poor; per capita GDP was only a quarter to a third that of Argentina in 1929. At the time, the country’s infrastructure was also rather modest. Nevertheless, the decline in the country’s capacity to import in the context of the Great Depression initiated a process of industrialisation, and the country recovered quite rapidly from the consequences of the international economic crisis. By the end of the 1930s, Brazil was close to self-sufficiency in the supply of consumer goods. First import
substitutions had already emerged during World War I, but only gained in importance during the 1930s.\textsuperscript{319}

In autumn 1930, a revolution brought Brazil’s first republic to an end. A military coup transferred power to Getúlio Vargas, former governor of Rio Grande do Sul. The political forces that came to power were heterogeneous, and the military government was confronted with increasing opposition. In July 1932, a constitutionalist revolution and civil war started in São Paulo but was defeated by the government. The civil war lasted for eighty-five days and caused the death of between 3,000 and 15,000 people. In November 1935, the Vargas government again faced various minor uprisings in Brazilian cities. As a response, a state of emergency was declared in the struggle against communism, followed by a decree on a state of war, successively renewed until 1937. In its fight against communism, the government persecuted thousands of those considered politically left wing, as well as journalists, writers, and intellectuals. In 1937, Vargas renewed his presidency by means of another coup,\textsuperscript{320} which led to a further centralisation of power and the establishment of an authoritarian dictatorship, the \textit{Estado Novo}. During his second presidency, Vargas exerted practically unlimited power: democratic political institutions became nonexistent and political parties were abolished. In 1939, a propaganda department, the \textit{Departamento de Imprensa e Propaganda}, was founded, inspired by fascist European dictatorships. Education and culture were strongly controlled. State control of unions had already been introduced in the aftermath of the 1930 revolution and was reinforced under the Estado Novo. The right to strike could not be exercised, and free collective bargaining did not exist. A single national trade union confederation, such as the \textit{Confederación General de Trabajo} (CGT) in Argentina, was not permitted at the time, though industry-level union federations were allowed. Nevertheless, there were advances with respect to workers’ social rights. In 1940, a national minimum wage was introduced. Moreover, a social security system was established and social welfare benefits increased for unionised workers. The relationship between labour and the state under the Estado Novo, hence, was overall characterised by ambiguities.

Whereas Brazil under Vargas’ first government experienced a rapid expansion of infrastructure and economic growth caused by state-led economic development and industrial growth, the country saw a clear deterioration of its economic situation during Vargas’ second presidency. Price increases during the war years led to demonstrations against the dictatorship in various Brazilian cities. At the end of World War II, Vargas faced increasing domestic as well as international pressure for democratisation, consequently promising free elections after

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{320} Under the Constitution of 1934, Vargas was to stay in office for only four years.
\end{itemize}
\end{footnotesize}
the war. Presidential and congressional elections were scheduled for the end of 1945, press censorship abolished, new parties formed, and political prisoners released. The political mobilisation that followed, however, produced a conservative backlash. Before elections took place, the military intervened again, forcing Vargas to relinquish the presidency in October 1945, ending the Estado Novo.321

Contrary to expectations, the 1945 coup did not lead to a military dictatorship, and elections were held in December, as scheduled. Presidential and congress elections were won by former Minister of War, General Eurico Dutra, and his political party, the Partido Social Democrático, representing the former dictatorship. The transition from dictatorship to a limited form of democracy was still controlled by the old political forces, and the military maintained an important political role in the years to follow. In early 1946, a new constitution was drafted and finally agreed in September of the same year. Brazil’s first National Labour Congress was held and a national labour confederation founded, the Confederação dos Trabalhadores do Brasil (CTB). It was, however, not recognised by the Ministry of Labour, and intervention in union affairs considerably increased thereafter. The new government faced high inflation—prices went up by 285% between 1945 and 1953—and a strongly overvalued exchange rate. As a result, imports experienced a boom in the second half of the 1940s. In order to equilibrate the balance of payments, the government exercised considerable control over imports. In addition, exchange controls were adopted and a regulatory framework for different economic activities created. The post-World War II period was characterised overall by the abolition of a liberal economic model, giving rise to greater state participation in industrial development. Brazil increasingly relied on import-substituting industrialisation. Production targets for industrial input and infrastructure were set, public investment in infrastructure expanded, and government institutions, such as the national economic development bank, Banco Nacional do Desenvolvimento Econômico (BNDE) and oil company, Petróleo Brasileiro-Petrobrás, founded. The 1950s showed a long period of economic expansion.

1960 saw the country’s new capital, Brasília, inaugurated, and the population becoming increasingly urban. Brazil’s post-war Federal Republic saw several more or less democratic governments. The administration of Juscelino Kubitschek (1956-1961) was the most successful and is remembered as Brazil’s “golden years,” a period of rapid and sustained economic growth. The post-war democracy was brought to an end by the military coup of

March 31-April 1, 1964. Then President João Goulart was deposed and his government overthrown.\textsuperscript{322}

The regime that came to power in 1964 initiated a long period of military governance, during which the institutions established during Brazil’s postwar democracy were radically remodelled and severely undermined. A restructuring of the old party system in 1966 left the country with only two political parties, the pro-government Aliança Renovadora Nacional and the Movimento Democrático Brasileiro, the only opposition party until 1979. Elections hence were not free, and the media was heavily censored. Five presidents, all of them generals, came to power during more than two decades of military dictatorship. The first was Humberto Castelo Branco, taking power on April 15, 1964. The early 1960s were characterised by high inflation, an increased public deficit, a deterioration of external accounts, and economic stagnation. The de facto regime addressed these issues by implementing economic stabilisation policies and structural reforms. By the end of the 1960s and early 1970s, Brazil was experiencing an “economic miracle,” showing strong economic growth, reduced inflation, and a clearance of balance of payments deficits. At the same time, political repression reached its most extreme forms. The period December 1968 to March 1974 later became known as \textit{anos de chumbo} (years of lead), marked by the imprisonment, torture, and disappearance of political prisoners. Initiated by the Costa e Silva government, the years of lead were continued on by the government of Médici, who took power on October 30, 1969. A group of urban guerrillas emerged and engaged in armed operations against the military. In response, the government adopted even tougher repressive measures, initiating a \textit{guerra suja} (dirty war) against the political opposition and intellectuals. By the end of 1971, urban guerrilla groups had been destroyed and their most important leaders killed.\textsuperscript{323}

Only after General Geisel assumed the presidency in March 1974 did the \textit{anos de chumbo} come to an end. Despite his authoritarian rule, Brazil’s fourth military president started a gradual process of political opening, maintained by his successor General Figueiredo. Brazil’s fifth and last military president was sworn into office on March 15, 1979. By 1980, Brazil had reached a per-capita GDP of more than 85\% that of Argentina. Under Figueiredo’s government, the two-party system was abolished and the creation of new parties permitted. Congressional elections thus became more competitive. Moreover, direct elections


for state governors were introduced. At the end of the 1970s, a new unionism emerged. In February 1980, the Partido dos Trabalhadores (PT) was created by union leaders, and in 1983, the Brazilian Central Workers Union Confederation in Brazil, Central Única dos Trabalhadores (CUT), was founded. During the 1970s, basic social security provision was extended, and there were improvements in social wellbeing. GDP growth rates were lower than during the miracle years, but still strong. Macroeconomic performance, however, steadily deteriorated after the mid-1970s. Inflation was high and the country’s indebtedness increased considerably in the aftermath of the 1973 and 1979 oil shocks and rise in global interest rates. In addition, the disequilibrium of public sector finances deteriorated. In this context, the military government established a denationalisation commission in 1981, initiating the first privatisations. After 50 years of high economic growth, a long period of stagnation started in the early 1980s. The economic crisis of this time, together with the growing strength of the political opposition and the emergence of a civil society expressed by mass protest, as well as tensions within the armed forces and the changing international political context, inter alia, caused the transference of power to more conservative elements in the civilian opposition in March 1985.324

José Sarney became Brazil’s first civilian president after the military coup of 1964, assuming the presidency on March 15, 1985.325 The new democratic government was faced with debt crisis, recession, and high inflation. Brazil’s external debt increased from around 13 billion US dollars in 1973 to just over 91 billion US dollars in 1982 and 106 billion US dollars in 1986. In 1987, Brazil unilaterally announced a debt repayment moratorium and rejected a structural adjustment plan proposed by the IMF. Like Argentina, Brazil experienced high inflation throughout the 1980s and a period of severe hyperinflation at the end of the decade. Annual inflation rates increased to 197.2% in 1983, 209.1% in 1984, and 239.0% in 1985; decreased to 59.2% in 1986; and increased again to 394.7% in 1987, 992.7% in 1988, and 1,861.6% in 1989. The Cruzado Plan, launched by the Sarney government, failed to control inflation, and Sarney became increasingly unpopular among the Brazilian population. Despite the 1980s economic crises, Sarney’s administration marked the country’s transition to democracy, with democratic elections for Congress and state governors being held, illiterates granted the right to vote, two communist parties legalised, and a new constitution promulgated. Moreover, relations with Argentina improved, paving the way for the creation

325 Sarney had still been indirectly elected.
of the Mercosur. Further liberal reforms, including the promotion of an open trade policy, financial liberalisation, and privatisation started to appear more systematically on the country’s political agenda. However, Sarney’s government did not launch any major privatisation programmes. It was not until the government of Fernando Collor de Mello that large-scale privatisation policies were adopted.\textsuperscript{326}

The 1989 presidential elections were won by the right wing candidate, Collor de Mello, who took office on March 15, 1990, for a five-year term. At the time, the Brazilian economy was suffering from stagflation. In the early 1990s, extremely high inflation continued to be chronic, with annual rates reaching 1,584.6\% in 1990. Without growth, social shortcomings—manifested in extreme income inequality and high poverty levels—became more evident. The new government launched two stabilisation plans to address the country’s economic crisis. The Collor Plan I and Collor Plan II, introduced in 1990 and 1991 respectively, were accompanied by an ambitious programme of structural reforms, which included privatisation, deregulation, and liberalisation policies. In the context of implementing a new Industrial and Foreign Trade Policy, the \textit{Política Industrial e de Comércio Exterior} (PICE) was created, and an opening-up of the economy and privatisations initiated. With the introduction of Brazil’s National Privatisation Programme, the \textit{Programa Nacional de Desestatização} (PND), in 1990, privatisations became an integral part of the government’s economic reforms; the magnitude and scope of privatisation was significantly amplified. The economic stabilisation plans launched by the Collor administration, however, failed. The government, moreover, faced corruption charges and was displaced due to prosecutions in December 1992; Brazil’s first democratically elected president since the military dictatorship, hence, was only in office for 30 months. Collor’s administration was characterised overall by political and economic instability.\textsuperscript{327}

After Collor’s impeachment, the vice-President, Itamar Franco, took over the presidency, in December 1992. At the time, GDP recovered slightly, but inflation remained high. In May 1993, Fernando Henrique Cardoso was appointed finance minister, and the following month presented an “immediate action plan,” an austerity initiative which entailed important cuts in government spending. In December of the same year, Cardoso proposed a new stabilisation programme, based on fiscal adjustment, and a new indexing system that would gradually establish a new currency. In July 1994, the new currency, the Real, was


introduced to replace the Cruzeiro at the rate of 1 R$ = 1 US$ in the context of the Plano Real.\textsuperscript{328} The stabilisation plan was not supported by the IMF; it was, however, successful in reducing inflation and re-establishing economic growth. The annual inflation rate was finally reduced and remained below 10% during the second half of the 1990s. Economic growth rose to a yearly average of over 5%. Imports increased with trade liberalisation in 1993 and, after a temporary halt, the Franco government continued the privatisations initiated by the Collor administration. The steel sector was included in the process, and a total of 15 companies were privatised in the years 1993 and 1994.\textsuperscript{329}

In October 1994, presidential and Congressional elections were held simultaneously for the first time since 1950. The former Minister of Finance, Cardoso, who had been responsible for introducing the Plano Real under the administration of Itamar Franco, won the presidential elections in the first round and became president for a four-year term on January 1, 1995. He was elected with strong political support and was able to count on absolute majorities in both houses of Congress. Liberal reform remained at the core of his economic policies, and several regional trade negotiations were started in the mid-1990s. From 1995 onwards, moreover, a new phase of privatisation was introduced, which included the transfer of major public service companies to private hands. In contrast to the Argentine process, privatisation in Brazil until the first half of the 1990s was characterised by its slowness. Under the administration of Cardoso, however, privatisation gained momentum. Constitutional reform was implemented in 1995 in order to enable the privatisation of public service companies. Privatisations were accompanied by a strong media campaign and were mostly received positively by the population. Similar to Argentina, a public dialogue on privatisation was almost nonexistent at the time.\textsuperscript{330} Foreign direct investment increased dramatically, along with the extension of privatisation under the Cardoso government, rising from US$ 1.9 billion in 1994 to US$ 15.3 billion in 1997 and US$ 31 billion in 2000. In addition, in June 1998, an administrative reform was approved allowing for the dismissal of civil servants on the grounds of overstaffing or inadequate performance. However, a proposed ceiling for civil service salaries was rejected. In 1997, the constitution was amended to include the possibility

\textsuperscript{328} Previously, a new transitional unit of account had been introduced, the Unidade Real de Valor (URV), which existed side by side with the old currency, Cruzeiro Real. The Real then replaced the URV and the Cruzeiro Real at the rate 2,750 Cruzeiros Reais = 1 URV = 1 Real.


\textsuperscript{330} Information based on various interviews held in Brazil in March 2009.
of a second successive mandate for holders of executive office. The October 1998 presidential elections were again won by Cardoso in the first round, and he became the first Brazilian president to be re-elected for a second term. Once more, he had a solid support base in Congress.

Cardoso’s second government (1998 to 2002) was not considered as successful overall as his first. Brazil faced the contagious effects of the 1997 Asian and 1998 Russian crises. The Real experienced a serious devaluation, and a floating exchange rate was adopted in January 1999. By the end of his second term, Cardoso was facing a low rate of approval and lost the October 2002 presidential elections to Luiz Inácio Lula da Silva. On January 1, 2003, power was transferred from Cardoso to Lula da Silva, Brazil’s first left-wing president.

Table 20 below lists the Brazilian governments of the 1990s.

Table 20: Overview of Brazilian Governments from 1990 to the Early 2000s

<table>
<thead>
<tr>
<th>Term of Office</th>
<th>President</th>
<th>Political Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>15/3/90–29/12/92</td>
<td>Fernando Affonso Collor de Mello</td>
<td>Partido da Reconstrução Nacional, PRN</td>
</tr>
<tr>
<td>29/12/93–1/1/95</td>
<td>Itamar Augusto Cautiero Franco</td>
<td>Partido da Reconstrução Nacional, PRN</td>
</tr>
<tr>
<td>1/1/95–1/1/03</td>
<td>Fernando Henrique Cardoso</td>
<td>Partido da Social Democracia Brasileira, PSDB</td>
</tr>
<tr>
<td>1/1/03–1/1/11</td>
<td>Luiz Inácio Lula da Silva</td>
<td>Partido dos Trabalhadores, PT</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation.

The analysis of the different aspects of the Brazilian privatisation process presented in the rest of this chapter concentrates on the government of Cardoso, since privatisation received a higher priority under his government and was extended to include public utilities.

Reasons for Privatisation in Brazil

The official reasons, according to Saravia (1996), for privatisation in Brazil established by the country’s privatisation programme PND, introduced under the Collor administration in 1990, are as follows:

1. Realigning the strategic position of the state in the economy
2. Contributing to the reduction of public debt

331 Some accusations of corruption in the context of the process of approving the amendment were made. Five deputies voting in favour of the amendment were alleged of having received money for their vote, but corruption was never proved.
3. Permitting the entry of new investment in economic activities of the companies to be privatised
4. Contributing to the modernisation of the country’s industries
5. Permitting the concentration of efforts and resources of the federal public administration on activities for which the involvement of the state is fundamental for the achievement of national priorities
6. Contributing to the strengthening of the capital market

Similar to Argentina, the official reasons for privatisation were, hence, primarily economic. Devin (1993) stressed that the establishment of political credibility was also of crucial importance to the government of Collor, since it aimed to demonstrate that it was addressing the unfavourable economic situation. Moreover, ideological reasons were of importance to the Brazilian privatisation decision. In his public discourses, Collor frequently emphasised the need to modernise the country. In addition, privatisation proceeds were partly used to reduce the country’s increasing external debt, as in Argentina.

However, in contrast to the Argentine government of Menem, the Brazilian government of Collor de Mello lacked a solid parliamentary basis. Its privatisation initiative was initially widely supported, even by centre-left parties, such as the Brazilian social democratic party, Partido da Social Democracia Brasileira (PSDB), but privatisation in Brazil did not go as far as in Argentina under his short-lived administration. It was only under the government of Cardoso that privatisation policies were considerably extended. Similar to Menem, Cardoso had a solid parliamentary basis and was re-elected after his first term in office. In contrast to Collor, then, Cardoso had the means to accelerate the process, and increase the scale and scope of privatisation.

**Application of Hay’s Theoretical Model to the Brazilian Context of Paradigm Shift towards Privatisation**

Similar to Argentina, privatisation policies in Brazil were adopted in various successive stages. Applying Hay’s (2001) theoretical model of “punctuated evolution” to the

336 Information based on several interviews held in Brazil in March 2009.
Brazilian process, four second-order policy-change cycles can be identified before a paradigm shift towards privatisation was secured in Brazil:

1. A first move towards privatisation at the end of Brazil’s last military regime under the government of Figueiredo.
2. A halt in the progress of privatisation policies in Brazil during the civilian government of Sarney.
3. A stronger progressive movement towards privatisation under the short-lived administration of Collor de Mello.
4. A further, ambiguous move towards privatisation under the government of Franco.

Under the military government of Figueiredo, denationalisation, in the form of privatisation, became part of Brazil’s economic agenda. A presidential decree from July 1981 established a commission for denationalisation and established norms for the transfer of companies managed by the federal state. The commission identified 140 firms to be privatised, of which 20 were sold in the years 1981-84. The privatised firms were generally small or medium-sized, and many were “reprivatisations.” As in Argentina, no major privatisation was undertaken during the last period of military dictatorship in Brazil.\(^{339}\)

The first civilian government in 21 years, under José Sarney, did not push for a massive privatisation programme, either. 18 firms were privatised under this administration, mostly relatively small ones. Privatisation proceeds, hence, were also rather modest, totalling US$ 533 million for the period 1985 to 1989.\(^{340}\)

The government of Collor was the first to introduce a major privatisation programme: The PND was launched on April 14, 1990; only one month after Collor had taken office. The process was initiated in the context of a general liberalisation and regarded as integral to it. As a result, the magnitude and scope of privatisation was significantly amplified. Privatisations under the Collor government occurred mostly at public auctions. Companies were paid for in old and new Brazilian currencies. Privatisation certificates, so called moedas de privatização (federal public debt securities) were widely used, since fiscal adjustment was of high priority. Some restrictions were applied to privatisation under the Collor administration, including the following: foreign participation was limited to 40% of the voting capital, but unlimited for non-voting capital; foreign capital was required to stay in Brazil for 12 years; and a maximum discount for debt conversion was set at 25%. These restrictions were partly lifted in the years

following. The Collor government included 68 firms in the PND, among them several large public companies. Such an ambitious programme, however, was not undertaken, since the government was displaced before the end of its official term due to the aforementioned corruption charges. The PND, under Collor, further concentrated on the privatisation of productive enterprises. 18 companies in the steel, fertiliser, and petrochemical industries were privatised in the period 1990 to 1992, raising funds to the amount of US$ 4 billion. 341

Under the government of Itamar Franco, the process was temporarily halted due to opposition, but it was reactivated again by mid-1993, and the privatisation of the steel sector was concluded. In the period 1993 to 1994, 15 state-owned firms were transferred to private hands, with privatisation proceeds amounting to US$ 4.5 billion. Moedas de privatização were still important as a means of payment. Moreover, discrimination against foreign investors was banned, and foreign capital participation in shareholdings of former public companies of up to 100% was permitted. In the period 1991 to 1994, most of Brazil’s public manufacturing companies were privatised. 342

Similar to the privatisation paradigm adoption in Argentina, the transition process in Brazil started at the end of the last military government and involved various successive stages before a paradigm shift was secured. Only under the government of Cardoso did privatisation reach such a level of priority that a paradigm shift was guaranteed: its speed was increased, public service companies included in the agenda, and privatisations at state- and municipal-level initiated. Constitutional amendments were passed in order to enable the privatisation of telecommunications, mining, and the supply of electricity. New regulatory frameworks were established for various infrastructure industries. A national privatisation council, the Conselho Nacional de Desestatização (CND), was established and privatisations of a multitude of public companies undertaken throughout Cardoso’s two terms in office. In just the period 1995 to 1996, 19 companies were privatised, generating proceeds amounting to US$ 5.1 billion. In 1997, the process at the level of the country’s 26 states was amplified with the support of the BNDES. Proceeds resulting from state- and municipal-level privatisation amounted to US$ 14.9 billion by the end of 1997, having an important fiscal impact. The process was extended to include further infrastructure sectors in the following years; due to the inclusion of public utilities in the process under Cardoso, proceeds increased to such an extent that they became of crucial importance to the government’s macroeconomic policies. 343

Just as in Argentina, the contemporary society had a favourable attitude towards privatisation, and union struggles against it were generally unsuccessful.

The following section gives details on the adoption of privatisation policies in the Brazilian infrastructure sector, but to begin with, the role of unions in the Brazilian privatisation process is investigated a little further.

4.3.2. Union Responses and Resistance to Privatisation in Brazil during the 1990s

In contrast to Argentina, privatisation in Brazil was strongly opposed by the majority of unions from the outset under the Collor administration, causing delays in several cases and a comparatively slow progress of the whole process.\(^\text{344}\) There was also some opposition from political groups, who started legal proceedings. Initial sales of public companies in the industrial sector faced a number of demonstrations; protests, however, gradually became quieter. Demonstrations were organised by Brazil’s federal-level union confederation, the Central Única dos Trabalhadores (CUT), Latin American biggest such confederation, founded in 1983, towards the end of Brazil’s last military dictatorship,\(^\text{345}\) and emerging from different militant trade unions at the federal level.\(^\text{346}\) When the first important privatisation—the auction of the public steel company, Companhia Siderúrgica Nacional (CSN)—was announced under the Collor government, CUT organised various strikes. Between 1984 and 1990, the company frequently experienced temporary closures. In 1988, the military intervened at a particularly tense standoff, resulting in the deaths of three workers. In 1990, a general strike was held for 31 days. The company directorate discouraged striking workers, threatening to dock their pay. In this context, a new pro-privatisation unionism emerged and, in March 1991, a further union confederation was founded, the Força Sindical, which supported the government’s neoliberal programme.\(^\text{347}\)

As in Argentina, privatisation in Brazil, hence, led to the emergence of a further central union confederation, although in Argentina, it emerged in response to the collaborative attitude of the existing confederation, whereas Brazil’s equivalent was founded to give active support to the country’s privatisation process, strongly opposed by the existing confederation. Applying Dombois and Pries’ (1999) categories of union responses to challenges to the

\(^\text{345}\) Saravia, E. (1996), p. 36ff; information based on interviews held in Brazil in March 2009.
\(^\text{347}\) See PSI (2006), p. 139ff; Saravia, E. (1996), p. 36ff; information based on several interviews held in Brazil in March 2009.
Brazilian union confederations in the 1990s, CUT clearly falls in the blockade-category, whereas Força Sindical would best be assigned to the ignore-or-accept category.\footnote{During the first Cardoso government Força Sindical changed its attitude from negotiation to directly confronting the government. See Martins, H. de S. & Rodrigues, I. J. (2000), p. 162.} The following table provides an overview of the responses of union confederations to privatisation in Argentina and Brazil in the early 1990s.

**Table 21: Responses of Union Confederations to Privatisation in Argentina and Brazil, Early 1990s**

<table>
<thead>
<tr>
<th>Union Confederation in Brazil</th>
<th>Immediate Response to Privatisation</th>
<th>Union Confederation in Argentina</th>
<th>Immediate Response to Privatisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUT</td>
<td>blockade</td>
<td>CGT</td>
<td>accept</td>
</tr>
<tr>
<td>Força Sindical*</td>
<td>accept</td>
<td>CTA*</td>
<td>blockade</td>
</tr>
</tbody>
</table>

* Union confederations which emerged in the context of the introduction of major privatisation programmes in the early 1990s.

**Source:** Author’s own compilation

The union Força Sindical turned out to be an important ally for the Collor government in the process of privatising the company CSN and negotiated the extension of subsidised workers shareholdings in the auction to 20%. During the public auction, CUT held a demonstration together with opposition parties in front of the Rio de Janeiro stock exchange. They failed, however, to mobilise an important number of demonstrators and could not prevent the second auction. The privatisation of CSN was undertaken as planned, and many other privatisations of public industrial companies followed under Collor’s administration.\footnote{See PSI (2006), p. 139ff.}

When the privatisation of public service companies was launched under the government of Cardoso, Brazilian unions were better prepared for confronting privatisation. In the electricity sector, unions looked for allies among the population in order to influence public opinion on privatisation and generated various public events. At federal level, the union federation for the electricity sector, the Federação Nacional dos Urbanitários (FNU), led the struggle against privatisation, organising strikes and demonstrations.\footnote{Information based on several interviews held in Brazil in March 2009; FNU website.}

Table 22 contrasts the responses of Argentine and Brazilian electricity sector union federations to privatisation. While heavily opposed in Brazil, it was accepted in Argentina.
Table 22: Responses of Electricity Sector Union Federations to Privatisation in Argentina and Brazil, Early 1990s

<table>
<thead>
<tr>
<th>Electricity Sector Union Federation in Brazil</th>
<th>Immediate Response to Privatisation</th>
<th>Electricity Sector Union Federation in Argentina</th>
<th>Immediate Response to Privatisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FNU</td>
<td>blockade</td>
<td>FATLyF</td>
<td>accept</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation

Moreover, electricity sector privatisation in Brazil was confronted by unions at state and municipal level. The Union of Urban Industry Workers of Rio de Janeiro, *Sindicato dos Trabalhadores nas Indústrias Urbanas do Rio de Janeiro* (STIURJ), at the time launched a campaign against the privatisation of Light, situated in the city of Rio de Janeiro. FNU and STIURJ would, therefore, also fall into Dombois and Pries’ blockade-category. Table 23 contrasts the responses of the Segba and Light unions to privatisation.

Table 23: Responses of Unions of Segba and Light to Privatisation

<table>
<thead>
<tr>
<th>Union of Light</th>
<th>Immediate Response to Privatisation</th>
<th>Union of Segba</th>
<th>Immediate Response to Privatisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>STIURJ</td>
<td>blockade</td>
<td>Luz y Fuerza de Capital Federal</td>
<td>accept</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation

In contrast to Argentina, not a single electricity sector union was in favour of privatisation in Brazil. However, unions in the Brazilian electricity sector were not able to mobilise masses against privatisation during Cardoso’s first term in office either, and privatisation could not be prevented.

Legal measures turned out to be somewhat more effective than demonstrations in confronting electricity distribution company privatisation during Cardoso’s first term in office and resulted in the postponement of various auctions. From 1991 to 1997, there were 35 judicial interventions in the privatisation processes of six electricity companies, with one legal measure even preventing the privatisation of a Brazilian public electricity company, CESP Paraná.

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351 The union STIURJ ceased to exist. It was divided into two different unions, one for sanitation services, and one for energy. Electricity workers of Light are now represented by the succeeding union for the energy sector, SINTERGIA-RJ.

352 Information based on several interviews held in Brazil in March 2009.


Union opposition, moreover, gained in importance during Cardoso’s second presidency. Whereas many electricity distribution companies were successfully privatised by his government, the national climate became unfavourable for privatisation, due to deteriorating macroeconomic conditions and the 2001 energy crisis. Electricity generation company privatisation was, thus, strongly opposed by unions and the political left and could not be continued. Only one major federal generation company was privatised; the privatisation process in Brazil remained incomplete.355

In sum, as in Argentina, the unions in Brazil were powerless to prevent privatisation during Cardoso’s first term in office. They collaborated partly with privatising governments, but less than in Argentina. The comparatively stronger opposition of Brazilian unions to privatisation might be attributed to the overall less repressive nature of Brazil’s last dictatorship in comparison to that of Argentina. However, unions in Brazil could not mobilise sufficient opposition to prevent privatisation either. Nevertheless, they were more successful during Cardoso’s second term in office. In contrast to Argentina, then, the Brazilian electricity sector privatisation process was not completed at federal level.

The next section gives an overview of the implementation of privatisation policies in the Brazilian infrastructure sector.

355 Information based on interviews held with José Goldemberg and Luiz Pinguelli Rosa in March 2009.
4.3.3. The Privatisation of Infrastructure Services in Brazil

From the late 1940s to the early 1990s, Brazil was characterised by the dominance of state over economy. The national state-enterprise sector was prominent in public utilities, heavy industry, natural resource exploitation, and the financial sector. An “expanded role of the state” in the Brazilian economy emerged as a reaction to international economic crises: the intention to control foreign capital activity, and the objective of rapidly industrialising the economy. State ownership in public utility sectors was gradually extended from the 1930s onwards. In the 1940s, a number of new government enterprises were created, and the government increasingly engaged in planning activities. A national development bank, the Banco Nacional de Desenvolvimento Econômico (BNDE)\textsuperscript{356} was created in 1952 to finance growth and infrastructure modernisation. Moreover, control of public utility rates was extended. The public utility sector saw a rapid growth and expansion of state enterprises in the years following. By 1990, the 20 largest public utility firms were all state-owned. Brazil’s public enterprises performed relatively well until the end of the 1970s, when the government started to use them as tools of macroeconomic policies in the context of the development of a debt crisis and inflationary pressures. Just as in Argentina, money borrowed by public companies on the international market was used by the government to address a deteriorating balance of payments. As a result, many public companies were placed in an increasingly weakening financial situation. Due to the rise of deficits, public company investments declined considerably in the 1980s, and many were making losses by the early 1990s.\textsuperscript{357} Iazzetta (1996), however, stresses that, at the time, the management capacity of the Brazilian state was high in comparison to that of Argentina.

As mentioned above, the first privatisation process in Brazil was initiated at the end of the military government in the early 1980s, but the sale of state firms during the 1980s was still limited to Brazilian companies and the manufacturing sector. Privatisation was, therefore, rather moderate and continued to be so during the civilian Sarney government. Under Collor, privatisation reached a much larger dimension with the introduction of Brazil’s privatisation programme, PND, in 1990, allowing for foreign participation of up to 40% of voting capital. Nevertheless, privatisation under the Collor and subsequent Franco governments was still restricted to the industrial sector. The Collor administration announced its intention to initiate the privatisation of the electricity sector by including the Escelsa and Light in the PND, but the announced changes were not undertaken due to the early replacement of that

\textsuperscript{356} In the 1980s, the name was changed to Banco Nacional de Desenvolvimento Econômico e Social (BNDES).
government. Only under the administration of Cardoso did privatisation gain in speed and importance due to the inclusion of public services in Brazil’s programme during the second half of the 1990s. Privatisation policies initially lacked broad political support but eventually grew to such an extent that the Brazilian programme became one of the most important in the world. Table 24 lists the first sectors and public companies—among them many infrastructure firms—privatised during the 1990s in Brazil, all of which were of federal jurisdiction. The table shows that privatisation was undertaken in many different industrial and infrastructure sectors. From October 1991 to January 2000, a total of 117 public companies were privatised, most during the government of Cardoso. However, despite this large number, privatisation in Brazil was not undertaken to the same extent as in Argentina. Many infrastructure sectors which had been privatised in Argentina were not privatised in Brazil, such as water and sewerage, postal services, and the national airport system, etc. Moreover, even in the sectors where privatisations were carried out, not all major public companies were privatised.

Table 24: Privatised Federal Brazilian Companies, 1990s

<table>
<thead>
<tr>
<th>Sector</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel companies</td>
<td>Usiminas, Cosinor, Piratini, C. S. Tubarão, Acesita, Cosipa, Açominas, Caraíba Metais</td>
</tr>
<tr>
<td>Aerospace companies</td>
<td>Celma, Embraer</td>
</tr>
<tr>
<td>Transport companies</td>
<td>Mafersa</td>
</tr>
<tr>
<td>Petrochemical and chemical companies</td>
<td>Petrofl ex, Polisul, Copesul, Alcalis, Polielolinas, CBE, Oxiteno, PQU, Acrinor, Coperbo, Politeo, Copene, CPC, Salgema, CQR, Nitrocarbono, Pronor, CBP, Polipropileno, Koppol, Deten, Polibrasil, EDN</td>
</tr>
<tr>
<td>Fertiliser companies</td>
<td>Fosfértil, Goiásfértil, Ultrafértil, Arafértl</td>
</tr>
<tr>
<td>Financial companies</td>
<td>Banco Meridional</td>
</tr>
<tr>
<td>Railways</td>
<td>RFFA (Malhas Oeste, Leste, Sudeste, Tereza Cristina, Sul Nordeste e Paulista)</td>
</tr>
<tr>
<td>Ports</td>
<td>Tecon1—Santos, Codesa, Term. Roll-on-Roll-off, Angra dos Reis</td>
</tr>
<tr>
<td>Electricity companies</td>
<td>Escelsa, Light, Gerasul</td>
</tr>
<tr>
<td>Telecommunication companies</td>
<td>Embratel</td>
</tr>
<tr>
<td>Mining companies</td>
<td>CVRD, Valepar</td>
</tr>
</tbody>
</table>

Source: PSI (2006)

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358 See Eletrobras (2010).
Under the Cardoso administration, federal level privatisation was followed by numerous privatisations of the country’s federative units, just as in Argentina. Brazil’s states faced pressure by the federal government to follow its example and sometimes went even further, privatising roads, gas, and water and sewerage systems, inter alia.

It should be noted that, even though the Brazilian privatisation process progressed faster in the second half of the 1990s, it was far from complete by the turn of the century. Apart from Cuba and Uruguay, where almost all public service companies remained in government hands, Brazil is the only Latin American country which maintains a number of important companies under state control, including electricity generation and transmission firms.

The following section introduces details of the Brazilian electricity sector in order to provide an analysis of its privatisation.

4.3.4. Characteristics of the Brazilian Electricity Sector

Brazil relies almost exclusively on non-fossil sources for electricity, in the form of hydroelectric power; its potential in that country is estimated to be one of the largest in the world, at 150,000 megawatts. Electricity generation activities in Brazil include the world’s largest hydroelectric project, the binational plant on the Paraguayan border at Itaipú. Brazil’s hydraulic system has a large storage capacity and consists of groups of physically interdependent reservoirs.

Figure 14 below shows the evolution of electricity generation by fuel in Brazil from 1971 to 2009. As shown, from the 1970s to the 1990s, there were hardly any changes in the balance of fuel sources. From 2001 onwards, geothermal / solar / wind energy, nuclear power, biofuels and waste, oil-fired plants, and coal / peat energy experienced some increase, probably attributable to the 2001 Brazilian energy crisis, and also at least partly explained by new private entrants into the generation segment following privatisation. The share of energy sources other than hydroelectricity remained low over the whole period.

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363 Brazil is a federation of 26 states and one federal district.
364 See PSI (2006), p. 22; information based on several interviews held in Brazil in March 2009.
366 See PSI (2006), p. 27.
369 Information based on interviews with Helder Queiroz Pinto Jr. and Luiz Pinguelli Rosa in March 2009.
In 1997, Brazil had 59,247 gigawatts of installed capacity.\(^{370}\)

**Figure 14:** Evolution of Electricity Generation by Fuel, Brazil, 1971-2009

![Graph showing evolution of electricity generation by fuel in Brazil from 1971 to 2009.](http://data.iea.org)


Similar to Argentina, the Brazilian electricity sector faced the challenge of increasing demand whilst public sector investment in infrastructure decreased following the 1980s debt crisis. Privatisation was regarded as a means of attracting new investment and expanding electricity services. However, investment by new private entities in the sector was not sufficient to prevent blackouts and energy crises. Like the Argentine electricity sector, the Brazilian equivalent experienced frequent failures in the distribution of power to consumers. According to Rosa et al. (2001a), new private investors in the Brazilian electricity sector pursued the objective of maximising shareholder value rather than improving service quality or expanding investment, and Brazil experienced major power cuts after privatisation policies were introduced. The city of Rio de Janeiro was particularly affected, suffering from repeated outages following the 1996 privatisation of Light, who substituted directly-employed technicians responsible for network maintenance with outsourced workers, lacking in experience and training. Just like in the city of Buenos Aires, distribution networks in the city of Rio de Janeiro are old and largely underground, complicating network maintenance. Operating problems within Light began to emerge as early as the first summer after its privatisation. The regulatory agency, Agência Nacional de Energia Elétrica (ANEEL), started

working at about the same time; one of their first projects was a public hearing in Rio de Janeiro on the issue, during which there was a power shortage.\textsuperscript{371} Power cuts at the end of 1997 and the beginning of 1998, caused by a distribution system overload, led to a large number of public complaints against Light, who were fined by ANEEL on several occasions.\textsuperscript{372} From June 2001 to February 2002, Brazil, moreover, experienced a major energy supply crisis due to a lack of rain and delays in investment in the expansion of the system, which led to blackouts and energy rationing of 20\% to consumers. Power shortages forced production cuts and slowed economic growth.\textsuperscript{373} Melo, Neves, and Da Costa (2009) point out that “the market didn’t work as expected.”\textsuperscript{374} As a consequence of the energy crisis and tariff increases, public opinion towards privatisation also changed; it was no longer perceived as positive.\textsuperscript{375}

In the next section, more details on the implementation of privatisation policies in the Brazilian electricity sector are presented.

\section*{4.3.5. The Privatisation Process of the Brazilian Electricity Sector}

From the end of the 19\textsuperscript{th} century until the 1950s, the Brazilian electricity sector was in private hands. From the 1950s onwards, the state started to be involved, and electricity generation capacity increased rapidly. Most of this was attributed to state-owned enterprises; foreign owned firms were restricted to electricity distribution.\textsuperscript{376} In 1962, the public Brazilian power company, Eletrobras, was created, and in the subsequent years, a large part of the electricity sector was nationalised. Since 1995, the Brazilian electricity sector has again allowed private participation.\textsuperscript{377}

In 1996, 96\% of generation and 100\% of transmission activity was still in public hands. As shown in Table 25 below, 98\% of distribution activities were also held by public

\begin{footnotesize}
\begin{itemize}
\item\textsuperscript{371} Information based on an interview with Luiz Pinguelli Rosa on 27/3/09.
\item\textsuperscript{373} See Goldstein, A. & Pires, J. C. L. (2002), p. 27.
\item\textsuperscript{374} See Melo, E., Neves, E. M. de A. & Da Costa, A. M. (2009), p. 6f.
\item\textsuperscript{375} Information based on various interviews held in Brazil in March 2009.
\item\textsuperscript{376} See Abreu, M. de P. (2008a), pp. 287, 338.
\item\textsuperscript{377} See Leme, A. A (2009), p. 99.
\end{itemize}
\end{footnotesize}
companies before the privatisation of Light\textsuperscript{378} and Escelsa. After this, the proportion provided by private entities increased from 2\% to 15\%.\textsuperscript{379}

**Table 25: Structure of the Brazilian Electricity Sector, Mid-1990s\textsuperscript{1}**

<table>
<thead>
<tr>
<th></th>
<th>Generation</th>
<th>Transmission</th>
<th>Distribution before\textsuperscript{2}</th>
<th>Distribution after\textsuperscript{3}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Government</td>
<td>60%\textsuperscript{6}</td>
<td>75%</td>
<td>18%</td>
<td>0%</td>
</tr>
<tr>
<td>State Governments</td>
<td>36%</td>
<td>25%</td>
<td>80%</td>
<td>85%</td>
</tr>
<tr>
<td>Private Sector</td>
<td>4%</td>
<td>0%</td>
<td>2%</td>
<td>15%</td>
</tr>
</tbody>
</table>

\textsuperscript{1} Brief summary of the process of change of the Brazilian electricity sector
\textsuperscript{2} Before the privatisation of Light and Escelsa
\textsuperscript{3} After the privatisation of Light and Escelsa
\textsuperscript{6} Including Itaipú

*Source: Coopers & Lybrand (1996)*

The table also shows that, in contrast to Argentina, most distribution companies in Brazil were in state government hands before privatisation; almost all states had one.\textsuperscript{380} Distribution companies of the states were all controlled by Eletrobras.\textsuperscript{381} Table 25 further indicates that most generation and transmission companies were owned by Brazil’s federal government in the mid-1990s, as in Argentina before privatisation.\textsuperscript{382}

The Collor government had already included Eletrobras and its subsidiaries in the PND in 1992. Even though utility privatisation was not undertaken by this administration, his government undertook the first steps. However, privatisation in the electricity sector was only initiated three years later, by the Cardoso government.\textsuperscript{383}

Table 26 gives an overview of electricity companies privatised in Brazil in the period 1995 to 1999. As shown, privatisation was carried out mainly in electricity distribution. Like in Argentina, the electricity sector privatisation process was initiated with distribution companies at federal level. Escelsa was the first to be privatised, in June 1995, followed by Light in May 1996. Both companies had been subsidiaries of Eletrobras, and their privatisation represented an important breakthrough in the sale of large public infrastructure companies. Even though the Brazilian states were sovereign over the decision to privatise their distribution companies, the privatisation of distribution companies at federal level was followed by various privatisations at state level in subsequent years. 16 distribution

\textsuperscript{378} Even though Light’s main activity is electricity distribution, the company also operates in generation and transmission.
\textsuperscript{380} São Paulo and Rio de Janeiro were the only states with more than one state-owned distribution company.
\textsuperscript{383} See Eletrobras (2010).
companies representing more than 55% of the Brazilian electricity distribution sector were privatised up to December 1998.384

Table 26: Federal Electricity Generation Companies in Brazil, Late 1990s

<table>
<thead>
<tr>
<th>Company</th>
<th>Concession Area</th>
<th>Ownership Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eletronorte</td>
<td>North</td>
<td>Remained a state-owned company</td>
</tr>
<tr>
<td>Chesf</td>
<td>Northeast</td>
<td>Remained a state-owned company</td>
</tr>
<tr>
<td>Furnas</td>
<td>Southeast and Centre</td>
<td>Remained a state-owned company</td>
</tr>
<tr>
<td>Eletrosul</td>
<td>South</td>
<td>Generation Units (Gerasul) privatised in September 1998</td>
</tr>
<tr>
<td>Itaipú</td>
<td>No special concession area</td>
<td>Remained a state-owned company</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation, based on Mendonça & Dahl (1999)

The Brazilian Development Bank, BNDES, supported these privatisations, and created a programme to encourage privatisation at state level, the Programa de Estímulo às Privatizações Estaduais (PEPE). Most state governments felt the need to sell their companies because of their precarious financial conditions; they had to raise funds and pay debts. Some of Brazil’s states went even further in privatising than the federal government, selling not only distribution but also generation companies.385 In the second half of the 1990s, several privatisations in electricity generation were carried out. The process in the generation segment was initiated at state level with the privatisation of Cachoeira Dourada in September 1997, and at federal level with the sale of Gerasul in September 1998.386

As depicted by Table 27 below, the other three federal generation companies, Chesf, Furnas, and Eletronorte, were not privatised at the time. They were scheduled for privatisation in 1999, but the sale was not performed.387

The process of electricity sector privatisation in Brazil, hence, started a few years after that of Argentina. Moreover, the Brazilian government, in contrast to the Argentine government, approached privatisation at a slower pace. Most privatisation in the electricity sector was undertaken in the years 1997 and 1998, and concentrated on the distribution segment.

385 Information based on interviews held in Brazil in March 2009.
### Table 27: Privatised Brazilian Electricity Companies, Second Half of the 1990s

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Abbreviation</th>
<th>Sector</th>
<th>Year</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Espírito Santo Centrais Elétricas S.A.</td>
<td>Escelsa</td>
<td>former subsidiary of Eletrobras</td>
<td>Distribution</td>
<td>1995</td>
</tr>
<tr>
<td>Light Serviços de Eletricidade S.A.</td>
<td>Light</td>
<td>former subsidiary of Eletrobras</td>
<td>Distribution</td>
<td>1996</td>
</tr>
<tr>
<td>Companhia de Eletricidade do Estado do Rio de Janeiro</td>
<td>Cerj</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companhia Energética da Bahia</td>
<td>Coelba</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companhia Centro-Oeste de Distribuição</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companhia Norte-Nordeste de Distribuição</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companhia Paulista de Força e Luz</td>
<td>CPFL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empresa Energética do Mato Grosso do Sul</td>
<td>Enersul</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centrais Elétricas Matogrossenses</td>
<td>Cemat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empresa Energética de Sergipe</td>
<td>Energeipe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companhia Energética do Rio Grande do Norte</td>
<td>Cosern</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cachoeira Dourada</td>
<td>CDSA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eletropaulo Metropolitana Eletricidade de São Paulo</td>
<td>Metropolitana</td>
<td>former Eletricidade de São Paulo (Eletropaulo)</td>
<td>Distribution</td>
<td>1998</td>
</tr>
<tr>
<td>Empresa Bandeirante de Energia</td>
<td>Bandeirante</td>
<td>former Eletricidade de São Paulo (Eletropaulo)</td>
<td>Distribution</td>
<td>1998</td>
</tr>
<tr>
<td>Elektro Eletricidade e Serviços</td>
<td>Elektro</td>
<td>former Companhia Energética de São Paulo (Cesp)</td>
<td>Distribution</td>
<td>1998</td>
</tr>
<tr>
<td>Companhia Energética do Ceará</td>
<td>Coelce</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centrais Elétricas do Pará</td>
<td>Celpa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gerasul</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companhia de Geração de Energia Elétrica Paranapanema</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companhia de Geração de Energia Elétrica Tietê</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** IOS (2001)
Privatisation was broadly performed until spillover effects from the Asian financial crisis changed the atmosphere, and the participation of international investors in tenders decreased. However, privatisation did not stop even then, and large companies continued to be sold thereafter. The process only came to a halt in 2001, when Brazil experienced a major energy crisis. At that time, the privatisation process was far from complete, with most electricity generation and transmission capacities and about one third of distribution activities still in public hands.

Table 28 shows public Brazilian electricity companies in the year 2000. As illustrated by the table, the Brazilian federal and state governments still owned important electricity generation, transmission, and distribution companies. The bulk of Brazil’s major generation companies were not privatised during the 1990s, but remained public, mostly in the hands of the federal government. Moreover, privatisation of electricity transmission lines was also limited.

Table 28: Public Electricity Companies in Brazil, 2000

<table>
<thead>
<tr>
<th>Activities</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bi-national</td>
<td>Generation</td>
</tr>
<tr>
<td>Federal</td>
<td>Holding and planning</td>
</tr>
<tr>
<td></td>
<td>Generation</td>
</tr>
<tr>
<td></td>
<td>Generation and transmission</td>
</tr>
<tr>
<td></td>
<td>Generation, transmission, and distribution</td>
</tr>
<tr>
<td></td>
<td>Generation and nuclear engineering</td>
</tr>
<tr>
<td></td>
<td>Transmission</td>
</tr>
<tr>
<td></td>
<td>Distribution</td>
</tr>
<tr>
<td></td>
<td>Research</td>
</tr>
<tr>
<td>State</td>
<td>Generation</td>
</tr>
<tr>
<td></td>
<td>Generation, transmission, and distribution</td>
</tr>
<tr>
<td></td>
<td>Transmission</td>
</tr>
<tr>
<td></td>
<td>Distribution</td>
</tr>
</tbody>
</table>

Source: PSI (2006)

The proceeding section provides an overview of electricity sector reform and company restructuring in the context of privatisation in Brazil.

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4.3.6. Restructuring of Privatised Infrastructure Companies and Electricity Sector Reform

“reform of the reform” (Melo, Neves, and Da Costa, 2009)

Sector reform was launched in Brazil in order to promote competition and attract new investment. The first phase of important changes was introduced under the Cardoso administration. In mid-1996, the Ministry of Mining and Energy, Ministério de Minas e Energia (MME), contracted the British consulting firm Coopers & Lybrand in order to enable sector reform compatible with privatisation, and, in August 1997, a final report was submitted to the Brazilian government, recommending changes in three broad areas:

1. a new legal and regulatory framework,
2. new trading arrangements and
3. institutional changes.\(^{391}\)

Following this, changes to the electricity sector based on recommendations of the report were introduced by means of provisional measures.\(^{392}\) Provisional Measure 1531-11 from October 1997 authorised the reorganisation of Eletrobras and its subsidiaries.\(^{393}\) The first phase of reforms was characterised by the implementation of a project of restructuring of the Brazilian electricity sector, Reestruturação do Setor Elétrico Brasileiro (RESEB), with the aim of introducing competition in generation and retail activities and establishing efficient regulation for transmission and distribution. In the context of the RESEB, the following institutions were created at national level:

- the national energy policy council, Conselho Nacional de Política Energética (CNPE), responsible for proposing national energy policies;
- the regulatory agency for the electricity sector ANEEL, as an independent regulatory entity;
- the national power system operator, Operador Nacional do Sistema Elétrico (ONS), responsible for controlling generation and transmission activities; and
- the wholesale electric energy market, Mercado Atacadista de Energia (MAE).

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\(^{393}\) Eletrobras, Brazil’s most important energy company, moreover, was transformed into a semi-public company in the context of company restructuring.
Within the new model, the expansion of the energy system was intended to be met through short-term price signals and contracting obligations. However, insufficient generation expansion was achieved, and, in 2001, with Brazil facing a major energy crisis, privatisation came to a standstill. At the time, sector reform was still far from complete, and many Brazilian electricity companies were still integrated. Similar to Argentina, public electricity companies in Brazil were largely vertically-integrated monopolies before privatisation. In the context of sector reform during the 1990s, the old regulatory model based on the concept of natural monopoly was replaced by a system based on free price formation, competition, and the separation of generation, transmission, distribution, and commercialisation activities. Electricity sector unbundling, however, was not taken as far as in Argentina. In contrast to Segba, Light was not vertically disintegrated, but remained an integrated company, operating in electricity distribution, transmission, and generation. Only in 2006, ten years after privatisation, was the company divided into different business units. As shown in Figure 15, Light was transformed into a corporate group with four subsidiaries: Light Energia S.A., responsible for generation, transmission, and retail of renewable energy; Light Serviços de Eletricidade S.A., committed to distribution; Light Esco Prestação de Serviços S.A., operating in energy retail, intermediation, representation, and consulting for captive and free customers; and Light Soluções em Eletricidade Ltda., acting in electric energy consulting for small, medium, and large scale enterprises.

**Figure 15: Restructuring of Light after Privatisation**

![Diagram](image)

**Source:** Author’s own compilation

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At the end of the 1990s, diverse companies were operating in the Brazilian electricity sector, some of them vertically integrated, others not.\footnote{See Mendonça, A. F. & Dahl, C. (1999), p. 80.}

In the aftermath of the 2001 crisis, the Câmara de Gestão da Crise de Energia Elétrica (Chamber of Management of the Electricity Crisis), was established and changes to the model applied, aiming at overcoming short-term supply problems. However, the model itself was not challenged under the Cardoso government.

Upon assuming power in 2003, the Lula government revised the electricity sector model and initiated a second round of electricity sector reforms to address the failures of the new model.\footnote{See Melo, E., Neves, E. M. de A. & Da Costa, A. M. (2009), p. 1f.} In contrast to Cardoso, Lula did not aim to privatise further federal electricity companies, but to attract investment to build new electricity generation plants.\footnote{Melo (2009) stresses that the main error of the new model for the electricity sector introduced under the Cardoso government was trying to apply a British-style model to the Brazilian context, which is inherently different due to its hydroelectric nature and interconnected system. A short-term Spot market, hence, cannot attract sufficient long-term investment in generation. Moreover, the restructuring process was carried out while privatisation was already underway. The process, therefore, lacked clarity for all participants.\footnote{Information based on an interview with Roberto d’Araujo on 26/3/09.} In addition, Mendonça and Dahl (1999) emphasise that the adopted tariff policy allowed distributors to keep a significant monopolistic rent.\footnote{Information based on several interviews held in Brazil in March 2009. Various interviewees also mentioned the rather chaotic nature of electricity sector reform in Brazil.} 

The following section provides more information on privatisation methods, prices, and payment forms, with focus on the distribution segment.

### 4.3.7. Privatisation Methods, Prices and Forms of Payment in Electricity Distribution

“with the extension of privatisation to public utilities and the participation of the states, revenues surged” (Baer, 2001)

Brazil opted to privatise public companies at public auctions, and, similar to Argentina, chose to offer company management to the highest bidders\footnote{Bidders presented one sealed envelope with the financial offer.} to maximise revenue and reduce fiscal deficits.\footnote{See Baer, W. (2001), p. 290.} In contrast to Argentina, the direct sale of assets was chosen as
the preferred method for privatising distribution companies.\textsuperscript{406} Competition for the market was, however, lower than expected.\textsuperscript{407} Light received only one offer and was sold for the stipulated minimum price.\textsuperscript{408}

Table 29 outlines proceeds generated by privatisation in Brazil between 1990 and January 2003. The table shows that proceeds amounting to US$ 30.5 billion were generated, and US$ 9.2 billion in debt was transferred to the private sector in the period under consideration. Privatisation proceeds generated from the sale of electricity companies amounted to US$ 3,908.2, and debts to the amount of US$ 1,669.9 were transferred to private electricity companies.\textsuperscript{409}

**Table 29**: Proceeds Generated by Privatisation in Brazil, 1990-2003 (in US$ Million)

<table>
<thead>
<tr>
<th>Business Sector</th>
<th>No. of Privatisations</th>
<th>Sale Revenue</th>
<th>Debt Transferred</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>8</td>
<td>5,561.5</td>
<td>2,626.3</td>
<td>8,187.8</td>
</tr>
<tr>
<td>Petrochemical</td>
<td>27</td>
<td>2,698.5</td>
<td>1,002.7</td>
<td>3,701.2</td>
</tr>
<tr>
<td>Fertilisers</td>
<td>5</td>
<td>418.2</td>
<td>75.3</td>
<td>493.5</td>
</tr>
<tr>
<td>Electricity</td>
<td>3</td>
<td>3,908.2</td>
<td>1,669.9</td>
<td>5,578.1</td>
</tr>
<tr>
<td>Rail Transport</td>
<td>7</td>
<td>1,696.9</td>
<td>-</td>
<td>1,696.9</td>
</tr>
<tr>
<td>Mining</td>
<td>2</td>
<td>5,201.8</td>
<td>3,558.8</td>
<td>8,760.6</td>
</tr>
<tr>
<td>Ports</td>
<td>7</td>
<td>420.8</td>
<td>-</td>
<td>420.8</td>
</tr>
<tr>
<td>Financial</td>
<td>4</td>
<td>4,190.6</td>
<td>-</td>
<td>4,190.6</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>1</td>
<td>4,840.3</td>
<td>-</td>
<td>4,840.3</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>393.6</td>
<td>268.4</td>
<td>662.0</td>
</tr>
<tr>
<td>Subtotal</td>
<td>-</td>
<td>29,330.4</td>
<td>9,201.4</td>
<td>38,531.8</td>
</tr>
<tr>
<td>Decree 1.068\textsuperscript{410}</td>
<td>-</td>
<td>1,150.7</td>
<td>-</td>
<td>1,150.7</td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>30,481.1</td>
<td>9,201.4</td>
<td>39,682.5</td>
</tr>
</tbody>
</table>

**Note**: The table refers to proceeds generated by privatisations under the PNAD. **Source**: BNDES (2003)

Table 30 gives privatisation proceeds generated by the sale of different electricity companies, among them Light, which raised US$ 2.711 billion.\textsuperscript{411} Proceeds generated by the sale of Brazilian state-owned electricity companies exceeded 15 billion dollars up to mid-1998.

\textsuperscript{407} Information based on an interview with Helder Queiroz Pinto Jr. on 25/3/09.
\textsuperscript{408} See IOS (2001), p. 28.
\textsuperscript{409} See BNDES (2003), p. 7f.
\textsuperscript{410} Decree 1.068 issued on March 2, 1994, established the inclusion of minority interests held by foundations, independent agencies, public companies, mixed-capital companies, and any other entities directly or indirectly controlled by the federal government in the PND. Between 1995 and 2003, 35 auctions of minority interests were held under the decree, implying proceeds to the amount of US$ 1,150.7 million.
\textsuperscript{411} The table does not depict the amount of debt transferred for each company, but, as shown in Table 26, the debt transferred in the context of electricity privatisation was also considerable.
Mendonça and Dahl (1999) stress that, in most cases, the private sector paid substantially over the minimum set by the government, and conclude that the acquisition prices of the distribution companies reflect the expectation for large gains with operational efficiency improvements.\(^{412}\)

**Table 30: Proceeds Generated by the Privatisation of Major Electricity Companies in Brazil**

<table>
<thead>
<tr>
<th>Company</th>
<th>Buyer</th>
<th>Date</th>
<th>Price paid in US$ Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escelsa AS(^a)</td>
<td>Iven / GTD</td>
<td>7/95</td>
<td>399</td>
</tr>
<tr>
<td>Light(^a)</td>
<td>EDF / AES/Houston</td>
<td>5/96</td>
<td>2,711</td>
</tr>
<tr>
<td>CERJ(^a)</td>
<td>ENERSIS / Chilectra/ENDESA/EDP</td>
<td>11/96</td>
<td>451</td>
</tr>
<tr>
<td>Coelba(^a)</td>
<td>Iberdrola</td>
<td>7/97</td>
<td>1,601</td>
</tr>
<tr>
<td>UHE Cachoeira Dourada (CDSA)(^b)</td>
<td>Endesa</td>
<td>9/97</td>
<td>711</td>
</tr>
<tr>
<td>CEEE (NO/NE)(^c)</td>
<td>VBC</td>
<td>10/97</td>
<td>1,482</td>
</tr>
<tr>
<td>CEEE (CO)(^c)</td>
<td>AES</td>
<td>10/97</td>
<td>1,368</td>
</tr>
<tr>
<td>CPFL(^a)</td>
<td>VBC</td>
<td>11/97</td>
<td>2,716</td>
</tr>
<tr>
<td>ENERSUL(^2)</td>
<td>ESCELSA</td>
<td>11/97</td>
<td>563</td>
</tr>
<tr>
<td>CEMAT(^a)</td>
<td>Paranapanema / Inepar</td>
<td>11/97</td>
<td>352</td>
</tr>
<tr>
<td>COELCE(^c)</td>
<td>Endesa / CERJ</td>
<td>4/98</td>
<td>868</td>
</tr>
<tr>
<td>Eletropaulo Metropolitana—SP(^a)</td>
<td>Light / AES/Houston</td>
<td>4/98</td>
<td>1,777</td>
</tr>
<tr>
<td>Elektro—SP(^a)</td>
<td>Enron</td>
<td>7/98</td>
<td>1,273</td>
</tr>
<tr>
<td>EBE Bandeirante—SP(^a)</td>
<td>EDP / CPFL</td>
<td>9/98</td>
<td>860</td>
</tr>
<tr>
<td>Gerasul(^c)</td>
<td>Tractbel</td>
<td>9/98</td>
<td>800</td>
</tr>
</tbody>
</table>

\(^a\) Distribution companies
\(^b\) Hydroelectric unit
\(^c\) Federal generation company

**Source:** Mendonça & Dahl (1999)

The next section briefly introduces the issue of corruption in the context of privatisation in Brazil.

### 4.3.8. Corruption and Illegal Processes in the Context of Brazilian Privatisation

Corruption played a significant role in the Brazilian privatisation process since, shortly after its initiation by the Collor government, progress came to a halt due to the displacement of the government following corruption charges. In 1992, Paulo Cesar Farias, the campaign treasurer of then president Collor, was accused of running a multimillion-dollar influence-peddling ring on Collor’s behalf. In order to investigate the charges, a commission was set up by the Brazilian Congress. Various newspapers reported massive high-level corruption within

the Collor administration, including that Farias extorted over US$ 55 million from firms in exchange for favourable treatment by the government and that at least US$ 8 million was passed on directly to Collor. As a consequence, Collor stepped down at the end of the year, one day before he was to be impeached.\footnote{See Stapenhurst, R. (2000), p. 3.}

The government of Cardoso, moreover, was accused of several irregularities in the electricity company privatisation process, including in the financing by the BNDES in the sale of Eletropaulo to the US company AES in 1998, as well as in the contracts of Lightgás during the exchange crisis at the end of the 1990s. Trials against 10 directors of the BNDES and BNDESPar, accused of financial fraud and poor management, were initiated as a consequence.\footnote{See Tribunal Regional Federal da 2ª Região (2010).}

The cases detected are probably just the tip of the iceberg; huge sums were transferred in the context of electricity sector privatisation in Brazil, providing major opportunities for corruption.\footnote{Information based on various interviews held in Brazil in March 2009.}

The following section outlines the ownership structures of privatised electricity companies in Brazil, focussing on distributors.

\section*{4.3.9. Ownership Structures of Brazilian Electricity Distribution Companies}

Whereas the participation of foreign investors in Brazilian privatisation was still small during the first half of the 1990s, it increased rapidly from the mid-1990s onwards, from 1\% in 1994 to 42.3\% by the end of 1998. However, the domestic private sector still dominated the process of the 1990s. Just like in Argentina, most bidders participating in the auctions were either foreign or the largest private domestic firms. Moreover, there was a tendency for mergers and acquisitions throughout the 1990s, leading to a higher capital concentration. Strategic alliances were formed by domestic firms to bid for larger public companies. In the energy sector, for instance, Group Votorantim, a major cement producer, Camargo Correia, a construction firm, and Brandeco, Brazil’s largest private domestic bank, participated jointly in privatisations. In addition, private Brazilian groups aligned with foreign investors in various infrastructure sectors, including electricity.\footnote{See Baer, W. (2001), p. 289ff.}
As depicted by Table 31, foreign companies, among the main shareholders of the privatised companies, dominated an important part of the electricity sector. Important European (Spanish, French, Belgian, and Portuguese), US, and Chilean firms participated in the auctions of Brazilian electricity companies during the 1990s.

**Table 31: Composition of Electricity Company Consortia in Brazil, 2000**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Date of Sale</th>
<th>Main Shareholders</th>
<th>Market Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distribution in the South, Southeast, and Central West</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escelsa / ES</td>
<td>12/7/95</td>
<td>Iven (Brazil)*, GTD (Brazil)</td>
<td>2.2</td>
</tr>
<tr>
<td>Light / RJ</td>
<td>21/5/96</td>
<td>EdF (Franca), Aes (USA), Houston (USA)</td>
<td>9.0</td>
</tr>
<tr>
<td>Cerj / RJ</td>
<td>20/11/96</td>
<td>Endesa (Chile), Chilectra (Chile), Endesa (Spain), EdP (Portugal)</td>
<td>2.4</td>
</tr>
<tr>
<td>RGE / RS</td>
<td>21/10/97</td>
<td>VBC Energia (Brazil), CEA (USA)</td>
<td>1.9</td>
</tr>
<tr>
<td>AES Sul / RS</td>
<td>21/10/97</td>
<td>AES (USA)</td>
<td>2.4</td>
</tr>
<tr>
<td>CPFL / SP</td>
<td>1/11/97</td>
<td>VBC Energia (Brazil)</td>
<td>7.1</td>
</tr>
<tr>
<td>Enersul / MS</td>
<td>19/11/97</td>
<td>Iven (Brazil)*, GTD (Brazil)</td>
<td>1.0</td>
</tr>
<tr>
<td>Cemat / MT</td>
<td>27/11/97</td>
<td>Grupo Rede Energia (Brazil)</td>
<td>0.95</td>
</tr>
<tr>
<td>AES Eletropaulo</td>
<td>15/4/98</td>
<td>EdF (France), AES and Houston (USA)</td>
<td>13.7</td>
</tr>
<tr>
<td>Elektro / SP</td>
<td>16/7/98</td>
<td>Enron (USA)</td>
<td>4.1</td>
</tr>
<tr>
<td>Bandeirante / SP</td>
<td>17/9/98</td>
<td>VBC Energia (Brazil), EdP (Portugal)</td>
<td>9.2</td>
</tr>
<tr>
<td><strong>Distribution in the North and Northeast</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coelba / BA</td>
<td>1/7/96</td>
<td>Iberdrola (Spain), Previ(^{417}) (Brazil)</td>
<td>3.3</td>
</tr>
<tr>
<td>Energipe / SE</td>
<td>1/12/97</td>
<td>Cataguases (Brazil), CMS (USA)</td>
<td>0.6</td>
</tr>
<tr>
<td>Cosern / RN</td>
<td>1/12/97</td>
<td>Iberdrola (Spain), Previ (Brazil)</td>
<td>0.9</td>
</tr>
<tr>
<td>Coelce / CE</td>
<td>2/4/98</td>
<td>Endesa (Chile), Chilectra (Chile), Endesa (Spain), EdP (Portugal)</td>
<td>1.9</td>
</tr>
<tr>
<td>Celpa / PA</td>
<td>1/7/98</td>
<td>Grupo Rede Energia (Brazil)</td>
<td>1.2</td>
</tr>
<tr>
<td>Celpe / PE</td>
<td>17/2/00</td>
<td>Iberdrola (Spain), Previ (Brazil)</td>
<td>2.4</td>
</tr>
<tr>
<td>Cemar / MA</td>
<td>15/6/00</td>
<td>Pennsylvania (USA)</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Generation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cachoeira Dourada / GO</td>
<td>5/9/96</td>
<td>Endesa (Chile)</td>
<td>0.03</td>
</tr>
<tr>
<td>Geraisul / SC</td>
<td>15/9/98</td>
<td>Tractebel (Belgium)</td>
<td>6.8</td>
</tr>
<tr>
<td>Paranapanema / SP</td>
<td>28/7/99</td>
<td>Duke Energy (USA)</td>
<td>4.9</td>
</tr>
<tr>
<td>Tietê / SP</td>
<td>27/10/99</td>
<td>AES (USA)</td>
<td>5.6</td>
</tr>
</tbody>
</table>

* In 1999, EdP from Portugal acquired 73% of the Iven Group.

**Source:** PSI (2006)

Foreign companies also acquired important shareholdings in Light. Whereas 82% of its pre-privatisation shares were held by Eletrobras\(^{418}\), this number decreased to 32.5%.

\(^{417}\) Caixa de Previdência dos Funcionários do Banco do Brasil (Previ)

\(^{418}\) The remaining shares were largely held by the public (0.6% were held by municipalities). See Rosa, L. P. et al. (2001), p. 83.
thereafter.\textsuperscript{419} Figure 16 depicts the post-privatisation shareholder structure of Light; initially 65.8\% of its capital was sold.\textsuperscript{420}

**Figure 16**: Composition of the Consortium of Light after Privatisation, 1996

![Composition of the Consortium of Light after Privatisation, 1996](image)

Source: IOS (2001)

Company management was taken over by three foreign groups, EdF (France), AES (USA), and Houston (USA), each holding 11.35\% of the shares, plus a major consumer of Light, CSN, holding 7.25\% of shares. In addition, BNDESPar acquired 9.14\%, while 10\% of shares were reserved for company employees, who could acquire them at a 70\% discount.\textsuperscript{421} The shared management caused serious difficulties, which can be explained partly by differences in management objectives between EdF and the US-American companies (AES and Houston), and CSN with respect to speed on the trajectory of company expansion. As stressed by Rosa et al. (2001), the post-privatisation shared management of Light was characterised overall by “different strategic objectives, administrative cultures, and no synergy at all among them.”\textsuperscript{422} In subsequent years, various changes in shareholder structure took place, with EdF becoming controlling shareholder in 2000.\textsuperscript{423}

Today, the company’s main shareholders are the controlling group, *Companhia Energética de Minas Gerais*, composed of CEMIG\textsuperscript{424}, Andrade Gutierrez Concessões, Luce

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\textsuperscript{419} See IOS (2001), p. 27f.
\textsuperscript{420} See BNDES (2013).
\textsuperscript{421} See IOS (2001), p. 27f. The option of acquiring shares at a reduced price was only granted to employees at the beginning of the process of electricity sector privatisation.
\textsuperscript{422} Rosa, L. P. et al. (2001a), p. 123.
\textsuperscript{423} See IOS (2001), p. 28.
\textsuperscript{424} Companhia Energética de Minas Gerais is a public company owned by the state of Minas Gerais.
In summary, like Argentina, Brazil initiated an important privatisation programme in the early 1990s in the context of a severe economic crisis and a favourable international and national climate towards privatisation. However, in contrast to that of the Argentine government of Menem, the privatisation programme launched under Collor was short lived, with privatisation not reaching the same level as in Argentina. Only in 1995, under the ambitious programme launched by the Cardoso government, was privatisation broadened to include the infrastructure sector, gaining in speed. In this context, important Brazilian electricity companies were also privatised. Nevertheless, this was performed mainly in the electricity distribution segment. The privatisation programme, moreover, was slowed down by the spillover effects of the Asian crisis and came to a halt due to a major energy crisis in 2001, before it was completed. Still, numerous privatisations in electricity distribution had already been carried out by this time, initiated at national level in 1995 and followed by many of the country’s provinces. Similar to Argentina, public calls for tender were initiated while the regulatory framework was still being drawn up. Foreign investors participated to a great extent in the competitive bidding processes and took over electricity service provision of many Brazilian distribution companies, with important consequences for the Brazilian population and company employees.

Some interim conclusions are next drawn, comparing the findings for Argentina and Brazil presented in this chapter.

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4.4. Interim Conclusions

In the context of a worldwide trend of liberalisation policies, most Latin American countries, including Argentina and Brazil, started to open up their economies to international trade and adopted deregulation, liberalisation, and privatisation policies from the late 1970s and early 1980s onwards. The 1980s were characterised by high economic instability in Latin America, resulting in a severe economic crisis at the end of the decade and hyperinflation in Argentina and Brazil. Table 32 below summarises some of the two countries’ main similarities in the economic and political conditions under which privatisation was undertaken.

Table 32: Similar Economic and Political Backgrounds of Privatisation in Argentina and Brazil

<table>
<thead>
<tr>
<th>Argentina</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import-substituting industrialisation strategy from the 1930s to the 1980s.</td>
<td>Import-substituting industrialisation strategy from the 1930s to the 1980s.</td>
</tr>
<tr>
<td>Democratisation process in the 1980s.</td>
<td>Democratisation process in the 1980s.</td>
</tr>
<tr>
<td>Period of economic stagnation, high rates of inflation and economic crisis during the 1980s; increasing external debt; “lost decade.”</td>
<td>Period of economic stagnation, high rates of inflation and economic crisis during the 1980s; increasing external debt; “lost decade.”</td>
</tr>
<tr>
<td>Period of severe hyperinflation and economic crisis at the end of the 1980s; interruption of debt payments.</td>
<td>Period of severe hyperinflation and economic crisis at the end of the 1980s; debt moratorium.</td>
</tr>
<tr>
<td>Implementation of liberalisation and privatisation policies from the late 1970s onwards.</td>
<td>Implementation of liberalisation and privatisation policies from the early 1980s onwards.</td>
</tr>
<tr>
<td>Expansion of liberalisation and privatisation policies during the 1990s.</td>
<td>Expansion of liberalisation and privatisation policies during the 1990s.</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation

The severity of the economic crisis of the late 1980s caused the Brazilian and Argentine population to demand changes. Since the performance of public companies had already deteriorated considerably in both countries with the increase in their external debts, privatisation seemed a welcome alternative. Thus, when privatisation programmes were launched in Argentina and Brazil during the early 1990s, the governments faced no strong political opposition, and the climate was favourable in both countries.426 Whilst some unions opposed privatisation—comparatively more strongly in Brazil than in Argentina—several also collaborated with governments, and privatisation in general could not be prevented.

As depicted in Table 33, the official reasons for privatisation in Argentina and Brazil were quite similar. In both countries, external debt reduction was crucial given the economic crisis. Moreover, the privatisation ideology had spread to Latin America. Efficiency and modernisation arguments as well as the idea of introducing competition were, therefore, also of vital importance, and it was hoped that privatisation would attract new investment. As mentioned above, the pressure from international financial institutions to introduce liberalisation and privatisation policies was also considerable.

**Table 33: Official Reasons for Privatisation in Argentina and Brazil**

<table>
<thead>
<tr>
<th>Official Reasons for Privatisation in Argentina</th>
<th>Official Reasons for Privatisation in Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing fiscal deficit.</td>
<td>Realigning the strategic position of the state in the economy.</td>
</tr>
<tr>
<td>Reducing external debt.</td>
<td>Contributing to the reduction of public debt.</td>
</tr>
<tr>
<td>Encouraging investment in order to improve public services and modernise national industries.</td>
<td>Permitting the entry of new investment in economic activities of the companies to be privatised.</td>
</tr>
<tr>
<td>Providing additional funds to the public sector for investment with a high social rate of return.</td>
<td>Contributing to the modernisation of the countries’ industries.</td>
</tr>
<tr>
<td>Increasing companies’ productive efficiency by means of reducing costs, corporate pressures by the different factors of production, and political interference.</td>
<td>Permitting the concentration of efforts and resources of the federal public administration on activities, for which the involvement of the state is fundamental for the achievement of national priorities.</td>
</tr>
<tr>
<td></td>
<td>Contributing to the strengthening of the capital market.</td>
</tr>
</tbody>
</table>

**Source:** Author’s own compilation, based on Saravia (1996)

Whereas there were no major differences in the reasons for privatisation in the two countries, there were some important divergences in the ways in which they were translated into institutional practice. The adoption of privatisation policies involved four successive stages in Brazil, in comparison to only two in Argentina. Hence, the paradigm shift towards privatisation in Brazil took significantly longer. The first Argentine government to launch a major programme was that of Menem, which had a parliamentary majority and faced no major difficulties in implementing large-scale privatisation within a short timeframe. Moreover, Menem was re-elected and could thus continue and extend the programme during his second term. The government of Collor, the first Brazilian administration to initiate a large-scale privatisation programme, was only in office for 30 months. Important privatisations were undertaken during this time and the subsequent administration of Itamar Franco, but did not reach Argentine dimensions. It was only when Cardoso assumed the presidency in 1995 that privatisation in Brazil was broadened to include public utilities and the country’s federative units. Table 34 below contrasts Argentine and Brazilian second-order policy changes towards privatisation before a paradigm shift was secured.
Table 34: Cycles of Second-Order Policy Change before a Paradigm Shift towards Privatisation Was Secured in Argentina and Brazil

<table>
<thead>
<tr>
<th>Cycles of Second-Order Policy Change in Argentina</th>
<th>Cycles of Second-Order Policy Change in Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A first ambiguous move towards privatisation during Argentina’s last military government under the administration of the Minister of Economic Affairs, Martínez de Hoz.</td>
<td>1. A first move towards privatisation at the end of Brazil’s last military regime under the government of Figueiredo.</td>
</tr>
<tr>
<td>2. A further tentative move towards privatisation on the part of the democratic UCR government under the presidency of Alfonsín.</td>
<td>2. A halt in the progress of privatisation policies in Brazil during the civilian government of Sarney.</td>
</tr>
<tr>
<td>3. A stronger progressive movement towards privatisation under the short-lived administration of Collor.</td>
<td></td>
</tr>
<tr>
<td>4. A further, ambiguous move towards privatisation under the government of Franco.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s own compilation, based on Hay’s (2001) theoretical model of “punctuated evolution”

Table 35, moreover, shows that whereas privatisation proceeds were achieved mainly in the early 1990s in Argentina, they were highest in the second half of the 1990s in Brazil.

Table 35: Privatisation Proceeds in Argentina and Brazil, 1988-1997 (in Constant 1990 US$ Million)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Argentina</strong></td>
<td>–</td>
<td>–</td>
<td>2,139</td>
<td>1,627</td>
<td>2,204</td>
<td>3,401</td>
<td>1,059</td>
<td>941</td>
<td>448</td>
<td>1,085</td>
<td>14,904</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>Brazil</strong></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1,662</td>
<td>2,495</td>
<td>2,445</td>
<td>1,470</td>
<td>610</td>
<td>3,378</td>
<td>8,143</td>
<td>20,203</td>
<td>5.0</td>
</tr>
</tbody>
</table>

| a Figures based on estimates until September 1997 |
| b As a proportion of GDP for each country in constant 1990 US dollars |

Source: Carneiro & Rocha (2000)

Table 35 also reveals that, even though privatisations in Brazil were approached at a slower pace, proceeds throughout the 1990s in Brazil were considerably higher in absolute terms than in Argentina, due to Brazil’s larger market. However, as a proportion of GDP, privatisation proceeds in Brazil were only half those of Argentina.
Privatisations under Menem and Cardoso

Comparing the privatisation process of the infrastructure sector under the governments of Menem in Argentina and Cardoso in Brazil, certain similarities are striking. Electricity privatisation was launched in both countries together with other infrastructure sector privatisations. Infrastructure privatisation in Argentina was initiated under the first government of Menem and extended during his second term in office. Similarly, in Brazil, these began during the first government of Cardoso and broadened during his second term. Both the Menem and Cardoso governments faced high inflation rates, increasing external debt, and economic crisis when taking office, and were, hence, both under pressure to address these economic difficulties. Both had a parliamentary majority and launched liberalisation and privatisation programmes without major difficulties. The privatisation process was non-participatory in both cases, and each government successfully reduced inflation by introducing a new currency pegged to the US dollar. Their first term in office was regarded as successful overall by the population with respect to the applied economic policies, and both leaders were re-elected for a second term, after their respective governments had amended the constitution to allow for a presidential re-election. In the end of the 1990s and early 2000s, the two governments, moreover, were again confronted with high rates of inflation and economic crises. These similarities are summarised by Table 36 below.

Table 36: Similarities between the Administrations of Menem and Cardoso

<table>
<thead>
<tr>
<th>Government of Menem</th>
<th>Government of Cardoso</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had a parliamentary majority.</td>
<td>Had a parliamentary majority.</td>
</tr>
<tr>
<td>Launched liberalisation and privatisation policies without major problems.</td>
<td>Launched liberalisation and privatisation policies without major problems.</td>
</tr>
<tr>
<td>Introduced a new currency pegged to the US dollar and successfully reduced inflation.</td>
<td>Introduced a new currency pegged to the US dollar and successfully reduced inflation.</td>
</tr>
<tr>
<td>Was re-elected for a second term and thus able to broaden privatisation policies.</td>
<td>Was re-elected for a second term and thus able to broaden privatisation policies.</td>
</tr>
<tr>
<td>Faced less favourable economic indicators and increasing opposition during second presidency.</td>
<td>Faced less favourable economic indicators and increasing opposition during second presidency.</td>
</tr>
<tr>
<td>The second term in office marked the way to another economic crisis.</td>
<td>The second term in office marked the way to another economic crisis.</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation
Differences and Similarities in the Implementation of Electricity Sector Privatisations in Argentina and Brazil during the 1990s

The process of electricity sector privatisation was started in Argentina and Brazil at federal level with major distribution and generation companies and followed by their federative units. Both Argentine provinces and Brazilian states faced pressure by their respective federal government to follow its privatisation path.

However, whereas privatisation of the electricity sector was completed at federal level, with all major companies being transferred to private hands during the presidency of Menem in Argentina, the same process in Brazil was impeded by the Asian crisis, faced increasing political opposition, and was interrupted by major energy shortages. Hence, many important federal-level Brazilian electricity companies were still in federal hands at the end of Cardoso’s second term in office. Of the countries’ four major electricity generation companies, only one was restructured and sold during the 1990s; privatisation in Brazil’s electricity sector concentrated largely on the distribution segment. Table 37 below depicts private participation in the Argentine and Brazilian electricity sectors as of 2001. The table clearly shows that privatisation during the 1990s in Argentina led to a large share of private participation in all three supply-chain segments in comparison to Brazil. While the private share in generation and transmission in Argentina was twice and ten times the respective share in Brazil, for distribution, it was only 10 percentage points higher.\(^{427}\)

**Table 37: Private Sector Participation in the Argentine and Brazilian Electricity Sectors, 2001**

<table>
<thead>
<tr>
<th></th>
<th>Generation</th>
<th>Transmission</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>60%</td>
<td>100%</td>
<td>70%</td>
</tr>
<tr>
<td>Brazil</td>
<td>30%</td>
<td>10%</td>
<td>60%</td>
</tr>
</tbody>
</table>

*Note:* Figures include electricity companies at the federal level and at the level of the countries’ federative units.

*Source:* Millán, Lora & Micco (2001)

In addition, there were major differences in pre- and post-privatisation institutional settings in the two countries’ electricity sectors, as well as in the chosen methods of privatisation. Table 38 depicts similarities and differences in the translation of privatisation policies into institutional practice in the Argentine and Brazilian electricity sectors during the 1990s.

### Table 38: Similarities and Differences in the Implementation of Electricity Sector Privatisations in Argentina and Brazil, 1990s

<table>
<thead>
<tr>
<th></th>
<th>Argentina</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main source of electricity generation</td>
<td>Natural gas</td>
<td>Hydroelectric power</td>
</tr>
<tr>
<td>Role models for electricity sector privatisation</td>
<td>British, Chilean</td>
<td>British</td>
</tr>
<tr>
<td>Year of first privatisation in the electricity sector</td>
<td>1992</td>
<td>1995</td>
</tr>
<tr>
<td>First major electricity company to be privatised</td>
<td>Segba</td>
<td>Escelsa</td>
</tr>
<tr>
<td>Segments in which privatisation was advanced</td>
<td>Generation, transmission, and distribution</td>
<td>Distribution</td>
</tr>
<tr>
<td>Privatisation at the federal level?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Privatisation at the level of the country’s federative units?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Level at which privatisation was initiated</td>
<td>Federal</td>
<td>Federal</td>
</tr>
<tr>
<td>New regulatory agency established?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Year in which the regulatory agency started working</td>
<td>1993</td>
<td>1996</td>
</tr>
<tr>
<td>Change in ownership of distribution companies?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Change in management from public to private?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Preferred method of transferring company management in distribution</td>
<td>Award of concession contract</td>
<td>Direct sale of assets at public auction</td>
</tr>
<tr>
<td>Competitive international bidding process?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Source:** Author’s own compilation

As illustrated by the table, privatisation was initiated three years later in Brazil than in Argentina. In both countries, the regulatory framework was established while privatisation was already underway. The newly established regulatory agencies, ENRE and ANEEL, only started working in the year after the process had begun. While concession contracts were the preferred method of management transfer from the public to the private sector for distribution companies in Argentina, electricity firms in Brazil, including distribution companies, were offered for sale at public auction. Accordingly, there were also similarities and differences in the privatisation of the selected company cases, Segba and Light. These are summarised in Table 39. Both were of federal jurisdiction and among the first electricity companies to be privatised. The privatisation of Segba was carried out at the end of 1992, after the company had been separated into seven entities, according to sector activity. The privatisation of Light was undertaken a few years later, in May 1996. In contrast to Segba, Light remained an integrated company.
<table>
<thead>
<tr>
<th></th>
<th>Segba</th>
<th>Light</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicable jurisdiction</td>
<td>Federal State</td>
<td>Federal State</td>
</tr>
<tr>
<td>Date of privatisation</td>
<td>Edesur: 1/9/92; Edenor: 10/9/92; Edelap: 22/12/92</td>
<td>21/5/96</td>
</tr>
<tr>
<td>Change in company ownership?</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Change in management from public to private?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Method of transferring company management</td>
<td>Award of Concession Contracts for 95 Years</td>
<td>Direct Sale of Assets at Public Auction</td>
</tr>
<tr>
<td>Competitive international bidding process?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Award criterion</td>
<td>Best Proposal in Financial Terms</td>
<td>Best Proposal in Financial Terms</td>
</tr>
<tr>
<td>Unbundling of the different stages of production before privatisation?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>% of capital privatised initially</td>
<td>51.00%</td>
<td>65.80%</td>
</tr>
<tr>
<td>Post-privatisation shareholder structure</td>
<td><strong>Edesur</strong>&lt;br&gt;Pérez Companc 19.60%&lt;br&gt;Chilelectra (Chile) 26.50%&lt;br&gt;Enersis (Chile) 32.70%&lt;br&gt;Endesa (Chile) 0.50%&lt;br&gt;Chispa (Chile) 2.70%&lt;br&gt;Los Almendros (Chile) 1.20%&lt;br&gt;Luz y Fuerza (Brazil) 1.20%&lt;br&gt;Elesur (Chile) 0.60%&lt;br&gt;Energy Power (USA) 5.10%&lt;br&gt;Employees 10.00%</td>
<td><strong>Light</strong>&lt;br&gt;EdF (FRA) 11.35%&lt;br&gt;AES (USA) 11.35%&lt;br&gt;Houston (USA) 11.35%&lt;br&gt;CSN 7.25%&lt;br&gt;BNDESpar 9.14%&lt;br&gt;Eletrobras 32.50%&lt;br&gt;Employees 10.00%&lt;br&gt;GTD 1.42%&lt;br&gt;Others 5.65%</td>
</tr>
</tbody>
</table>

**Source:** Author’s own compilation, based on Azpiazu, Bonofiglio & Nahón (2008) for Segba and IOS (2001) for Light

The award criterion for both companies was the best offer in financial terms. International invitations for tender were launched in both cases. Whereas 95-year concession contracts were granted for the distribution units of Segba, Light was sold at public auction. 51% of the capital of the succeeding companies of Segba was privatised at the time, and 65.8% of the capital of Light. Comparing the post-privatisation shareholder structure of the
distributive units of Segba and Light, the important involvement of foreign companies is striking. European and US companies participated in both cases; the French company, EdF, and the US-company, Houston, were among the major shareholders of Edenor and Light and of Edelap and Light, respectively. Shareholder structures were, overall, quite diverse in all cases. Moreover, employees held 10% of the shares in each case. It is also interesting to see that the participation of the federal state remained important in the case of Light, with Eletrobras holding 32.5% and BNDESpar holding 9.14% of the shares. In the cases of Edenor, Edesur, and Edelap, no public Argentine company is among the main shareholders.

In summary, this chapter has provided a contextual analysis of the privatisation processes in Argentina and Brazil and assessed the relative importance of the various institutional and agential factors involved in the emergence of a privatisation paradigm in the two countries by applying Hay’s ideational institutionalist theoretical schema, thus giving insights into why privatisation policies were introduced in Argentina and Brazil. Moreover, the chapter has also investigated how privatisation policies were translated into institutional practices, focussing on the electricity sector and the two company cases, Segba and Light.

Comparing the different paths, referring to the processes as a whole, and starting at the end of the two countries’ last military dictatorships, the Brazilian and Argentine privatisation processes show important differences. The Brazilian process involved more second order policy changes before the paradigm shift towards privatisation was secured; more governments were involved, making the process comparatively slower than in Argentina. Brazil’s last military dictatorship lasted two years longer than Argentina’s; major changes in economic policy, including the introduction of liberalisation and privatisation policies were, hence, launched with a certain delay and less consistency in comparison to Argentina. When the public service privatisation process in Brazil was finally fully underway, in the second half of the 1990s, the country suffered from spillover effects of the Asian crisis, and the process slowed down as a consequence. Moreover, major federal level privatisation came to a halt with the election of Lula da Silva in 2002. The process was, hence, interrupted before its completion, and important Brazilian infrastructure companies stayed in federal hands as a consequence. During the Brazilian privatisation process, there was also comparatively more resistance on the part of unions than in Argentina. The implementation of privatisation policies in Argentina was facilitated by the fact that the Menem government had a strong parliamentary base and was aligned with the country’s union confederation, CGT. Most important privatisations were undertaken during Menem’s first term in office. Within a short
period of time, Argentina’s major federal level infrastructure companies were handed over from public to private hands.

However, if only the *processes* of electricity sector privatisation in Argentina and Brazil under the governments of Menem and Cardoso are compared, the similarities are striking. Privatisation was carried out at a rapid pace, starting before new regulatory frameworks were established. Public electricity companies were in a dilapidated state before privatisation, due to a lack of investment in the context of the 1980s debt crisis in both countries, and service quality had worsened considerably. The population, hence, had a favourable attitude towards privatisation, plus it was partly supported by unions and the political opposition. Privatisation was initiated at federal level with distribution companies and succeeded by privatisations in the Argentine provinces and Brazilian states. The most important differences between Argentine and Brazilian electricity sector privatisation processes relate to the timing of the application of these policies, electricity sector preconditions, and regulatory changes.

Since “regulation is a crucial institutional variable in privatisation” (Bortolotti, Fantini, and Siniscalco, 1998) and may at least partly explain differences in privatisation outcomes, the next chapter details the regulatory frameworks of the Argentine and Brazilian electricity sectors introduced during the 1990s.

Chapter 5. Regulatory Contexts in Argentina and Brazil—from an Entrepreneurial to a Regulatory State

“A new regulatory framework and a strong regulatory agency with a well-defined tariff policy should have preceded privatisation.” (Mendonça and Dahl, 1999)

This chapter assesses Argentina and Brazil’s regulatory contexts in order to gain further insights with respect to how the privatisation paradigm was translated into institutional practice. Defining institutions as formal rules and organisations, it aims at identifying the specific regulatory settings of the two countries. The first section provides an introduction to the new role of the government in the electricity sector. Section two assesses the regulatory background to privatisation in Argentina during the 1990s, beginning with the legislation which enabled the process, followed by that relating the new regulatory regime plus the responsibilities and functionality of the Argentine regulatory agency; labour regulation is also covered. Section three applies the same approach to Brazil, and section four draws interim conclusions.

5.1 Regulatory Changes in the Electricity Sector

“electricity power reform is a complex process” (Zhang, Parker, and Kirkpatrick, 2004)

The state has primary responsibility for delivering public services; even when these are outsourced, the state remains in charge. However, in the context of infrastructure sector reform and privatisation, the government’s role changes from managing the whole process of service provision towards policy making and regulation; the private sector assumes operation and investment responsibilities. As stressed by Hermann and Verhoest (2007): “In certain market segments, the loss of regulatory oversight [by the government] has been compensated for by increasing efforts to control outcome.” Whereas policy guidelines are usually formulated by the ministries responsible, regulatory tasks are often delegated to independent agencies. Figure 17 below depicts the new functions assumed by the government and private sector.

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429 Information based on interviews held in Argentina in the period 5/12/08 to 28/5/09.
Electricity sector restructuring usually starts with a statutory framework, including an Electricity Reform Act, and is followed by the introduction of competition, including company unbundling and the establishment of market institutions and regulators.\footnote{See Krause, M. (2002), p. 16f.}

According to Ogus (2001), the choice of a “good” regulatory system involves issues related to \textit{instruments or legal forms} and \textit{procedures or processes}. The former should be selected so as to achieve the desired regulatory objectives, including justification for intervention; the latter refer to the formulation and application of instruments, and involve aspects such as expertise, transparency, and accountability.\footnote{See Ogus, A. (2001), p. 2.} In network industries such as electricity distribution, regulation is of particular importance due to its natural monopolistic characteristics. The regulation of such monopolies requires very precise rules and poses several challenges. Due to its technical features, the electricity sector requires a high degree of coordination, since the electrical grid is an interdependent system, and supply must meet demand in real time. Two levels of technical coordination must be ensured by the new institutional design and regulation:

- system operation (short-term coordination), and
- system planning (long-term coordination).

In order to guarantee security and quality of supply, moreover, a certain centralisation of activity coordination is necessary. Furthermore, regulation should address two problems caused by the inelasticity of supply and demand in the sector:

- electricity power exchanges show volatile prices, particularly in hydroelectric systems,
important electricity providers have considerable market power, allowing for monopolistic rents.\textsuperscript{435}

Different instruments exist for different areas of regulation. Whereas \textit{economic regulation} is generally concerned with competitive issues, in the case of natural monopolies, it has to control prices and quality of products and services.\textsuperscript{436} \textit{Price regulation} is introduced to avoid monopolistic rents and price discrimination. It can be implemented by law or by contract. Implementation by law allows regulators a certain degree of flexibility within the legal framework, provided at the expense of planning security; implementation by contract, on the other hand, implies the procedure for price regulation, the period and mechanisms of adjustment being defined by concession contracts between the public granting authority and the concessionaire, reducing flexibility and raising planning security.\textsuperscript{437} Diverse price-setting mechanisms can be adopted for the various supply stages, aiming at obtaining an optimal price level. Whereas Argentina and Brazil opted for market prices\textsuperscript{438} in electricity generation, both countries introduced price caps\textsuperscript{439} for distribution. The tariff structures adopted further have to account for the costs of operation and new investments.\textsuperscript{440}

\textit{Quality regulation} involves the definition of standards related to the length and frequency of power cuts and voltage fluctuations. It further implies the monitoring of compliance with the defined standards and punishment for their violation.\textsuperscript{441} In order to guarantee supply quality, moreover, regulation of network industries has to provide incentives for both the short-run operation of existing networks and network extensions.\textsuperscript{442} The regulatory regime must ensure that sufficient investment is carried out and coordinate investment activities involving the planning and timing, as well as the financing, of infrastructure investment. Hence, investment objectives have to be specified, and meeting these objectives has to be guaranteed.

Figure 18 depicts the main issues involved in the economic regulation of the non-competitive electricity production stages (transmission and distribution).

\textsuperscript{436} See Ogus, A. (2001), pp. 5, 10.
\textsuperscript{438} Market prices here refer to those at which the retailer buys energy, passed on to consumers, adjusted by losses and a certain degree of smoothing.
\textsuperscript{439} Price caps were first introduced in the UK. Regulated prices, according to this price-setting scheme, are subject to a maximum rate of increase equal to that in the retail price index, less a factor X, accounting for technological improvements over time.
\textsuperscript{442} See Millán, J., Lora, E. & Micco, A. (2001), pp. 27, 34.
In addition to economic issues, public service regulation may also address social concerns related to consumer protection and establish a number of public service obligations to be met. For European postal services, for instance, a universal service obligation is imposed by legislation. Social regulation may also address issues such as health and safety or specify environmental policy objectives. Flecker and Hermann (2009) claim that public service regulation should focus on the protection of consumers and public sector workers, rather than merely on economic issues. The implementation of minimum standards for employment and working conditions, such as the introduction of a minimum wage, may contribute to this objective and help avoid the erosion of national employment regulation.\textsuperscript{443}

The main regulatory tasks—mostly defined by economic regulation—are usually delegated to agencies, and range from rule-setting to rule-monitoring and sanctioning. Regulatory agencies, hence, operate at the interface between legislative, administrative, and judicial authorities, and their efficiency depends on the given institutional structure. They are further required to be institutionally and financially independent of political and industry lobbying interests. The efficient functioning of these agencies depends on their competences as defined by law, cooperation with other public institutions, and sufficiency of financial and human resources. Regulators’ responsibilities, resources, and degrees of autonomy, however, vary from country to country.\textsuperscript{444}

5.2. The Regulatory Context of Privatisation in Argentina

The assessment of regulatory contexts of privatisation in Argentina starts with an introduction to the legislation which allowed for the implementation of privatisation policies. Numerous regulations exist, establishing requirements for the provision of public goods and delivery of public services in Argentina. Accordingly, a large amount of legislation was passed to enable the privatisation of public service companies. This section does not provide an exhaustive list of this legislation in Argentina, but aims to outline the most important items passed under the Menem government. Section two then summarises the main legislation relating to the new Argentine electricity sector regulatory regime and the electricity company, Segba, and its successors. Furthermore, the section assesses the role and functions of the regulatory agency, ENRE. Section three briefly introduces some of the main changes in national labour regulation during the 1990s in Argentina, focusing on employment contracts.

5.2.1. Legislation which Enabled the Implementation of Privatisation Policies in Argentina

As mentioned above, at the end of Argentina’s last military government, the national cabinet had already approved basic criteria and terms for privatisation policies. The Menem government, with the benefit of a parliamentary majority, then significantly amended the legislation on privatisation within a short period of time. The comprehensive reform of the economy the state introduced in the early 1990s led not only to a reduction in its size, but also a decrease in the state’s capacity to intervene and regulate. Shortly after the PJ government took office, two laws were passed, one on the reform of the state, the *Ley de Reforma del Estado* (*Law no. 23.696*), and one of economic emergency, the *Ley de Emergencia Económica* (*Law no. 23.697*). The former set out conditions for the privatisation of public companies. It authorised the executive to intervene in public companies, remove directors and administrations, change corporate structures, divide, and privatise them. Articles 8 and 9 stipulated that a public company had to be declared *subject to privatisation* by the National Executive Branch, the *Poder Ejecutivo Nacional* (PEN), as a prerequisite for privatisation, which then had to be approved by the Congress. Some public companies were already privatised.

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445 Law proposals were sent to congress within ten days of the new government taking office. See Duarte, M. (2001), p. 33.
declared subject to privatisation by Law no. 23.697 itself and listed in the appendix of the legislation. In order to coordinate the work of the PEN and Congress, a bicameral committee was created (Article 14), consisting of six senators and six deputies, elected by their respective bodies. It relied on the cooperation of the Court of Auditors and the Auditing Commission, in charge of controlling the entire process (Article 20). Moreover, Article 11 stated that the PEN should involve provincial governments in the process, in their respective area of influence. Article 13, further, established the ministry in whose jurisdiction the company concerned lay as the implementing authority.\footnote{See Saravia, E. (1996), p. 9.} In addition, Articles 21 to 40 introduced the Argentine Employee Stock Ownership Plan; Articles 41 to 45 dealt with employee protection and specified that job losses or negative impacts on employment were to be avoided in the context of any privatisation.\footnote{See Drolas, M. A. (2009), p. 6; Duarte, M. (2001), p. 33; legislative text.}

Law no. 23.697, however, passed within a month of Law no. 23.696, stipulated a recruitment freeze for public companies, facilitated the dismissal of public employees, and abolished public employee payment schemes, which were considered privileged. Moreover, the emergency law, inter alia, established the suspension of industrial promotion arrangements and cancelled the preferential treatment of national companies. It covered a wide range of subjects over 30 chapters, and was initially implemented for a period of 180 days, extended afterwards.\footnote{See Rapoport, M. (2005), p. 799; legislative text.}

Table 40 below summarises the main contents of the two aforementioned laws.

<p>| Table 40: Legal Frame for Privatisation in Argentina, 1990s |
|---------------------------------|-----------------|-------------------------------------------------|</p>
<table>
<thead>
<tr>
<th>Name of Legislation</th>
<th>Date of Enactment</th>
<th>Main Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law no. 23.696</td>
<td>17/8/89</td>
<td>Law on state reform. Established conditions for the privatisation of public companies.</td>
</tr>
<tr>
<td>Law no. 23.697</td>
<td>15/9/89</td>
<td>Law on economic emergency. Adoption of economic measures on the grounds of the state of emergency on a wide range of subjects.</td>
</tr>
</tbody>
</table>

\textbf{Note:} The legislation is available online on the website of the Ministry of Economics and Public Works, available at infoleg.mecon.gov.ar.

\textbf{Source:} Author’s own compilation based on diverse sources.

In addition to state reform and economic emergency legislation, the Menem government also passed several laws defining new regulatory frameworks for the different infrastructure sectors to be privatised. The next section provides details on this newly adopted regulatory framework in the Argentine electricity sector.
5.2.2. The Adoption of a New Regulatory Framework in the Argentine Electricity Sector

The electricity sector reform legislation was passed within a short period of time and introduced major changes to the traditional system of sector organisation. From the beginning, an unbundling of public monopolies according to sector activity was decided, following the British and Chilean models of electricity sector reform. Decree no. 643, on the reconversion of the Argentine electricity sector, from April 1991, established the separation of generation, transmission, and distribution in order to guarantee their efficient functioning (Article 1), the restructuring of national electricity companies (Article 2), and the reconversion of the electricity sector, to be started on January 1, 1993 (Article 3). The decree further stated the necessity of recreating a free-functioning market, and Article 4 set out the conditions for introducing wholesale and retail markets. Article 15 stipulated that the Energy Secretariat had four weeks to propose a regime for the new electricity sector regulatory frame. In addition, the Secretariat, based in the Ministry of Economics, was to be the implementing authority (Article 18). Article 16, moreover, laid down that Segba, AyE, and Hidronor were to be restructured and the privatisation of their different activities carried out as scheduled.\(^{450}\)

Resolution no. 38, passed two months later, set out the conditions for the creation of the *Mercado Eléctrico Mayorista* (MEM), a wholesale electricity market (Articles 1 to 6), company organisation (Articles 7 and 8), the creation of an agency responsible for energy dispatching (Articles 9 to 15), the system of commercialisation and pricing (Articles 16 to 26), a price stabilisation mechanism (Article 27), invoicing and collection procedures (Articles 28 to 31), and sanctions in the event of non-payment (Article 32). Article 8 further declared that the unbundling of electricity sector activities of Segba, AyE, and Hidronor had to be undertaken within 30 days.\(^{451}\)

On December 19, 1991, Law no. 24.065, on a new regime for the national electricity sector, the *Ley del Marco Regulatorio Eléctrico Nacional*, was enacted by the Argentine Congress, determining general sector policies and agents.\(^{452}\) Article 1 characterised electricity transmission and distribution as public services, and generation as of general interest. According to Article 3, the private provision of transmission and distribution was to be prioritised over government provision; only in the cases where no private providers exist should the state offer such services. Article 2 set out the different objectives for electricity

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\(^{450}\) See legislative text.

\(^{451}\) See legislative text.

\(^{452}\) Information from the website of the Ministry of Economics and Public Works, retrieved from infoleg.mecon.gov.ar.
supply, transmission, and distribution. Sector agents were defined by Article 4. ENRE was created by Article 54, which stipulated that the agency was to be established and ready to fulfil its specified functions within 60 days. The functions and powers of ENRE were listed in Article 56 and will be explained in the next section. Article 93, further, declared Segba, AyE, and Hidronor subject to privatisation and requested the bicameral committee to establish tendering procedures, evaluation, and the award of offers and privatisation contracts within a period of 30 days. Decree no. 1.192, issued in July 1992, further established the wholesale market administration company CAMMESA.

The main legislation for the new regulatory frame of the Argentine electricity sector and its contents are summarised by Table 41 below.

Table 41: New Legal Frame for Electricity Sector Regulation in Argentina

<table>
<thead>
<tr>
<th>Name of Legislation</th>
<th>Date of Enactment</th>
<th>Main Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decree no. 634</td>
<td>12/4/91</td>
<td>Decree on the reconversion of the electricity sector. Separation of generation, transmission, and distribution activities.</td>
</tr>
<tr>
<td>Resolution no. 38</td>
<td>19/7/91</td>
<td>Creation of the wholesale electricity market MEM.</td>
</tr>
<tr>
<td>Law no. 24.065</td>
<td>19/12/91</td>
<td>Law on a new regulatory framework for the electricity sector. Established basic guidelines for the creation of the regulatory agency for this sector, ENRE, electricity sector reform, and privatisation.</td>
</tr>
<tr>
<td>Decree no. 1.192</td>
<td>10/7/92</td>
<td>Creation of a company to administer the wholesale electricity market, CAMMESA.</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation, based on information from the website of the Ministry of Economics and Public Works, available at infoleg.mecon.gov.ar.

The table clearly reveals the short time period in which the most important relevant legislation was passed; Azpiazu and Schorr (2010) refer to the “institutional shock” pushed forward by the Menem government. However, although institutional legislation was passed quickly, the new regulatory framework was not yet in place at the launch of the first electricity sector privatisations. The rapid pace of the Argentine process caused a similar situation in other infrastructure industries; only in the case of water and sewerage services were the regulatory framework and agency established at the time of privatisation.

In the following section, the legal framework for Segba and Edenor, Edesur, and Edelap is presented, focussing on company foundation, restructuring, and privatisation.

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453 See legislative text.
Legal Frame for Segba and Edenor, Edesur, and Edelap

The Argentine electricity company, Segba, was created as a public electricity company by Decree no. 11.950 from December 30, 1958, in the context of electricity sector expansion and the formation of major public companies in the aftermath of the Second World War. Segba was an integrated company, operating in electricity generation and distribution.

By means of Decree no. 1.374, from July 20, 1990, the Menem government declared Segba, AyE, and Hidronor subject to economic emergency (Article 1) and privatisation (Article 9). Decree no. 2.074, passed on October 3, 1990, announced concessions to be granted for the distribution and commercialisation activities of Segba by means of tendering procedures (Article 2). Article 2 further stated that international and national calls for public bids were to be undertaken within 180 days. Only one month later, Decree no. 2.408 introduced time schedules for the privatisation of major public infrastructure companies, including Segba (Appendix I). Segba’s distribution and generation activities were unbundled and the distribution companies Edenor S.A. and Edesur S.A. created by Decree no. 714, passed on June 26, 1992; Edelap S.A. was established by Decree no. 1.795, enacted three months later. Resolutions no. 591 and 1.128 from July and September 1992 set out the conditions for an international call for tender for the privatisation of Edenor S.A. and Edesur S.A. and Edelap S.A., respectively, by means of selling 51% of company shares. They further approved the terms of privatisation.\footnote{See legislative texts.}

The three distribution companies were privatised by means of concession contracts\footnote{Concession contracts have been gaining in importance as a means of transferring the exclusive right to operate, maintain, and carry out investment in a public utility for a given period of time. Mundhe (2008) stresses “concessions require complex design and monitoring systems; thus, they are difficult to implement.” The author further points to the difficulty of accounting for the uncertainties involved in the provision of public services by means of a concession contract, leaving space for price renegotiation and abuse. See Mundhe, R. (2008), p. 1.} for a period of 95 years shortly afterwards: Edesur changed from public to private hands on September 1, 1992; Edenor on September 10, 1992; and Edelap on December 22, 1992. The concession contracts were approved by Resolution no. 170 for Edenor and Edesur, being signed by the granting authority and the concessionaires, and including the following sub-annexes on price and quality regulation:

1. the tariff regime to be applied and implementing rules for the tariff scheme;
2. the procedure for determining the tariff scheme;
3. the initial tariff scheme;
4. quality standards for public services and sanctions.458

Table 42 summarises the legal frame for Segba and its succeeding distribution companies, Edenor, Edesur, and Edelap. The table further indicates that this legal frame was, to a large part, created by means of decrees, thus bypassing the institutional system.

Table 42: Legal Frame for Segba and Edenor, Edesur, and Edelap

<table>
<thead>
<tr>
<th>Name of Legislation</th>
<th>Date of Enactment</th>
<th>Main Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decree no. 11.950</td>
<td>30/12/58</td>
<td>Creation of Segba; approval of company statutes.</td>
</tr>
<tr>
<td>Decree no. 1.374</td>
<td>20/7/90</td>
<td>Declaration of a state of emergency for the electricity companies Segba, AyE, and Hidronor. Reconversion of the energy sector. Energy sector declared subject to complete privatisation.</td>
</tr>
<tr>
<td>Decree no. 2.074</td>
<td>3/10/90</td>
<td>Prescribed the concession of distribution and commercialisation activities of Segba, tender procedures and calls for tender.</td>
</tr>
<tr>
<td>Decree no. 2.408</td>
<td>12/11/91</td>
<td>Established a time schedule for the privatisation of public service companies, including Segba.</td>
</tr>
<tr>
<td>Decree no. 714</td>
<td>26/6/92</td>
<td>Creation of Edenor S.A. and Edesur S.A.; approval of company statutes.</td>
</tr>
<tr>
<td>Resolution no. 591</td>
<td>14/7/92</td>
<td>International call for tendering for the privatisation of Edenor S.A and Edesur S.A.; approval of privatisation terms.</td>
</tr>
<tr>
<td>Resolution no. 170</td>
<td>31/8/92</td>
<td>Approved the concession contracts for Edenor S.A and Edesur S.A. and added their contents, including the price and quality regulation to be applied.</td>
</tr>
<tr>
<td>Resolution no. 1.128</td>
<td>30/9/92</td>
<td>International call for tendering for the privatisation of the subsidiary of Segba S.A. in La Plata.; approval of privatisation terms.</td>
</tr>
<tr>
<td>Decree no. 1.795</td>
<td>28/9/92</td>
<td>Creation of Edelap S.A.; approval of company statutes and concession contract.</td>
</tr>
<tr>
<td>Resolution no. 198</td>
<td>19/2/93</td>
<td>Segba was declared as being in state of liquidation.</td>
</tr>
</tbody>
</table>

Source: Author's own compilation based on information from the website of the Ministry of Economics and Public Works, available at infoleg.mecon.gov.ar.

The existence of a new legal framework for electricity sector regulation, however, does not on its own guarantee the functioning of the new regulatory system. The roles and functionality of the institutions designed to enforce such legislation are also of crucial importance. The following section, hence, provides more information on the Argentine electricity sector regulatory agency.

458 Information based on the concession contract for Edenor S.A. and Edesur S.A. The concession contract for Edelap S.A. was approved by Decree no. 1.795 on September 28, 1992. It also included four sub-appendices on the aforementioned issues of price and quality regulation.
5.2.2.1. The Argentine Regulatory Agency, Ente Nacional Regulador de la Electricidad (ENRE)

As mentioned in the previous section, the Argentine regulatory agency for the electricity sector, ENRE, established by Law 24.065 passed in December 1991, started operating in 1993. Its directorship was to be composed of five members, the president, vice president, and three other members (Article 57), selected on the grounds of technical expertise and appointed by the executive branch of government (Article 58). The functions and powers of ENRE were outlined in Article 56 of Law 24.065. Its most important functions included:

- monitoring compliance with concession contracts granted by the federal government, particularly with respect to quality, technical service, and commercial assistance provided by the concessionaires;
- tariff setting for the different sector activities and monitoring of their application in compliance with the corresponding concession contracts in distribution and transmission;
- determining the conditions for concession contracts and granting concessions;
- preventing anticompetitive, monopolistic, or discriminatory conduct by market agents;
- regulating and applying sanctions in accordance with Law no. 24.065, in the case of non-compliance with regulations and concession contracts;
- establishing rules of a general nature.

At the provincial level, further regulatory agencies with broadly similar functions were established to oversee electricity sector activities. However, in the provinces, which did not privatise electricity distribution companies, the traditional public sector regulation largely remained in place and no independent regulatory agency was created.

459 Only two regulatory agencies were established by law in Argentina: the agencies for the electricity and the gas sectors.
461 Independent electricity sector regulatory agencies were established in the following provinces: Buenos Aires (OCEBA), Entre Ríos (EPRE), Mendoza (EPRE), Río Negro (EPRE), San Juan (EPRE), San Luis (CRPEE), Santiago del Estero (ENRESE), and Tucumán (EPRET). Multi-sectorial agencies were established in: Catamarca (ENRECAT), Chubut (OMRESP), Córdoba (ERSEP), Formosa (EROSP), Jujuy (SUSEPU), La Rioja (EUCOP), and Salta (ENRESP).
462 The provinces Chaco, Corrientes, Misiones, Neuquén, Santa Cruz, Santa Fe, Tierra del Fuego, and La Pampa retained a regulatory system based on public property. See Azpiazu, D., Bonofiglio, N., & Nahón, C. (2008), pp. 113, 121.
ENRE’s Functionality

Even though ENRE was established as an inherently autarkic institution, it depended functionally on the Energy Secretariat. Azpiazu, Bonofiglio, and Nahón (2008) stress that the actual margin of autonomy of the regulatory agencies turned out to be one of the major problems of the new model for public services in Argentina; in practice, these agencies operated under the national executive. Moreover, ENRE only assumed its operating activities after the privatisation of Edenor, Edesur, and Edelap had already been carried out, thus compromising its future capacity for regulation and control. ENRE faced several difficulties right from the start. Since Argentina had little experience in electricity-sector economic regulation, it was necessary to train the agency’s personnel and develop the knowledge required for sector regulation. ENRE, hence, was unable to exert quality control in such a way as to prevent major power shortages during the 1990s. When Buenos Aires experienced a large blackout in 1999, ENRE’s quality control was restricted to ex-post rather than ex-ante control. Daniel Bouille (2008) claims the lack of private investment the consequence of a major failure of the regulatory frame. In addition, ENRE could not prevent an ownership concentration process. Furthermore, ENRE’s sanctioning capacity was restricted; in practice, companies used a strategy of appealing against penalties in order to postpone payments for as long as possible. Summing up, ENRE’s functionality during the 1990s was rather limited.

At the same time as the economic regulation of the electricity sector was changed to allow for privatisation policies to be introduced, major changes were also made to labour regulation in Argentina during the 1990s contributing to a reduction of labour costs in the privatised companies. Some of these are briefly introduces in the next section.

5.2.3. Labour Regulation in Argentina

Until the early 1990s, the Argentine labour market was regulated by various pieces of legislation originally passed by the Perón government between 1946 and 1955. These inter
alia established rules on working conditions and union organisation, mandatory collective bargaining agreements at the industrial or sector level, and the unlimited duration of individual and collective contracts. The Menem government introduced various changes to this regulation. Twenty legal proposals on changes in working conditions were made with the aim of introducing greater flexibility in the labour market, but not all of them became law, since they were largely rejected by unions.\textsuperscript{467} Labour regulation reforms were launched on November 13, 1991 by means of Law no. 24.013, which, inter alia, introduced temporary employment contracts with partial or total exemption from social contributions and a ceiling for severance payments.\textsuperscript{468} Only one day later, Law no. 24.028 was enacted, limiting compensation payments for work-related accidents. A law on employment contracts, Law no. 24.465, passed in 1995, introduced further modalities for temporary employment contracts as well as a probationary period of three to six months and an apprenticeship contract of three months to two years—implying a substantial decrease in labour costs for employers.\textsuperscript{469} Table 43 provides an overview of the mentioned laws.

**Table 43: Important Changes in Argentine Labour Legislation, 1990s**

<table>
<thead>
<tr>
<th>Name of Legislation</th>
<th>Date of Enactment</th>
<th>Main Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law no. 24.013</td>
<td>13/11/91</td>
<td>Law on employment.</td>
</tr>
<tr>
<td>Law no. 24.028</td>
<td>14/11/91</td>
<td>Law on work-related accidents.</td>
</tr>
<tr>
<td>Law no. 24.465</td>
<td>15/3/95</td>
<td>Law on employment contracts.</td>
</tr>
</tbody>
</table>

\textbf{Note:} The legislation is available online at infoleg.mecon.gov.ar.

\textbf{Source:} Author’s own compilation based on diverse sources.

From 1991 onwards, moreover, various legislative measures were enacted, which led to a decentralisation of collective bargaining by promoting separate negotiation for different companies. In addition, further laws were drafted and decrees passed with respect to working contracts and dismissals.\textsuperscript{470} Overall, labour regulation worsened considerably during the 1990s in Argentina.\textsuperscript{471} In the following section, the regulatory context of the 1990s in Brazil is outlined.

\textsuperscript{467} See Murillo, M. V. (2008), p. 194.


\textsuperscript{471} Information based on an interview with Juan Leyría on 8/1/09.
5.3. Regulatory Contexts in Brazil

“the regulatory climate in Brazil moved substantially in favour of the new private owners of public utilities” (Baer, 2001)

This section analyses the regulatory contexts of privatisation in Brazil, analogous to the assessment of such contexts in Argentina, beginning with an introduction to the legislation which enabled the implementation of privatisation policies in section one. Section two then provides an overview of the main legislation on the new regulatory regime in Brazil, and on Electrobras and its subsidiaries, including Light. In addition, the role and functions of the regulatory agency, ANEEL, are explored. Some of the major changes in Brazil’s national labour regulation are briefly summarised in section three, with a focus on changes in legislation regarding employment contracts.

5.3.1. Legislation which Enabled the Implementation of Privatisation Policies in Brazil

The Brazilian national privatisation programme, PND, was created by Law no. 8.031 on April 14, 1990 by the Collor administration. Law no. 8.031, moreover, defined objectives (Article 1), rules, and procedures (Articles 2 to 4) for the programme.\footnote{472 See Saravia, E. (1996), p. 9; legislative text.} A PND management committee was created to identify public companies to be privatised and recommend conditions for their sale (Articles 5 and 6). The committee was to be under direct presidential control and technically linked to the Ministry of Finance (Article 5). It consisted of five leading public officials and seven representatives from the private sector, who were all chosen by the president and had to be approved by congress. The president of Brazil’s National Development Bank, BNDES, was appointed head of the committee. Article 9 further established the creation of a national privatisation fund, the *Fundo Nacional de Desestatização* (FND). In addition, Article 21 stipulated that the value of firms to be privatised had to be assessed by consultants, contracted through public tendering procedures. The minimum price for the firms and methods of sale, then, were defined by the committee. Law no. 8.031, in the original version, restricted foreign participation in privatised companies to 40% of voting capital. This restriction was, however, changed to allow for unlimited participation of foreigners under the subsequent government of Itamar Franco.\footnote{473 See Baer, W. (2001), p. 286f; IOS (2001), p. 14f; legislative text.}
In January 1995, under the Cardoso government, the National Privatisation Committee was replaced by a National Privatisation Council, and changes in the legal and institutional framework of the PND were made. Law no. 8.987, passed in February 1995, defined conditions for concessions and the provision of public services, and set out terms for the tariff policy to be applied, establishing that tariffs were to be defined by concession contracts, and that concessions were to be awarded for a fixed term, which could be renewed based on a new bidding process (Articles 8 to 13; Article 23). The law, moreover, introduced penalties for delinquent concessionaires (Articles 32 to 39). In addition, public subsidies to concessionaires were prohibited and consumers entitled to participate in the supervision of concessions.\footnote{Baer, W. (2001), p. 288; IOS (2001), p. 16; legislative text.}

Table 44, below, summarises the main legislation which enabled infrastructure service privatisation in Brazil during the 1990s.

\begin{table}[h]
\centering
\begin{tabular}{|l|l|l|}
\hline
Name of Legislation & Date of Enactment & Main Contents \\
\hline
Law no. 8.031 & 12/4/90 & Established the national privatisation programme, PND, and formal procedures for privatisation. \\
\hline
Law no. 8.987 & 13/2/95 & Defined conditions for concessions and public service provision. \\
\hline
\end{tabular}
\caption{Legal Frame for Privatisation in Brazil, 1990s}
\end{table}


Later in 1995, constitutional amendments were approved, enabling privatisation in the telecommunications, gas distribution, and oil sectors. Moreover, the distinction between domestic and foreign owners of Brazilian companies was abolished, paving the way for privatisation in mining and power generation.\footnote{Bethell, L. & Nicolau, J. (2008), p. 261f.}

In contrast to Argentina, the legal frame for privatisation in Brazil during the 1990s was defined by different governments. The laws establishing conditions for the privatisation of public service companies were not passed until the Cardoso government assumed power, five years after the PND had been created. However, with the Cardoso government, not only the speed and scope of the privatisation programme, but also of the enactment of the respective legislation, increased considerably. Despite its broad based support in Congress, Cardoso’s government made extensive use of provisional measures.\footnote{Bethell, L. & Nicolau, J. (2008), p. 261f.}

The next section gives an overview of the newly adopted regulatory framework in Brazil’s electricity sector.
5.3.2. The Adoption of a New Regulatory Framework in the Brazilian Electricity Sector

Much legislation was passed in Brazil in the context of electricity sector reform. The first legal reform had already been passed under the Franco administration. Law no. 8.631, enacted on March 4, 1993, introduced a radical change to the applied tariff policy; it ended tariff equalisation, allowed for charging customers a price reflecting costs (Article 1), and required a periodical tariff readjustment (Article 4).

The Cardoso administration amended and significantly extended electricity sector reform. Five months after the abovementioned Concession Act, Law no. 9.074 was passed, on July 7, 1995, introducing specific rules for electricity-service concessions and other important principles, such as the concept of an independent power producer (Articles 11 to 14). Law no. 9.427, from December 1996, introduced the Brazilian electricity regulatory agency, ANEEL, as an independent body tied to the Ministry of Mines and Energy (Article 1) with the aim of regulating and supervising the generation, transmission, distribution, and commercialisation of electrical energy in Brazil (Article 2). Article 3 of Law no. 9.427 further listed ANEEL’s responsibilities, outlined in a following section.

Furthermore, in August 1997, Law no. 9.478, on the national energy policy was enacted. Article 2 established Brazil’s national energy policy council, CNPE. The wholesale electricity market, MAE, was created by Law no. 9.648 from April 1998 (Article 12). The legislation, moreover, authorised the executive branch to promote the restructuring of Brazilian power plants and of Eletrobras and its subsidiaries (Article 5) and made several changes to previous legislation. Tariff regulation and the establishment of general contracting conditions were attributed to ANEEL (Article 7).

The main legislation on the new regulatory frame for the Brazilian electricity sector during the 1990s is summarised by Table 45 below.

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480 See IOS (2001), p. 18; legislative text.
Table 45: Legal Frame for Electricity Sector Regulation in Brazil

<table>
<thead>
<tr>
<th>Name of Legislation</th>
<th>Date of Entry into Force</th>
<th>Main Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law no. 8.987</td>
<td>13/2/95</td>
<td>Law on concessions. Implemented bidding procedures for new public service concessions.</td>
</tr>
<tr>
<td>Law no. 9.074</td>
<td>7/7/95</td>
<td>Established standards for granting concessions. Creation of the independent power producer.</td>
</tr>
<tr>
<td>Law no. 9.427</td>
<td>26/12/96</td>
<td>Creation of Brazil’s electricity regulatory agency, ANEEL.</td>
</tr>
<tr>
<td>Law no. 9.478</td>
<td>6/8/97</td>
<td>Creation of Brazil’s national energy policy council, CNPE.</td>
</tr>
<tr>
<td>Law no. 9.648</td>
<td>29/4/98</td>
<td>Creation of the wholesale electricity market, MAE. Introduced various changes to previous legislation.</td>
</tr>
</tbody>
</table>

Note: The legislation is available online at http://www2.planalto.gov.br/presidencia/legislacao; several of the aforementioned laws have been changed by subsequent legislation and are no longer valid in their original form.

Source: Author’s own compilation based on diverse sources.

The table shows the new regulatory frame for the electricity sector during the 1990s in Brazil took several years to create. In addition, further important changes in sector legislation were made during the second phase of electricity sector reform, launched by the government of Luiz Inácio Lula da Silva from 2003 onwards.

In the following section, the legal frame for Eletrobras and its subsidiaries, including Light, is outlined, focusing on company foundation, restructuring, and privatisation.

Legal Frame for Eletrobras and Light

In contrast to the Argentine Segba, the Brazilian electricity company, Light, was founded as a private firm by Canadian investors. It started operating in public transport and electrical energy in the city of São Paulo at the turn of the 20th century. In 1905, it extended operations to the city of Rio de Janeiro, then capital of Brazil. Within a short period of time, Light assumed a monopolistic position in the electricity and gas sectors, trams, and telephony services in Rio de Janeiro. The company considerably expanded its service provision in the areas of Rio and São Paulo in the following decades, incorporating various companies. Until the 1960s, the Brazilian electricity sector was dominated by foreign investors. In 1961, Eletrobras was created as a federal public electricity company by Law no. 3.890-A, passed by Congress on April 25. According to this law, Eletrobras was to be responsible for promoting research and the construction and operation of generation plants, transmission lines, and electricity substations. Eletrobras assumed the characteristics of a federal holding shortly after foundation, and its activities were significantly broadened during subsequent years. In
1975, due to difficulties in financing the expansion of its activities, its owner, the Canadian group, Brascan Limited started negotiations with the government, with the result that Light was acquired by Eletrobras in January 1979. In 1981, the services provided by Light in São Paulo were assumed by Eletro Paulo, a company of the state government of São Paulo; Light Rio remained under the control of the state holding until its privatisation in 1996.\textsuperscript{482}

In the 1990s, institutional reform and privatisation led to a reduction in the functions and changes in the profile of Eletrobras.\textsuperscript{483} Decree no. 572, issued by Collor on June 22, 1992, included Escelsa and Light in the PND; Decree no. 1.481, issued by Cardoso three years later, included further subsidiaries of Eletrobras in the PND. Law no. 9.163, passed in December 1995, further approved the separation of Light from Eletrobras and established the division of its operational activities from Eletro Paulo.\textsuperscript{484} In the years to follow, several Eletrobras subsidiaries changed from public to private hands. Light was privatised on May 1996, by means of a public auction at the Rio de Janeiro Stock Exchange. The concession contract was confirmed on June 4, 1996 by the granting authority, giving the concessionaires a duration of 30 years and stipulating the conditions for service provision. It demanded “regularity, continuity, efficiency, security, generality, and courtesy” in the provision of services to consumers (Article 2). Appendices I and II moreover regulated the electricity tariffs to be applied.\textsuperscript{485}

Table 46 below provides an overview of legislation on the creation, reorganisation, and privatisation of Eletrobras and its subsidiaries, including Light.

**Table 46: Legal Frame for Eletrobras and Light**

<table>
<thead>
<tr>
<th>Name of Legislation</th>
<th>Date of Enactment</th>
<th>Main Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law no. 3.890-A</td>
<td>25/4/61</td>
<td>Created Eletrobras.</td>
</tr>
<tr>
<td>Decree no. 572</td>
<td>22/6/92</td>
<td>Included Escelsa and Light in the PND.</td>
</tr>
<tr>
<td>Decree no. 1.481</td>
<td>3/5/95</td>
<td>Included further subsidiaries of Eletrobras in the PND.</td>
</tr>
<tr>
<td>Law no. 9.163</td>
<td>15/12/95</td>
<td>Authorised Eletrobras’s separation from Light.</td>
</tr>
<tr>
<td>Concession Contract no. 001/96</td>
<td>4/6/96</td>
<td>Established conditions for service provision and electricity tariffs of Light.</td>
</tr>
</tbody>
</table>

**Source:** Author’s own compilation based on information from the website of the Presidency of the Republic of Brazil available online at http://www2.planalto.gov.br/presidencia/legislacao

The next section further outlines the role and functions of the Brazilian electricity sector regulatory agency.


\textsuperscript{483} Information from company website, retrieved September 25, 2013, from http://www.eletrobras.com.br/Em_Biblioteca_40anos/default.asp.

\textsuperscript{484} See IOS (2001), p. 17f.

\textsuperscript{485} See IOS (2001), pp. 17, 27; Concession Contract no. 001/96.
5.3.2.1. The Brazilian Regulatory Agency, Agência Nacional de Energia Elétrica (ANEEL)

The national regulatory agency for the Brazilian electricity sector, ANEEL, was created by means of Decree no. 2.335 on October 6, 1997, and started working on December 2, 1997. It replaced the national Department of Water and Electrical Energy, *Departamento de Águas e Energia Elétrica* (DNAEE), a federal agency of the Ministry of Mines and Energy. As mentioned previously, ANEEL was founded with the aim of regulating and supervising the various electricity sector activities. The agency was headquartered in the city of Brasília and headed by one Director General and four directors, appointed by the president. ANEEL, inter alia, assumed the following functions:

- granting of licences and concessions;
- tariff setting (price cap in distribution and revenue cap in transmission; annual adjustment tariff revision every 4 years);
- dispute settlement between the different sector agents;
- monitoring compliance with contractual and regulatory arrangements;
- applying penalties in the event of non-compliance, intervening in the provision of services, and cancelling contracts.

At the level of Brazil’s states, twelve further regulatory agencies with broadly similar functions were established to oversee the electricity sector.

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488 The regional electricity regulatory agencies established were the following:
- in the North: ARCON (State of Pará);
- in the Northeast: ARCE (State of Ceará), ARSEP (State of Rio Grande do Norte), ARPE (State of Pernambuco), ASES (State of Sergipe), Agerba (State of Bahia);
- in the Southeast: Agersa (State of Espírito Santo), ASEP (State of Rio de Janeiro), CSPE (State of São Paulo);
- in the Centre-West: AGER/MT (State of Mato Grosso), AGR (State of Goiás);
- in the South: Agergs (State of Rio Grande do Sul).
ANEEL’s Functionality

Similar to ENRE, the Brazilian agency, from the beginning, faced difficulties in exercising its regulatory and monitoring powers. The first years were particularly problematic, since ANEEL started from scratch, when privatisation and restructuring processes were already underway but sector reform not yet complete. Its capacity to enforce private sector obligations was, hence, somewhat weak. The electricity sector was, at the time, characterised overall by a lack of clarity with respect to its new structure and regulations. The first two concession contracts for privatised electricity companies, for Escelsa and Light, moreover, had been signed by its preceding agency, DNAEE, at a time in which the regulatory environment in Brazil was still very uncertain. As a result, contractual obligations were less rigid than those of companies privatised afterwards (tariff revision, for instance, was to take place after eight instead of four years). As outlined in the previous chapter, at the end of 1997 and the beginning of 1998, the city of Rio de Janeiro experienced repeated power cuts, and ANEEL’s intervention was required at the time it assumed its role. Furthermore, the agency was confronted with a major sector crisis in 2001, posing important challenges. The learning process in the years after its establishment was largely based on trial and error. Goldstein and Pires (2002) emphasise that “ANEEL has often lacked the flexibility to define key roles to encourage entry, stimulate investment, and increase electricity capacity.”

As in Argentina, labour regulation in Brazil was changed at the same time as economic regulation and facilitated reductions in employment costs. The next section briefly introduces some of the main changes in Brazilian labour regulation.

5.3.3. Labour Regulation in Brazil

Labour regulation in Brazil is governed by a consolidation of labour laws, the **Consolidação das Leis do Trabalho** (CLT). The CLT goes back to the Vargas era, during which labour legislation at the time was consolidated. The resulting legislative project was passed on May 1, 1943.  

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Whereas labour rights were extended during the 1980s, the 1990s were characterised by a deregulation of such rights, particularly during the second half of the decade. Various legal measures were adopted in order to promote, among other things, the flexibilisation of working conditions and remuneration and changes in labour protection and trade union structure.\footnote{491} Law no. 9.601, enacted under the Cardoso administration in January 1998, enabled the use of temporary employment contracts with reduced social security contributions and a reduction in overtime pay. In addition, it introduced the concept of time banking, \textit{banco de horas}, thus flexibilising working hours.\footnote{492} Provisional Measure no. 1.709, passed six months later, regulated part-time work of up to 25 hours per week. Both contributed to a reduction in employment costs.\footnote{493}

Table 47 summarises the information on the two aforementioned pieces of legislation.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|l|}
\hline
\textbf{Name of Legislation} & \textbf{Date of Enactment} & \textbf{Main Contents} \\
\hline
Law no. 9.601 & 21/1/98 & Law on employment contracts. \\
Provisional Measure no. 1.709 & 6/8/98 & Legislation on part-time work. \\
\hline
\end{tabular}
\caption{Important Changes in Brazilian Labour Legislation, 1990s\footnote{494}}
\end{table}

\textbf{Note:} The legislation is available online at http://www2.planalto.gov.br/presidencia/legislacao.

\textbf{Source:} Author’s own compilation, based on diverse sources.

The administrative reform of public sector employment approved under the Cardoso administration at the end of the 1990s, further allowed for the dismissal of civil servants on the grounds of overstaffing or inadequate performance.\footnote{495}

In addition, various legislation on trade union organisation was also enacted at the end of the 1990s, facilitating an increase in the number of unions and their decentralisation in the following years.\footnote{496}

In summary, similar to in Argentina, labour regulation enacted in Brazil during the 1990s resulted in more flexible and uncertain working conditions.

In the following discussion, some interim conclusions on the regulatory contexts in Argentina and Brazil are presented.

\footnote{491 See Cardoso, J. C. Jr. (2002), p. 905f.}
\footnote{492 The time banking system introduced implied that overtime worked on day X could be compensated for by taking time off on day Y instead of receiving extra pay.}
\footnote{494 This table only summarises some of the most important changes introduced. For a more detailed list see, for instance, Filho, R. M. de S. (2004), p. 2f.}
\footnote{495 See Bethell, L. & Nicolau, J. (2008), p. 261.}
\footnote{496 See Cardoso, J. C. Jr. (2002), p. 918ff.}
5.4. Interim Conclusions

The purpose of this chapter has been to assess the translation of privatisation policies into institutional practices in the electricity sector and examine differences and similarities in the application of new regulatory contexts in Argentina and Brazil. In line with the varying timing and timeframe of privatisation processes of the 1990s in the two countries, the same was true regarding institutional changes made in the context of privatisation. The most important legislation enabling the implementation of Menem’s large scale privatisation programme in Argentina, the laws on the reform of the state and economic emergency, were passed shortly after his government took office, in August and September 1989, respectively. Important legislation enabling privatisation during the 1990s in Brazil, on the other hand, was passed by different governments. The PND was enacted by the Collor government in April 1990. However, it was not until five years later that the preconditions for public service privatisation were established, under the Cardoso administration. The regulatory progress towards privatisation, thus, took significantly longer in Brazil than in Argentina, even though it was started less than a year later.

In the electricity sector, many legal provisions were adopted to allow for sector and company restructuring, as well as privatisation in both countries. Most important legislation on electricity sector reform and privatisation was passed within two years in Argentina, from 1991 to 1992. Argentine legislation, moreover, included a tight time schedule for privatisation and set short deadlines for implementing different institutional changes. In Brazil, again, the first legislation on electricity sector reform was introduced by the Collor administration in 1993, and further legislation was enacted by the Cardoso government throughout the 1990s. Whereas Electrobras and its subsidiaries were rapidly included in the PND, legislation on electricity sector reform took much longer to appear and be implemented. Brazil, hence, opted for a more evolutionary process of sector reform, whereas Argentina chose a revolutionary implementation.\footnote{See Krause, M. (2002), p. 18 for the distinction between revolutionary and evolutionary approaches towards electricity sector reform.}

The restructuring of Segba and the privatisation of its succeeding companies was also undertaken in a relatively short time period. Within two and a half years, Segba had changed from a state of economic emergency to one of complete liquidation—an integrated public monopoly had been transformed into seven independent private entities, of which three were distribution and four were generation companies. Light was also privatised rapidly, within
only one year after Eletrobras had been included in the PND. Company restructuring according to different sector activities, however, was not forthcoming during the 1990s.

Independent regulatory agencies for the electricity sector were founded in both countries. Table 48 gives an overview of these newly established agencies.

**Table 48: Regulatory Agencies of the Argentine and Brazilian Electricity Sectors**

<table>
<thead>
<tr>
<th></th>
<th>Argentina</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existence of a regulatory agency?</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Name of the regulatory agency</strong></td>
<td>ENRE</td>
<td>ANEEL</td>
</tr>
<tr>
<td><strong>Established by law?</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Name of legislation</strong></td>
<td>Law no. 24.065</td>
<td>Law no. 9.427</td>
</tr>
<tr>
<td><strong>Date of enactment of legislation</strong></td>
<td>19/12/91</td>
<td>26/12/96</td>
</tr>
<tr>
<td><strong>Institutional autonomy?</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Main form of financing</strong></td>
<td>Fees</td>
<td>Fees</td>
</tr>
<tr>
<td><strong>Number of employees</strong></td>
<td>141*</td>
<td>325*</td>
</tr>
<tr>
<td><strong>Main functions as described by the respective law of establishment</strong></td>
<td>- Granting of concessions</td>
<td>- Granting of concessions</td>
</tr>
<tr>
<td></td>
<td>- Tariff setting</td>
<td>- Tariff setting</td>
</tr>
<tr>
<td></td>
<td>- Dispute settlement</td>
<td>- Dispute settlement</td>
</tr>
<tr>
<td></td>
<td>- Monitoring</td>
<td>- Monitoring</td>
</tr>
<tr>
<td></td>
<td>- Applying penalties</td>
<td>- Applying penalties</td>
</tr>
<tr>
<td></td>
<td>- Rule-Making</td>
<td></td>
</tr>
</tbody>
</table>

**Ability of the Regulatory Agency to Enhance Compliance with Regulatory Norms and Standards**

**Price Control**

| Change in electricity wholesale prices in Buenos Aires and Rio de Janeiro, 1990s | Strong Decrease | —990 |
| Change in electricity consumer prices in Buenos Aires and Rio de Janeiro, 1990s | Roughly Constant991 | Increase992 |

**Quality Control**

| Major blackouts after sector reform and privatisation in BA and RJ? | Yes | Yes |
| Investment needs met by private investors in BA and RJ? | No | No |

*Numbers based on Krause (2002)

Source: Author’s own compilation based on various sources

As shown in the table, the Brazilian agency was established five years after the Argentine equivalent, with both created by law. In Argentina, the respective law was passed shortly after a time schedule for privatisations had been enacted and before the first privatisations were to be carried out. However, ENRE only started working in the year after

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991 In the period 1993 to 1994, tariffs charged to low-demand consumers (defined as those consuming less than 150 kWh per month) rose as a result of increases of more than 20% in fixed unit charges. At the same time, unit charges for high demand consumers (defined as those consuming more than 150 kWh per month) decreased. From 1994 to 1999, tariffs remained roughly constant. See Delfino, J. A. & Casarin, A. A. (2001), p. 10f.

992 Consumer tariffs started to increase shortly after privatisation: they were raised by 8.63% at the end of 1996, another 4% in early 1997, and 5% in mid-1997. See IOS (2001), p. 29f.
Segba had been privatised. The law on the Brazilian regulatory agency, ANEEL, on the other hand, was passed six months after the concession contract for Light had been finalised, and it only assumed its operating activities one and a half years later. Both ENRE and ANEEL are financed mainly by fees paid by companies operating in the two countries’ electricity markets. Azpiazu, Bonofiglio, and Nahón (2008) stress the resulting financial dependence on the companies, which the agency is supposed to regulate and monitor;\textsuperscript{501} this dependence might make the regulator vulnerable to lobbing pressures. The table also shows that the number of employees is higher in Brazil, a difference which might, however, reflect its bigger market. The main functions of ENRE and ANEEL, as defined by the respective sector legislation, are very similar overall, but ENRE’s functions are broader with respect to its rule-making authority.

In practice, both agencies have faced difficulties with respect to monitoring and enforcing price and quality standards\textsuperscript{502}, reflected by a lack of investment and major power cuts in the second half of the 1990s in the cities of Buenos Aires and Rio de Janeiro, and by Brazil’s national energy crisis at the turn of the century. Almost 7 million consumer complaints were registered by ANEEL in 1999.\textsuperscript{503} Moreover, important cost reductions in electricity generation in Argentina were reflected in the wholesale energy market, but not passed on to residential consumers, and no specific instruments for defending low-demand consumers were applied by ENRE; instead, the adopted tariff structure was regressive, favouring high-demand consumers.\textsuperscript{504} In Brazil, almost all energy companies increased tariffs above inflation between 1995 and 2000. In Rio de Janeiro, consumer tariffs increased considerably after the privatisation of Light, the same time at which the city experienced major power cuts.\textsuperscript{505}

Parallel to changes in economic regulation, changes in labour regulation were also introduced. Despite the lack of an adequate social safety net to address the situation of unemployment, Argentina launched changes in its labour regulation, which led to an “external labour flexibility,” introducing various temporary forms of employment which resulted in more unstable employment situations.\textsuperscript{506} The law on economic emergency, moreover, facilitated the dismissal of public employees. Similar changes to labour regulation were also introduced. Despite the lack of an adequate social safety net to address the situation of unemployment, Argentina launched changes in its labour regulation, which led to an “external labour flexibility,” introducing various temporary forms of employment which resulted in more unstable employment situations.\textsuperscript{506} The law on economic emergency, moreover, facilitated the dismissal of public employees. Similar changes to labour regulation were also

\textsuperscript{501} See Azpiazu, D., Bonofiglio, N. & Nahón, C. (2008), p. 132. Both agencies are also partly financed by fines.

\textsuperscript{502} The agencies also experienced difficulties with respect to enhancing competition. ENRE could not prevent an ownership concentration during the second half of the 1990s, even though this was explicitly prohibited by sector regulation. A similar picture emerged for Brazil.

\textsuperscript{503} See PSI (2006), p. 65f.

\textsuperscript{504} In the context of the 2001 economic crisis, a tariff freeze was introduced. Information based on interviews held in Argentina in the period 5/12/08 to 28/5/09.


adopted in Brazil, introducing more flexible working contracts and less stable employment conditions.

In sum, electricity sector regulation is complex and poses important challenges to electricity regulators in the areas of rule setting, monitoring, and sanctioning. Guaranteeing sufficient investment and monitoring and enforcing quality standards and tariff regulation are of particular importance. These tasks, however, were not satisfactorily performed by the newly established regulatory agencies of the Argentine and Brazilian electricity sectors during the 1990s. Securing “easily accessible, affordable, and high quality services” for consumers requires strong regulatory bodies. ENRE and ANEEL, at the beginning, lacked experts in regulatory matters; personnel had to be trained, and experience in economic regulation was only gained in subsequent years. The sequencing of reforms—first starting to privatise and then establishing regulatory agencies—hence mattered and negatively impacted upon service quality and price.

Furthermore, regulatory agencies focussed on economic regulation, largely neglecting redistributive issues, environmental concerns, and the protection of public sector workers. The introduction of a profit motivation in the electricity sector led to efforts to reduce energy losses on the part of new private managers. In Argentina, this caused a disconnection of electricity supply in poor neighbourhoods and various schools due to non-payment. In Brazil, the proportion of consumers disconnected from electricity supply on a monthly basis tripled between 1995 and 2002. In 2003, about 1.2 million defaulting consumers experienced monthly cut-offs. Furthermore, no important progress was made with respect to alternative energy sources during the 1990s; electricity provision in Argentina still heavily relies on fossil fuels. The lack of protection of public sector workers, together with the outlined changes in labour regulation, had important consequences, outlined in the subsequent chapter.

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508 Rosa, L. P., Tolmasquim, M. T., & Pires, J. C. L. (1998), p. 147, mention the lack of qualified personnel as one of the main weaknesses of ANEEL.
Chapter 6. Impact of Privatisation on Electricity Sector Employees in Argentina and Brazil

This chapter assesses the impact of privatisation on electricity sector employees in Argentina and Brazil, aiming at providing a multi-dimensional perspective. The data used is taken mainly from the various studies introduced in Section 2.2.2. and supplemented by further secondary data sources and information from expert interviews. The first section explores the impact of privatisation for electricity sector employees in Argentina; section two assesses the same in Brazil; and section three presents interim conclusions.

6.1. Impact of Privatisation on Employees in Argentina

“the Argentine program involved massive layoffs” (Galiani et al., 2003)

The analysis of the impact of privatisation on employees in Argentina starts with presenting infrastructure sector employment levels from the mid-1980s to the end of the 1990s, followed by employment data on the electricity sector (section two), and on Segba (section three). Section four then considers alterations in working conditions for the electricity sector in general and Segba in particular. Section five studies the impact of privatisation on union membership and collective bargaining.

6.1.1. Employment Levels in the Argentine Infrastructure Sector

Infrastructure services are particularly employment intensive, and their privatisation was associated with huge employment reductions in Argentina. Whereas in 1985, about 243,300 people were employed in seven public infrastructure sectors (telecommunications, postal services, air transport, water and sewerage, electrical energy, rail, and gas), this number had decreased by almost 70%, to 75,800, by 1998.\(^{511}\)

Figure 19 below illustrates these huge reductions in Argentine infrastructure sectors against the background of privatisation over the 1990s.

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The graph can be divided into three periods of employment reduction:

1. a *pre-privatisation period*: a slight employment decrease of 8% during the second half of the 1980s (in the period 1985 to 1990), when the companies were still owned by the federal government;

2. a *privatisation period*: a strong fall of about 50% in the early 1990s (in the period 1990 to 1993) affecting more than 100,000 employees, at the time Menem’s massive privatisation programme was launched; and

3. a *post-privatisation period*: a further reduction by 32% in the period 1993 to 1998, when the companies were privately run.\(^{512}\)

Employment reductions were, hence, mainly carried out in the period 1992 to 1993, but had already started before that and continued throughout the 1990s. They were, therefore, initiated by the public sector prior to privatisation in order to make public companies more attractive to private investors and intensified by the private sector afterwards.\(^{513}\)

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\(^{512}\) See Duarte, M. (2002), p. 50; presented percentages and division into three sections based on own considerations.

Table 49: Evolution of Employment by Infrastructure Sector in Argentina, 1985-1998 (in Thousands)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecommunications</td>
<td>11/90</td>
<td>47.1</td>
<td>46.3</td>
<td>46.1</td>
<td>46.8</td>
<td>45.5</td>
<td>44.0</td>
<td>40.2</td>
<td>37.0</td>
<td>34.6</td>
<td>31.5</td>
<td>30.3</td>
<td>27.9</td>
<td>23.7</td>
<td>22.6</td>
</tr>
<tr>
<td>Postal Services</td>
<td>11/97</td>
<td>41.5</td>
<td>40.3</td>
<td>39.8</td>
<td>37.5</td>
<td>37.8</td>
<td>36.7</td>
<td>32.2</td>
<td>25.2</td>
<td>25.2</td>
<td>20.9</td>
<td>19.0</td>
<td>19.0</td>
<td>21.3</td>
<td>16.5</td>
</tr>
<tr>
<td>Air Transport</td>
<td>11/90</td>
<td>10.6</td>
<td>10.3</td>
<td>10.3</td>
<td>10.4</td>
<td>10.8</td>
<td>10.9</td>
<td>9.6</td>
<td>8.3</td>
<td>6.2</td>
<td>6.4</td>
<td>5.7</td>
<td>5.2</td>
<td>4.9</td>
<td>4.8</td>
</tr>
<tr>
<td>Water and Sewerage</td>
<td>5/93</td>
<td>9.6</td>
<td>9.5</td>
<td>9.4</td>
<td>9.5</td>
<td>9.4</td>
<td>8.4</td>
<td>8.4</td>
<td>8.1</td>
<td>6.4</td>
<td>5.1</td>
<td>4.1</td>
<td>4.2</td>
<td>4.4</td>
<td>4.3</td>
</tr>
<tr>
<td>Electric Energy</td>
<td>7/93</td>
<td>21.7</td>
<td>21.1</td>
<td>21.7</td>
<td>22.2</td>
<td>22.8</td>
<td>22.4</td>
<td>20.8</td>
<td>18.8</td>
<td>11.0</td>
<td>9.7</td>
<td>8.8</td>
<td>8.1</td>
<td>7.2</td>
<td>6.8</td>
</tr>
<tr>
<td>Rail Services</td>
<td>11/91 – 11/92</td>
<td>102.9</td>
<td>99.9</td>
<td>97.2</td>
<td>97.5</td>
<td>94.2</td>
<td>90.0</td>
<td>85.9</td>
<td>67.5</td>
<td>22.5</td>
<td>19.9</td>
<td>16.2</td>
<td>16.2</td>
<td>15.6</td>
<td>15.7</td>
</tr>
<tr>
<td>Gas</td>
<td>12/92</td>
<td>9.8</td>
<td>9.4</td>
<td>9.2</td>
<td>9.7</td>
<td>10.2</td>
<td>10.3</td>
<td>10.5</td>
<td>10.1</td>
<td>5.6</td>
<td>5.5</td>
<td>5.4</td>
<td>5.3</td>
<td>5.2</td>
<td>5.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>243.3</td>
<td>236.8</td>
<td>233.8</td>
<td>233.6</td>
<td>230.6</td>
<td>222.8</td>
<td>207.6</td>
<td>175.1</td>
<td>111.5</td>
<td>99.0</td>
<td>89.6</td>
<td>86.0</td>
<td>82.2</td>
<td>75.8</td>
</tr>
</tbody>
</table>

Note: Numbers are based on selected public sector companies of federal jurisdiction.
For the electricity sector, only Segba and its succeeding companies are included due to data unavailability for AyE and Hidronor.
Source: Duarte (2002)54

Table 50: Voluntary Resignations in Major Argentine Infrastructure Companies, 1991-1993 (Absolute Values and Percentages)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas del Estado</td>
<td>Gas</td>
<td>0</td>
<td>1,000</td>
<td>0</td>
<td>1,000</td>
<td>1.64</td>
</tr>
<tr>
<td>Segba</td>
<td>Electric Energy</td>
<td>0</td>
<td>1,500</td>
<td>0</td>
<td>1,500</td>
<td>2.46</td>
</tr>
<tr>
<td>AyE</td>
<td>Electric Energy</td>
<td>0</td>
<td>2,450</td>
<td>1,720</td>
<td>4,170</td>
<td>6.84</td>
</tr>
<tr>
<td>Encotel</td>
<td>Postal Services</td>
<td>109</td>
<td>6,000</td>
<td>0</td>
<td>6,109</td>
<td>10.02</td>
</tr>
<tr>
<td>Obras Sanitarias de la Nación</td>
<td>Water and Sewerage</td>
<td>0</td>
<td>1,893</td>
<td>0</td>
<td>1,893</td>
<td>3.10</td>
</tr>
<tr>
<td>Ferrocarriles Argentinos</td>
<td>Rail Services</td>
<td>12,327</td>
<td>25,981</td>
<td>8,000</td>
<td>46,308</td>
<td>75.94</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>12,436</td>
<td>38,824</td>
<td>9,720</td>
<td>60,980</td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Source: Duarte (2002)

54 The sources of data are Sistema de Información y Gestión del Empleo Público (SIGEP) and company balance sheets. All companies included were privatised.
Looking at the different infrastructure sectors separately reveals that employment reductions were observed in all sectors mentioned, but were more severe in some than in others (see Table 49). The percentage decrease over the whole period under consideration was comparatively more severe in rail services and electrical energy, where the workforce was reduced by 85% and 69%, respectively, in comparison to 52% in telecommunications, 60% in postal services, 55% each in air transport and water and sewerage, and 49% in the gas sector. In absolute terms, rail services were the most affected, suffering a loss of 87,200 employees, followed by postal services and telecommunications, where the workforces were reduced by 25,000 and 24,500, respectively. In the electricity sector, employment decreased by 14,900; in air transport, the workforce declined by 5,800, in water and sewerage by 5,300, and in the gas sector by 4,800 over the whole period.\(^{515}\)

A large part of these huge reductions of the early 1990s can be explained by voluntary resignation schemes, outlined further below.

6.1.1.1. “Voluntary” Resignation

Voluntary resignation schemes in Argentina were based on an agreement on the abandonment of post on the part of the employee in exchange for an indemnity payment, the amount of which depended on the years of service and category of work. Downsizing in the form of voluntary resignation, *retiro voluntario*, had, in most cases already been initiated by the Argentine government prior to privatisation, in the context of infrastructure sector restructuring, and partly financed by World Bank loans.\(^{516}\) It was often implemented by public company directors under agreements with union organisations. As shown by Table 50, a total of 60,980 employees from different infrastructure companies retired under such schemes in the period 1992 to 1993. Indemnity payments relating to voluntary resignation schemes amounted to a total of US$ 1,299.5 million in the period 1992 to 1993. Table 50 further indicates that all seven companies mentioned used voluntary resignation as a means of reducing employee numbers, with most being undertaken in 1992. In absolute terms, the national railway company again showed the highest number, accounting for 76% of all voluntary resignations, this way reducing its workforce by 50%.\(^{517}\) The two electricity

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\(^{515}\) Author’s own calculations based on the presented data from Duarte, M. (2002).

\(^{516}\) See Duarte, M. (2002), p. 54; information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.

companies listed, Segba and AyE, also made use of voluntary resignation, reducing their workforce by 1,500 and 4,170 employees, respectively. In total, voluntary resignation accounted for about 50% of workforce cuts from 1991 to 1993.\textsuperscript{518} Other forms of employment reduction included early retirement, dismissal, and suspension.

The next section takes a closer look at employment reduction in the Argentine electricity sector.

\subsection{6.1.2. Employment Levels in the Argentine Electricity Sector}

Employment reductions similar to those presented for infrastructure services in general were also observed in the Argentine electricity sector during the 1990s. Figure 20 below depicts the number of employees in the Argentine electricity sector from 1985 to 1998.

\textbf{Figure 20:} Number of Employees in the Electricity Sector in Argentina (in Thousands)

\begin{figure}
\centering
\includegraphics[width=0.6\textwidth]{figure20.png}
\end{figure}

\textbf{Note:} Numbers are based on Segba and its succeeding companies; AyE and Hidronor were not included due to data unavailability.\textsuperscript{519}

\textbf{Source:} Author’s own compilation based on Duarte (2002)

The graph again allows for distinguishing different periods of employment reduction:


\textsuperscript{519} AyE was divided into 23 entities prior to privatisation, complicating the gathering of employment data. The different electricity generation units of AyE employed a total of 5,522 employees before privatisation. Hidronor had 1,558 employees before privatisation. See APJAE (2005), p. 26; information from the website of the Ministry of Economics, retrieved October 1, 2013, from http://mepriv.mecon.gov.ar/.
1. a pre-privatisation period: the number of employees in the electricity sector remained roughly constant for most of the second half of the 1980s, but started decreasing from 1989 onwards—it declined by 4,000 people in the period 1989 to 1992, equivalent to an 18% decrease;

2. a privatisation period: 1992 to 1993 saw a strong decline in employment of about 42% of the workforce, equivalent to 7,800 employees; followed by

3. a post-privatisation period: employment reduced further in the period 1993 to 1997 by 38%, or 4,200 employees.\footnote{Author’s own calculations based on the presented data taken from Duarte, M. (2002).}

Electricity sector employees affected by downsizing were often highly specialised and therefore faced major difficulties reintegrating into the labour market.\footnote{Information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.} In many cases, dismissed employees started their own small private businesses, such as newsstands. However, lacking experience and training, they were generally unsuccessful. Some, therefore, also offered their services as self-employed workers to their former companies, working under less stable conditions.\footnote{See APJAE (2005), p. 12; information based on various interviews held in the period 5/12/08 to 28/5/09. Some workers also united to found cooperatives in the electricity sector and, in this way, continued providing services to the privatised companies.}

A further impact of the huge scale of dismissals was the loss in human capital in the sector, since it was often the experienced, qualified workers who were displaced. This led to a lack of energy planning capacities in the following years, with important consequences for Argentine energy supply.\footnote{Information based on various interviews held in the period 5/12/08 to 28/5/09.}

The subsequent section presents further data on employment reductions at Segba—the national Argentine electricity company with the highest number of employees prior to privatisation.

\section*{6.1.3. Employment Levels at Segba}

“The privatisation of Segba was part of Menem’s model of the 1990s, which consisted in privatising everything that could be privatised.” (Azpiazu, 2008)\footnote{Author’s translation. Information based on an interview with D. Azpiazu on 17/12/08.}

Despite the restrictions on employee number reduction in the context of privatisation in Argentina specified in Art. 41 of Law no. 23,696, employment levels at Segba were
drastically reduced. Initial reductions had already been undertaken by the company management prior to privatisation. Table 51 below shows that the number of employees at Segba declined by 12% in the immediate pre-privatisation period, going from 20,000 to 17,600.\(^{525}\)

**Table 51: Employment Reductions at Segba before Privatisation**

<table>
<thead>
<tr>
<th></th>
<th>Number of Workers before Privatisation</th>
<th>Number of Workers Retrenched</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning</td>
<td>20,000</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>End</td>
<td>17,600</td>
<td>2,400</td>
<td>-12</td>
</tr>
</tbody>
</table>

*Source: APJAE (2005)*

Once privatised, the workforce of Segba’s seven succeeding companies steadily declined. Table 52 depicts employment reductions in the post-privatisation period over the 1990s. Most reductions were undertaken shortly after privatisation; between 1992 and 1993, employment decreased by 38%, from 17,600 to 11,000, and continued a downward trend in the years to follow. By June 1999, fewer than 40% of Segba’s employees, 6,618 people, remained in its succeeding companies.\(^{526}\)

**Table 52: Employment Reductions at Segba’s Succeeding Companies, 1992-1999**

<table>
<thead>
<tr>
<th>Date</th>
<th>Enterprise</th>
<th>Number of Employees</th>
<th>Accumulated Retrenchment Numbers</th>
<th>Acc. % Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/92</td>
<td>Segba</td>
<td>17,600</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>6/93</td>
<td>at seven privatised enterprises</td>
<td>11,000</td>
<td>6,600</td>
<td>-38%</td>
</tr>
<tr>
<td>6/94</td>
<td>at seven privatised enterprises</td>
<td>9,858</td>
<td>7,742</td>
<td>-44%</td>
</tr>
<tr>
<td>6/96</td>
<td>at seven privatised enterprises</td>
<td>8,272</td>
<td>9,328</td>
<td>-53%</td>
</tr>
<tr>
<td>6/98</td>
<td>at seven privatised enterprises</td>
<td>7,040</td>
<td>10,560</td>
<td>-60%</td>
</tr>
<tr>
<td>6/99</td>
<td>at seven privatised enterprises</td>
<td>6,618</td>
<td>10,982</td>
<td>-62%</td>
</tr>
</tbody>
</table>

*Note: 1992-99 variation (Segba) = Total downsizing (66.9%).*\(^{527}\)

*Source: APJAE (2005)*

Figure 21 exemplifies the employment reductions at Segba’s succeeding companies, showing numbers for the distributor Edesur from 1992 to 1999.\(^{528}\) In accordance with the above findings, Edesur implemented reductions throughout the 1990s, with the strongest decrease in the period 1992 to 1993 (a decrease of 33%, leading to a workforce reduction

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\(^{525}\) See APJAE (2005), p. 12.


\(^{527}\) It should be noted that the number of employees refers to those directly employed; outsourced staff are therefore not included in the above statistics.

\(^{528}\) Employment numbers for Edenor and Edelap showed similar tendencies.
from 7,541 to 5,051 people). As illustrated by the figure, in 1999, only 36% of the 1992 workforce was left—2,695 people in comparison to 7,541.\textsuperscript{529}

**Figure 21:** Employment Levels at Edesur, 1992-1999

At the same time as employment numbers experienced an important decrease, productivity—measured as the number of customers per employee—increased substantially, from 248 in 1992 to 800 in 1999 (see below Figure 22).

Duarte (2002) stresses “the increase in labour productivity in the selected companies has been highly associated with the evolution of employment.”\textsuperscript{530} In accordance with the findings of Flecker and Hermann (2009) for public services in Europe, important and continuous employment reductions in Argentina also implied that fewer staff were creating roughly the same output as the larger workforce before privatisation and restructuring, implying an increased workload for the remaining employees.\textsuperscript{531}

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The next section details the changes in working conditions in the post-privatisation Argentine electricity sector.

### 6.1.4. New Working Arrangements for the Argentine Electricity Sector

Employee status in the privatised sectors switched from public to private and was accompanied by important changes in working conditions. New collective labour agreements were concluded between the privatised companies and electricity sector unions shortly after privatisation. For Segba’s succeeding companies, Edenor, Edesur, and Edelap, the *Convenio de Trabajo Colectivo 225/1993*—concluded between the union *Luz y Fuerza de Capital Federal* and the three companies on August 2, 1993—inter alia established the following new working arrangements:

- the introduction of multitasking as a concept; the requirement to provide services in a location other than the habitual residence, if considered necessary (Article 13);
- the use of outsourcing for technical or economic reasons (Article 14);
- an increase in minimum working hours from 7 hours 15 minutes to 8 hours 12 minutes per day and 41 hours per week (Article 21);
- the establishment of base salaries (Article 46 and Annex II); and
- performance-based annual bonus payments (Article 49).\textsuperscript{532}

Cifarelli (2000) distinguishes between four forms of working condition flexibilisation observed in the post-privatisation Argentine electricity sector, in accordance with the aforementioned collective labour agreement:

- flexibilisation of working hours,
- flexibilisation of work tasks,
- flexibilisation of salaries, and
- flexibilisation of employment contracts.\textsuperscript{533}

The daily working routine of electricity sector employees experienced profound changes during the 1990s in Argentina, outlined in the following section.

**Outsourcing**

Outsourcing was applied to various areas of work, including maintenance, transport, and invoicing. Outsourced workers were generally employed with more precarious working conditions and lower salaries, typically receiving a two-year contract, renewed with less favourable terms at the end of the contract period.\textsuperscript{534} \textsuperscript{535}

**Working Contracts**

There was a general increase in the use of temporary working contracts in public service companies in the Greater Buenos Aires area in the second half of the 1990s, implying a rise in unstable employment situations.\textsuperscript{536}

\textsuperscript{532} Information based on the collective labour agreement Convenio de Trabajo Colectivo 225/93; APJAE (2005), p. 11.
\textsuperscript{535} However, in comparison to Brazil, outsourcing seems to have been of less importance in Argentina and comparably less data on it was found by the author for Argentina.
\textsuperscript{536} See Marshall, A. (1998), p. 14f. The exact period under consideration was 10/96 to 5/97. 23,000 temporary contracts were concluded among public service companies in the area of Greater Buenos Aires in this period. See also Murillo, M. V. (2008), p. 214.
Work-Related Accidents

Several fatal accidents among distribution company employees were reported after privatisation. Cifarelli (2000) emphasises an increase in work-related accidents in the electricity sector, particularly for Edesur, as a result of rising workloads and non-compliance with security standards.\textsuperscript{537}

Working Hours

Apart from lengthened working hours established by new collective agreements, unpaid overtime was also increasingly applied in practice, since employees were expected to complete tasks by the end of the working day.\textsuperscript{538}

Salaries

Average wages increased by 27\% over the period 1993 to 1998, with no significant variations from 1994 onwards for selected public infrastructure companies, including Segba.\textsuperscript{539}

In sum, employment benefits enjoyed by public employees and established by collective labour agreements in operation at the time of privatisation were substantially reduced after the companies were handed over to private investors. Salaries increased initially, but remained constant for most of the 1990s and hence could not compensate for the deterioration in working conditions.\textsuperscript{540}

The subsequent section provides further information on worker shareholdings, which were widely applied in privatisation programmes in Argentina.

\textsuperscript{539} The data on wages for privatised Argentine companies lacked the qualifier “real” or “nominal” in the original data source. See Duarte (2002), p. 56. During the 1990s, a salary freeze was introduced in the context of the convertibility plan without the possibility of renegotiation.
\textsuperscript{540} Information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09. The collective labour agreement, in place at the time of privatisation of Edenor, Edesur, and Edelap, was the Convención Colectiva de Trabajo 78/75, concluded between the union, Luz y Fuerza de Capital Federal, and the public electricity company, Segba, on 8/7/86.
6.1.4.1. Employee Stock Ownership Plan

Worker shareholdings were introduced in the context of many privatisation programmes in Latin America.\(^{541}\) As mentioned in the previous chapter, in Argentina, Articles 21 to 40 of Law no. 23,696, passed on August 17, 1989, introduced the concept of an employee stock ownership plan, Programa de Propiedad Participada (PPP), to be applied to the companies declared “subject to privatisation.” By means of Decree no. 265, issued in 1994, the PPP was implemented for employees of the succeeding companies of Segba, AyE, and Hidronor (Article 1). The Decree implied that workers had to join the PPP individually, negotiate and sign a transference contract with the authorities, and designate a trustee bank. Workers were allowed to choose representatives in the board of directors and set up an executive committee in order to administer the PPP.\(^ {542}\) The shareholdings established for employees ranged from 2% to 12% of the companies’ capital—for the distributors Edenor, Edesur, and Edelap, shareholdings of 10% were applied by means of Decrees no. 714/92 and 976/95.\(^ {543}\) According to the PPP, the shares were to be paid for by annual dividends\(^ {544}\) and could be acquired at a reduced price—set at ARS$ 0.95 per share in the case of Edesur, at ARS$ 0.92 for Edenor, and ARS$ 1.00 for Edelap.\(^ {545}\)

However, the PPP did not always work out as expected. In the case of Edesur, for instance, the programme was cancelled by Resolution no. 735 on June 9, 1999, as a consequence of a lack of interest in the programme on part of company employees.\(^ {546}\) Hence, workers shareholdings could not have impacted in an important way on labour relations.

They were often seen as a method of reducing resistance to privatisation, and, as such, seem to have been quite successful in Argentina.\(^ {547}\)

The following section outlines the consequences of privatisation on union membership and collective bargaining in the Argentine electricity sector.

\(^{542}\) See APJAE (2005), p. 9; legislative text.
\(^{544}\) See Article 31 of Law no. 23,696.
\(^{545}\) See Appendix I of Decree no. 265/94.
6.1.5. Union Membership and Collective Bargaining in the Argentine Electricity Sector

In Argentina, three levels of trade union organisation exist: local, provincial, and federal.\textsuperscript{548} The two union confederations at the latter level are the aforementioned CGT and CTA. In addition, the electricity sector has one union federation, the FATLyF, as well as 41 sector unions at provincial level (see Table 53 below). Several unions experienced a decrease in membership as a consequence of privatisation. Some almost ceased to exist, such as the Asociación de Profesionales Universitarios de Agua y Energía Eléctrica (APUAYE), an association of water and energy sector professionals, which experienced two waves: a pre-privatisation reduction due to the introduction of voluntary-resignation schemes, and a post-privatisation decrease as a consequence of dismissals. In other public service sectors, such as gas, oil, telephony services, and railways, professional associations vanished. Unions were weakened overall by the decrease in membership and the associated decline in contributions.\textsuperscript{549} The disintegration of infrastructure companies, moreover, implied the fragmentation of the workforce and unions.

\textbf{Table 53: Overview of Electricity Sector Trade Union Organisation in Argentina}

<table>
<thead>
<tr>
<th>Union confederations at the federal level</th>
<th>Confederación General del Trabajo (CGT); Central de los Trabajadores de la Argentina (CTA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union federation for the electricity sector</td>
<td>Federación Argentina de Luz y Fuerza (FATLyF)</td>
</tr>
<tr>
<td>41 electricity sector unions at the provincial level</td>
<td>including Luz y Fuerza de Capital Federal, Luz y Fuerza Mar del Plata, and Luz y Fuerza Córdoba, as well as APUAYE</td>
</tr>
</tbody>
</table>

\textbf{Source:} Author’s own compilation

In the case of Segba and its succeeding private companies, \textit{Luz y Fuerza de Capital Federal} is the responsible trade union. Its number of members decreased considerably over time, as shown in Figure 23, below.

In 1975, the union still had a very high membership of 35,000. This number had declined by half, to 17,072 by 1991, and decreased further against the background of privatisation. In the pre- and post-privatisation period from 1991 to 1996, membership declined by as much as 61\%, decreasing by another 44 \% over the following decade (from 1996 to 2009). In 2009, \textit{Luz y Fuerza de Capital Federal} was only left with 3,722 people, equivalent to 10.6\% of its 1975 level.\textsuperscript{550}

\textsuperscript{548} Information based on an interview with José Rigane, carried out on 15/12/08 and 28/4/09.

\textsuperscript{549} Information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.

\textsuperscript{550} See Drolas, M. A. (2009), p. 6; author’s own calculation based on the data used by Drolas.
As mentioned previously, collective bargaining agreements for the whole sector were replaced by separate negotiations. New agreements were concluded shortly after privatisation, contributing to a deterioration of working conditions and increased flexibility. Apart from the loss of members, unions also suffered from a decentralisation of collective bargaining over the 1990s.\(^{551}\) As a consequence, the collective bargaining process in the Argentine electricity sector fundamentally changed. Trade unions lost bargaining power vis-à-vis private employers and had to renew their strategies.\(^{552}\) The division of bargaining systems also implied less comprehensive coverage and increasing differences between companies.\(^{553}\) Furthermore, labour regulation in force was not always respected by the new private company management, despite having signed a passage on compliance with union contracts upon signature of concession contracts.\(^{554}\) There was also, hence, a law-enforcement problem with respect to labour regulation.

In the following section, the impact of privatisation on Brazilian electricity-sector employees is explored.

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\(^{552}\) See APJAE (2005), p. 11.  
\(^{553}\) See Flecker, J. & Hermann, C. (2009), p. 27.  
\(^{554}\) See APJAE (2005), p. 11; information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.
6.2. Impact of Privatisation on Electricity Sector Employees in Brazil

“The use of public funds for financing dismissals” (PSI, 2006)

The exploration of the impact of privatisation on electricity sector employees in Brazil during the 1990s begins with an examination of employment trends in the infrastructure sector, followed by the electricity sector (section two) and the company Light (section three). Section four then assesses changes in working conditions, and section five investigates shifts in union membership and collective bargaining.

6.2.1. Employment Levels in the Brazilian Infrastructure Sector

Public companies became a significant source of employment in Brazil after the 1960s, absorbing excess labour supply. Overstaffing is said to have emerged as a trend in the public sector, which was reversed with privatisation during the 1990s. Employment numbers showed a drastic reduction in most of the country’s infrastructure sectors; similar to Argentina, in many cases, this commenced even before state-owned firms were privatised. Downsizing was especially pronounced in public utilities, since a large part of the privatisation process centred on these companies, and they traditionally employed huge numbers of staff. Figure 24 illustrates this decline. The number of employees in selected infrastructure sectors decreased by 10% in the second half of the 1990s, from 395,359 in 1995 to 356,607 in 1999. In contrast to the Argentine infrastructure sector, the state continued to play an important role in the provision of public services in Brazil during the 1990s. The numbers presented here do not allow for a clear-cut distinction of different employment reduction periods. However, the figure clearly shows that the number of employees decreased throughout the period under consideration: from 1995 to 1996 by 1%, from 1996 to 1997 by 3%, from 1997 to 1998 by 4%, and from 1998 to 1999 by 2%. Employment reduction was, hence, comparably more pronounced from 1996 to 1998 than in the beginning and end of the period under consideration. Looking at the four sectors as a whole, percentage decreases in employee number seem to have been less pronounced in Brazil than in Argentina. In absolute terms, however, 38,752 people lost their jobs within a short period of time in Brazil.

556 It should be noted that the previously presented data on Argentina only included public infrastructure companies, which were privatised during the 1990s—simply because all major Argentine infrastructure...
Employment changes were not uniform across sectors. Whereas electricity and gas showed important employment reductions of 36% and 56%, respectively, employment actually increased in water and sewerage and telecommunications by 11% and 2% respectively over the period. Unfortunately, it is not possible to conclude from the data whether employment changes were more pronounced in privatised than in public companies.

Table 54 further shows that the private sector share in public service provision was augmented significantly in all four sectors considered. Whereas 97% of the electricity sector was still public in 1995, 45% was private in 1999; in the gas sector, 92% of companies were public in 1995 and 69% private in 1999; in water and sewerage, 68% of the sector was public in 1995 and 38% private in 1999; and in telecommunications, the numbers dropped from 80% public in 1995 to 74% privately owned in 1999.
Table 54: Total Volume of Employment for Selected Brazilian Infrastructure Sectors, 1995-1999

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Public</td>
<td>Private</td>
<td>Total</td>
<td>Public</td>
</tr>
<tr>
<td>Electricity</td>
<td>149,100</td>
<td>97</td>
<td>3</td>
<td>128,545</td>
<td>97</td>
</tr>
<tr>
<td>Gas Distribution</td>
<td>3,257</td>
<td>92</td>
<td>8</td>
<td>2,640</td>
<td>89</td>
</tr>
<tr>
<td>Water and Sewerage</td>
<td>135,313</td>
<td>68</td>
<td>32</td>
<td>146,791</td>
<td>72</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>107,689</td>
<td>80</td>
<td>20</td>
<td>113,126</td>
<td>77</td>
</tr>
<tr>
<td>Total</td>
<td>395,359</td>
<td>391,102</td>
<td>378,750</td>
<td>363,647</td>
<td>356,607</td>
</tr>
</tbody>
</table>

Source: Anuatti-Neto et al. (2003) 557

557 Anuatti-Neto et al. (2003), p. 25ff, point to the difficulty in gathering comprehensive data on privatised companies for the pre-and post-privatisation period. Their data is based on the Brazilian Annual Survey of Social Data (RAIS) from the Ministry of Labour and Employment, which provided consistent data for the period 1995 to 1999 for several industries. The RAIS requires firms and the government to list employees on an annual basis. It does not allow for identifying individual firms. It should be noted that the widespread use of outsourcing in Brazil is not reflected in the direct employment data of the privatised firms. The effect on employment levels presented here might therefore be overstated.
Of the four sectors considered, telecommunications, hence, went furthest in privatising, followed by gas. However, electricity, as well as water and sewerage also showed a high rate of private participation in service provision in 1999. According to the data, most privatisations were carried out in the period 1997 to 1999, which does not entirely overlap with the major downsizing period (1996 to 1998), but lagged a year behind.

The next section takes a closer look at electricity sector downsizing during the 1990s.

### 6.2.2. Employment Levels in the Brazilian Electricity Sector

The electricity sector is a major source of employment in Brazil, employing almost 150,000 people in 1995 (see Table 54). Moreover, it is estimated that about 80,000 people were directly or indirectly employed by associated industries, such as manufacturing of equipment. A report by Coopers & Lybrand (1996) at the time stated that the employment level in several areas of the Brazilian electricity sector was “high in comparison to efficient companies in other countries and that there seemed to be considerable scope [with respect to downsizing].” Figure 25 below shows the number of employees in the Brazilian electricity sector in the period 1995 to 1999.

**Figure 25:** Number of Employees in the Electricity Sector in Brazil (in Thousands)

Note: Figures rounded
Source: Author’s own compilation, based on Anuatti-Neto et al. (2003)

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As illustrated by the figure, an important reduction in the number of electricity sector employees can be observed during the Cardoso government in the second half of the 1990s in Brazil. In addition, there had already been a significant decrease in the workforce in the early 1990s. When the Collor administration included the Eletrobras Group in the PND, an administrative reform was implemented, in the context of which more than 20% of the 1989 workforce—equivalent to 11,000 employees—was made redundant, mostly by means of voluntary severance.\textsuperscript{559}

From 1995 to 1996, electricity sector employment decreased by 14%, and, from 1996 to 1997, fell even further—by 22%. From 1997 to 1998, figures then increased by 11%, only to fall again by 14% from 1998 to 1999. Most privatisations, according to the data presented in Table 54, were undertaken in the period 1997 to 1998. This period, again, does not overlap with the time in which most downsizing occurred, but actually coincides with an employment increase. Nevertheless, the short period of rising employment could not compensate for the cuts made before and afterwards; the downward trend continued at the end of the 1990s, by which time almost half the sector was in private hands.\textsuperscript{560} Over the whole period considered, 53,230 electricity sector employees lost their jobs, equivalent to a 36% decrease.\textsuperscript{561} Employment numbers experienced a further drop in the early 2000s. All Brazilian states saw such decreases.\textsuperscript{562}

As with the Argentine case, dismissed Brazilian electricity workers were highly specialised and therefore experienced significant difficulties reintegrating into the labour market.\textsuperscript{563} Even though compensation payments were relatively high, workers who started their own businesses often failed and ended up in debt.\textsuperscript{564} Moreover, dismissals also led to a loss of planning capacity, particularly problematic as hydroelectric power requires an extensive planning process, and new projects take several years of construction work.\textsuperscript{565}

The following section presents data on the employment levels of the electricity company, Light.

\textsuperscript{560} Again, it would be desirable to compare employment trends in public and private companies, but the data unfortunately does not allow for making such a distinction.
\textsuperscript{561} This number is higher than the previously presented number on employment reductions for the four infrastructure sectors presented since two of the sectors included in the data experienced employment increases.
\textsuperscript{564} Information based on several interviews held in Brazil in March 2009.
\textsuperscript{565} Information based on several interviews held in Brazil in March 2009.
6.2.3. Employment Levels at Light

During the first two months after Light’s privatisation, some administrative changes, as well as alterations in the company directorate, were undertaken. To begin with, the first 362 workers were made redundant in a single day, then, 15 days later, a voluntary severance programme, Programa de Demissões Incentivadas (PDI), was launched, in which 3,892 employees would participate in 1996. Figure 26 depicts the reduction in employee number in the context of the PDI, differentiating between the following three areas of work: operations, support services, and administration.

**Figure 26: Remunerated Dismissals at Light per Area of Operation, August 1996**

![Bar chart showing the reduction in employee number in the context of the PDI, differentiating between the following three areas of work: operations, support services, and administration.]

*Source: IOS (2001)*

The figure clearly shows that, overall, operational activities were much more strongly affected by downsizing than administration and support services, accounting for 62.51% of dismissals under the PDI. However, the other two areas also experienced significant downsizing.566

In mid-1997, 930 further dismissals followed.567 Table 55 shows the number of employees for different categories of professionals at Light pre- and post-privatisation (as of October 1997). Before privatisation, Light had a total of 11,860 employees; following privatisation, this number had reduced to 6,500, equivalent to only 55% of the previous figure. The table further allows for identifying which professionals were particularly affected by downsizing. In absolute terms, administrative staff and electricians were the most affected.

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groups, whereas drivers and health professionals were the least. The latter two groups were, however, the most affected in relative terms.\footnote{Author’s own calculation, based on the data presented from IOS (2001).}

Table 55: Employment Reductions at Light for Different Categories of Professionals

<table>
<thead>
<tr>
<th>Area of Work</th>
<th>No. of Employees before Privatisation</th>
<th>No. of Employees after Privatisation</th>
<th>Difference in the No. of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agents for cargo / distribution / system</td>
<td>190</td>
<td>140</td>
<td>50</td>
</tr>
<tr>
<td>Electric substation operators</td>
<td>776</td>
<td>469</td>
<td>307</td>
</tr>
<tr>
<td>Electricians</td>
<td>2,226</td>
<td>1,351</td>
<td>875</td>
</tr>
<tr>
<td>Technicians</td>
<td>1,328</td>
<td>847</td>
<td>481</td>
</tr>
<tr>
<td>Engineers</td>
<td>789</td>
<td>514</td>
<td>175</td>
</tr>
<tr>
<td>Drivers</td>
<td>198</td>
<td>44</td>
<td>154</td>
</tr>
<tr>
<td>Industrial support personnel</td>
<td>595</td>
<td>143</td>
<td>452</td>
</tr>
<tr>
<td>Maintenance personnel and construction employees</td>
<td>168</td>
<td>103</td>
<td>65</td>
</tr>
<tr>
<td>IT staff</td>
<td>303</td>
<td>106</td>
<td>197</td>
</tr>
<tr>
<td>Health professionals</td>
<td>84</td>
<td>20</td>
<td>64</td>
</tr>
<tr>
<td>Commercial sector employees</td>
<td>734</td>
<td>258</td>
<td>476</td>
</tr>
<tr>
<td>Administrative staff</td>
<td>2,919</td>
<td>2,085</td>
<td>834</td>
</tr>
<tr>
<td>Other</td>
<td>1,550</td>
<td>420</td>
<td>1,130</td>
</tr>
<tr>
<td>Total</td>
<td>11,860</td>
<td>6,500</td>
<td>5,260</td>
</tr>
</tbody>
</table>

Note: Translation by author
Source: IOS (2001), based on a report of the HR department of Light from 10/97

As a consequence of the PDI, the number of customers per employee increased considerably in the privatisation period, from 200 in 1996 to 429.5 in 1997 (see Figure 27).

Figure 27: Number of Customers per Employee at Light in 1978, 1996, and 1997

Source: IOS (2001)\footnote{Author’s own calculation, based on the data presented from IOS (2001).}
However, a significant proportion of dismissed employees continued to work indirectly for Light, providing their services through cooperatives or micro-enterprises.\textsuperscript{570} Outsourcing started to play an important role in Brazil during the 1990s. This phenomenon is outlined further below.

\textbf{6.2.3.1. Outsourcing}

A trend towards outsourcing (\textit{terceirização})—defined as “the strategic use of outside resources to perform activities traditionally handled by internal staff and resources”\textsuperscript{571}—started in various industrial sectors in Brazil in the 1990s and was also widely applied in public sectors during the second half of that decade.\textsuperscript{572} In the electricity sector, outsourcing commenced from 1996 onwards, after the initiation of the privatisation process with the aim of reducing costs and withdrawing from labour-law obligations on the part of new private managers.\textsuperscript{573} Outsourcing was initially limited to areas such as maintenance of equipment, cleaning services, safety, transport, and nutrition, but was extended to strategic areas subsequently.\textsuperscript{574} At Light, outsourcing played an important role. Many activities previously undertaken by permanent staff were outsourced after privatisation. As a result, by 2004, Light had only 3,845 direct employees left, whereas it employed 10,772 outsourced workers.\textsuperscript{575}

Today, services are outsourced in almost all productive sectors in Brazil. According to current estimates, such workers total about 11 million people.\textsuperscript{576} Union struggles with respect to outsourcing concentrate on the need to find an appropriate regulatory frame for negotiations and collective bargaining agreements. The regulation of outsourcing remains a challenge, since very different forms of contract and transfer of production / service provision exist.\textsuperscript{577}

In sum, following the commencement of outsourcing in the 1990s, it was broadly extended in the following years, generally implying less stable employment situations as well as poorer working conditions than those for directly employed workers.

\textsuperscript{570} See IOS (2001), p. 29f.
\textsuperscript{575} See PSI (2006), p. 71.
\textsuperscript{576} De Ferreira, G. (2013), p. 1. Due to a lack of regulation of outsourced activities and high job rotation, no exact data on the number of employees in these activities exists.
\textsuperscript{577} See DIEESE (2012), p. 2ff.
However, working conditions also altered for those directly employed. The following section details some of the most important changes in working conditions over the 1990s, focusing on Light.

6.2.4. New Working Arrangements for the Brazilian Electricity Sector

At the time of Light’s privatisation, the collective bargaining agreement for the period 1995-1996 was still in place. The agreement, concluded the following year for the period 1996-1997, brought several changes and, inter alia, established the following:

- implementation of profit and result sharing,
- introduction of internal mobility by retraining employees whose tasks were eliminated or outsourced, and
- reduction of benefits for new employees.

Apart from the contractually established changes in the working conditions at Light, several further modifications took place in practice. The most important of these are listed in the following.

Working Hours

Working beyond normal hours became more common among Light employees after privatisation and was not always compensated. Similar to those in Argentina, employees felt pressure to complete tasks within a deadline. Unpaid overtime was more frequent among employees with higher salaries, who often opted not to reclaim payment for extra hours worked. In the electricity sector in general, the adoption of more flexible working hours was introduced in practice.

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579 See IOS (2001), pp. 33, 100ff.
Workload and Tasks

As a consequence of the reduced workforce, combined with increased demand for electricity services, the workload for the remaining Light employees rose significantly. Moreover, assuming additional tasks became common practice among Light employees.\textsuperscript{582} Multifunctionality has, since then, also been introduced in the daily routine at Light.

Working Environment

The need to perform additional tasks led to a sense of insecurity among employees, who felt pressure and stress. The huge scale downsizing, moreover, left the remaining workers fearful of losing their job, exacerbated by difficult labour market conditions.\textsuperscript{583} The threat of unemployment made employees in general accept poorer and more flexible working conditions during the second half of the 1990s in Brazil.\textsuperscript{584}

Salaries

Light employees received salaries well above the Brazilian average. According to IOS (2001), workers received between 3 and 15 Brazilian minimum wages; most of them fell in categories 6 to 9, 9 to 12, and more than 15 minimum salaries.\textsuperscript{585} However, many employees also experienced salary reductions, particularly those who left direct working relations and started to work as indirectly employed.\textsuperscript{586}

Workers’ Shareholdings

At the beginning of the electricity-sector privatisation process, shares were offered to employees at a reduced price. At Light, 10\% were reserved for employees, of which 41\% could be acquired at a 70\% discount.\textsuperscript{587}

\textsuperscript{582}See IOS (2001), pp. 50, 53.
\textsuperscript{583}See IOS (2001), p. 46ff.
\textsuperscript{585}See IOS (2001), pp. 37, 55. The minimum wage considered was from September 2000, amounting to R$ 151.00 per month. Costa, A. F. de S. & Zotes, L. P. (Eds.) (2005), p. 601, also find above average salaries for the distribution company, Alfa, after privatisation.
\textsuperscript{586}Information based on various interviews held in Brazil in March 2009.
\textsuperscript{587}See IOS (2001), p. 27f, for further information on workers’ share ownership at Light.
In addition to the above changes in the working conditions at Light, PSI (2006) point to a flexibilisation of working contracts for electricity sector workers in general.\(^{588}\) In summary, as for Argentina, a considerable deterioration in working conditions was observed after the privatisation of Light, which was, however, at least partially compensated for by comparably high salaries. In the electricity sector in general, a flexibilisation of working relations commenced during the 1990s.\(^{589}\)

The following section takes a closer look at the issue of work-related accidents and its specific application to the electricity sector, focussing on Light.

### 6.2.4.1. Work-Related Accidents

Work-related accidents are not necessarily more pronounced in the electrical industry than in other sectors; however, those involving contact with electricity are often fatal.\(^{590}\) so relevant companies adopt various preventative safety measures. At Light, a committee for the prevention of accidents, Comitê Permanente de Prevenção de Acidentes (CPPA), was created by the public company management in 1992.\(^{591}\) The CPPA was in charge of monitoring the results of an accident prevention plan, Plano de Prevenção de Acidentes da Light, and formulated policy recommendations. When Light was privatised, it took about one year of strong union pressure until the CPPA resumed working. Fatal accidents increased noticeably after privatisation,\(^{592}\) although it seems that this problem was outsourced, together with operational activities; in 1999 there was not a single fatal accident among Light employees, but as many as 68 fatalities were reported from agencies providing maintenance for an important part of Light’s operational system. The number of fatal accidents had been even higher the previous year, totalling 89.\(^{593}\) The high number of fatalities among outsourced activities can be explained, according to IOS (2001), by a lack of training of the employees

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592 See PSI (2006), p. 70.
593 The number of fatal accidents at Light’s outsourced operational activities is extremely high in comparison to other countries. In the UK, for instance, 104 fatal accidents involving contact with electricity were reported for all industries during a period of seven years (1996/97 to 2002/03). Information from the British Health and Safety Executive retrieved October 8, 2013, from [http://www.hse.gov.uk/research/rrpdf/rr771.pdf](http://www.hse.gov.uk/research/rrpdf/rr771.pdf). In addition, there were also deadly incidents among local residents who came into contact with facilities or equipment of Light. See IOS (2001), p. 34.
concerned, as well as by poor working conditions of outsourced activities. The authors, hence, point to a need to monitor outsourced activities on the part of Light.\textsuperscript{594}

In recent years, Light has launched several initiatives to prevent work-related accidents. In 2009, the company implemented a management system for a safe working environment, \textit{Sistema de Gestão de Trabalho Seguro} (SGST), in order to address the high risk in the sector. All Light’s outsourced staff today are trained in health and safety matters. As a result of recent efforts, the number of fatal accidents has been substantially reduced. In 2012, three such accidents were reported among outsourced personnel.\textsuperscript{595}

The following section investigates the consequences of privatisation on union membership and collective bargaining.

\textbf{6.2.5. Union Membership and Collective Bargaining in the Brazilian Electricity Sector}

Several union confederations exist in Brazil today. Among the most important are the previously mentioned \textit{Central Única dos Trabalhadores} (CUT) and \textit{Força Sindical}.\textsuperscript{596} In the electricity sector, workers are also represented by the union federation \textit{Federação Nacional dos Urbanitários} (FNU) and dozens of electricity sector unions at the level of Brazil’s states (see Table 56).

\textbf{Table 56: Overview of Electricity Sector Trade Union Organisation in Brazil}

<table>
<thead>
<tr>
<th>Most important union confederations at the federal level</th>
<th>\textit{Central Única dos Trabalhadores} (CUT); and \textit{Força Sindical}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union federation for the electricity sector</td>
<td>\textit{Federação Nacional dos Urbanitários} (FNU)</td>
</tr>
<tr>
<td>About 40 electricity sector unions at the state level</td>
<td>including SINTERGIA (electricity workers of Rio de Janeiro) and SENGERJ (engineers in the State of Rio de Janeiro)</td>
</tr>
</tbody>
</table>

\textbf{Source:} Author’s own compilation

Since the number of employees in former public electricity companies was drastically reduced in the context of privatisation in Brazil, sector unions also suffered from a considerable loss in membership, and many unions had their base reduced by almost 50%.

\textsuperscript{594} See IOS (2001), pp. 34, 45; information based on several interviews held in Brazil in March 2009. Unfortunately, data on fatal accidents before privatisation is not provided by the authors.
\textsuperscript{595} See Light (2013), p. 95.
which also implied a reduction in unions’ financial resources and capacity to bargain.\textsuperscript{597} The trade union representing Light workers, SINTERGIA, experienced a considerable loss of members due to the high number of dismissals after privatisation. However, despite this loss, SINTERGIA still maintained a comparatively high affiliation rate of almost 70\% in 2001. Nevertheless, union affiliation was lower among new employees. Moreover, those in higher positions felt pressure to remain unaffiliated. In addition, some union leaders were transferred to areas where they had less influence on other employees.\textsuperscript{598}

As a consequence of membership losses, various unions of electricity distributors acquired by multinationals, including Light, changed strategy and developed collaborative relations with unions from the multinational’s country of origin.\textsuperscript{599} Overall, the focus of unions changed from fighting for additional rights to securing existing rights instead.\textsuperscript{600}

Furthermore, a tendency for union fragmentation emerged over the 1990s. As illustrated by Table 57, the number of unions in Brazil increased considerably: from 8,306 in 1991 to over 13,299 ten years later. This increase was, however, stronger in the public than the private sector. The rising trend in union number might be explained partly by the facilitation of union formation under the new constitution of 1988 but is probably also attributable to changes in trade union organisation implemented by the Cardoso administration at the end of the 1990s.\textsuperscript{601} Moreover, it is most likely influenced by workforce fragmentation in the context of privatisation and sector restructuring.

**Table 57: Number of Unions in Brazil, 1991 versus 2001**

<table>
<thead>
<tr>
<th></th>
<th>1991</th>
<th>2001</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private sector unions</td>
<td>7,612</td>
<td>11,354</td>
<td>49%</td>
</tr>
<tr>
<td>Public sector unions</td>
<td>694</td>
<td>1,945</td>
<td>180%</td>
</tr>
<tr>
<td>Total number of trade unions in Brazil</td>
<td>8,306</td>
<td>13,299</td>
<td>60%</td>
</tr>
</tbody>
</table>

*Source: Zylberstajn (2002)*

At the same time as the number of unions increased, strikes by trade unions decreased considerably. Alves (2000) stresses “a crisis of unionism in Brazil,” which surged in the 1990s as a result of the crisis in the world of work.\textsuperscript{602}

In the following section, some interim conclusions are presented.

\textsuperscript{597} See PSI (2006), p. 139ff.
\textsuperscript{598} See IOS (2001), p. 38ff.
\textsuperscript{599} See PSI (2006), p. 139ff.
\textsuperscript{602} See Alves, G. (2000), p. 120ff.
6.3. Interim Conclusions

Electricity sectors in Argentina and Brazil experienced massive downsizing in the context of privatisation during the 1990s. The massive employment reductions were mostly carried out in the form of voluntary resignation in Argentina and voluntary severance in Brazil. Downsizing started before privatisation and was intensified in the post-privatisation period. The companies Segba and its successors as well as Light experienced huge reductions in the workforce of over 40% in each case in the years of privatisation (see Table 58 below).

Table 58: Overview of Workforce Reductions in the Argentine and Brazilian Electricity Sectors

<table>
<thead>
<tr>
<th>Electricity Sector</th>
<th>Argentina</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-privatisation employment reductions?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Post-privatisation employment reductions?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Major form of downsizing</td>
<td>voluntary resignation</td>
<td>voluntary severance</td>
</tr>
<tr>
<td>% decrease in the workforce during the privatisation period</td>
<td>42% reduction from 1992 to 1993 at Segba and succeeding companies(^{603})</td>
<td>45% reduction in 1996 at Light</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation based on diverse sources.

Employment reductions in the public sector in Argentina were undertaken to such an extent that they had an important impact on unemployment. Figure 28 below depicts the unemployment rates for Argentina and Brazil over the 1990s. As shown in the figure, the rate in Argentina increased significantly during the 1990s, reaching an unprecedented level,\(^{604}\) and becoming structural in Argentina over the period.\(^{605}\) Several studies demonstrated that privatisation and restructuring were partly responsible for this increase.\(^{606}\) Duarte (2002), for instance, finds that 2.3 percentage points of the increase in the unemployment rate can be explained by privatisation of public service companies.\(^{607}\) Privatisation was accompanied by dismissals on a huge scale in different infrastructure sectors. Due to the extent to which public companies were handed over to private entities, the state, moreover, lost its capacity to

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\(^{603}\) According to Duarte (2002), 42% of the workforce was reduced from 1992 to 1993; according to APJAE (2005), the decrease was 38%. The difference is probably due to the fact that APJAE use mid-year figures.


\(^{606}\) See for instance Duarte, M. (2002), p. 52f; Marshall, A. (1998), p. 8. Another important reason for the increase in the unemployment rate was the deteriorating macroeconomic conditions in the second half of the 1990s.

compensate for an excess supply of labour. As a consequence of the huge unemployment rate of the 1990s, the income distribution worsened, poverty rose, and criminality increased.\textsuperscript{608}

**Figure 28**: Unemployment Rate in Argentina and Brazil, 1990s

Whereas the unemployment rate increased from an historic 6\% to 17\% in 1996 in Argentina, it remained between 5\% and 6\% in Brazil until 1997.\textsuperscript{609} In Brazil, employment numbers did not decrease in all infrastructure sectors over the 1990s, but actually increased in some. Moreover, infrastructure sector reforms and privatisation were introduced later in Brazil. Most employment reduction was carried out from 1997 to 1998, and an eventual impact is hence not yet visible in the figure. The Brazilian unemployment rate did indeed start to increase in the period 1997 to 1998, amounting to 8\% by mid-1998.\textsuperscript{610} However, due to its more solid industrial base, Brazil’s unemployment rate was affected less overall by the introduction of neoliberal reforms during the 1990s than that in Argentina,\textsuperscript{611} increasing by two percentage points from 1997 to 1998, in comparison to the 11 percentage point increase from 1991 to 1996 in Argentina. Nevertheless, the Brazilian unemployment rate reached a historic high level during Cardoso’s first term in office.\textsuperscript{612} Moreover, the Brazilian labour market during the 1990s also experienced rapid changes with respect to a shift of employment from the secondary to the tertiary sector, an increase in low quality jobs, and an increase in

\begin{itemize}
\end{itemize}
informal employment. It was further characterised by the flexibilisation of employment in combination with greater job insecurity with respect to employment duration and entry into the labour market.

In view of the huge size of employment reduction in Argentina and Brazil against a background of privatisation during the 1990s, it is unsurprising that many studies point to efficiency improvements in terms of labour productivity at the companies concerned.

At the same time as unemployment increased in Argentina and Brazil, working conditions worsened, as outlined previously and summarised below.

Changes in the Working Conditions in Argentina and Brazil during the 1990s

Privatisation policies in Argentina and Brazil were introduced together with sector restructuring and major changes in labour regulation. As a result, part-time, temporary, and outsourced working relations emerged and contributed to a flexibilisation and fragmentation of the Brazilian and Argentine workforces. In the electricity sector, new collective bargaining agreements concluded shortly after privatisation introduced more flexibility and overall poorer working conditions.

At Edesur, Edenor, and Edelap, working hours increased without any compensation. Overtime was increasingly used in electricity companies in Argentina and Brazil and working hours generally handled more flexibly, as reflected, for instance, by the introduction of time banking in Brazil. In both countries, the number of tasks handled by workers, as well as the daily workload, increased considerably as a consequence of workforce reductions. The working atmosphere also suffered, since workers felt increasing pressure and were afraid of losing their jobs.

Salaries, on the other hand, were comparatively high in Brazil for Light employees, and a profit- and result-sharing system was introduced after privatisation, although overtime was partly unpaid. In Argentina, average public sector salaries increased at first, but remained constant thereafter. In addition, performance based bonus schemes were introduced.

Different types of working agreement emerged in both countries, with temporary employment contracts being of particular importance in Argentina. Outsourcing has played a

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major role in Brazil, where an important part of services in many companies are now provided by indirectly employed staff. In Argentina, outsourcing was also applied for different activities; in the electricity sector, these included the areas of maintenance and administration. With differing types of contract, moreover, an increasing fragmentation of the workforce emerged. Whereas the longstanding workforce enjoyed stable employment conditions, newly hired workers were increasingly contracted by means of temporary contracts; new employment relationships became mostly short-term, implying lower employment security. Moreover, outsourced workers faced more precarious employment conditions overall.617

Table 59 summarises the main changes in employment and working conditions in the Argentine and Brazilian electricity sectors over the 1990s.

Table 59: Changes in the Working Conditions of Electricity Sector Employees in the Context of Privatisation in Argentina and Brazil, 1990s

<table>
<thead>
<tr>
<th>Changes introduced by the Private Company Management under new Collective Agreements</th>
<th>Argentina</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working hours</td>
<td>rise in working hours and increase in the use of overtime</td>
<td>introduction of time banking and increase in the use of overtime</td>
</tr>
<tr>
<td>Work tasks</td>
<td>introduction of multitasking</td>
<td>increase in the number of tasks</td>
</tr>
<tr>
<td>Workload</td>
<td>rise in workload</td>
<td>rise in workload</td>
</tr>
<tr>
<td>Working atmosphere</td>
<td>deterioration due to worsening working conditions and unemployment threat</td>
<td>deterioration due to worsening working conditions and unemployment threat</td>
</tr>
<tr>
<td>Average salaries</td>
<td>salary increase in the early 1990s; roughly constant thereafter</td>
<td>comparatively high salaries; partly unpaid overtime</td>
</tr>
<tr>
<td>Bonus payments</td>
<td>introduction of performance-based criteria</td>
<td>introduction of profit and result sharing</td>
</tr>
<tr>
<td>Employment contracts</td>
<td>increasing utilisation of temporary employment contracts</td>
<td>flexibilisation of working contracts</td>
</tr>
<tr>
<td>Outsourcing</td>
<td>outsourcing of various activities, including maintenance and administration</td>
<td>applied to an important extent, at first in areas not considered strategic, amplified afterwards</td>
</tr>
<tr>
<td>Workforce</td>
<td>increasing fragmentation of working conditions (old vs. new staff)</td>
<td>increasing fragmentation of working conditions (direct vs. indirect staff)</td>
</tr>
<tr>
<td>Health &amp; safety</td>
<td>several fatal work-related accidents after privatisation</td>
<td>numerous fatal accidents in outsourced operational activities</td>
</tr>
<tr>
<td>Union membership</td>
<td>decrease in membership; union fragmentation</td>
<td>decrease in membership; union fragmentation</td>
</tr>
<tr>
<td>Collective labour agreements</td>
<td>decentralisation; loss of bargaining power</td>
<td>loss of bargaining power</td>
</tr>
</tbody>
</table>

Source: Author’s own compilation, based on diverse sources.

Several fatal accidents concerning electricity sector employees were reported after privatisation in both countries. At Light, numbers were particularly high among outsourced

617 Flecker, J. & Hermann, C. (2009), p. 27, present similar findings for electricity sector employees in several European countries.
workers, who lacked sufficient training. Outsourced workers were often not unionised. Unions overall suffered an important loss in membership and became increasingly fragmented as a result of privatisation and electricity sector restructuring. They also, hence, experienced a loss of bargaining power. In addition, in Argentina, where unions traditionally had a centralised structure, a decentralisation took place.

The massive job cuts in the electricity industry also had important consequences for service quality, an issue briefly introduced in the following section.

**Impact of Employment Reductions on Service Quality**

Privatisation impacted on service quality through two main channels:

1. reduction in the workforce, and
2. introduction of a profit motivation.

Companies’ short-run operational activities, as well as long-term planning capacities, were affected by these changes. The massive employment reductions led to a significant increase in the number of customers per employee (from 248 in 1992 to 800 in 1999 at Edesur and from 200 in 1996 to 429.5 in 1997 at Light), which necessarily implied that less attention was being given to each customer. The decrease in the workforce, moreover, led to a loss of cooperative spirit and technical expertise, since it was often experienced, qualified workers who were displaced. As a consequence, maintenance work was not always undertaken in a high quality way.\(^{618}\) In addition, the planning capacities of the sector suffered as a result. This fact was exacerbated by the interest in short-term profits on the part of private investors, who tend to lack a long-term perspective and underinvest in projects such as network expansion, which are required to meet increasing energy demand.

Figure 29 below illustrates the problems caused by privatisation with respect to energy planning capacities.

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\(^{618}\) Information based on various interviews held in Argentina and Brazil in the period 5/12/08 to 28/5/09.
As a result, regarding post-privatisation electricity generation in Argentina, more private investment was undertaken in fossil fuels instead of hydroelectric plants. Other alternative energy sources were largely neglected; environmental aspects played a minor role in private investment decisions. As mentioned in Section 4.2.4., initial private participation in electricity generation even led to overinvestment in generation activities, resulting in a price decrease, followed by a fall in investment. This reduction, combined with increasing demand for electricity then led to energy shortages in the late 1990s and a greater dependence on imports of electrical energy in recent years. In addition, abandoned power plants were turned on again, impacting negatively on the environment, since old plants use more polluting technologies.

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619 Information based on various interviews held in Argentina and Brazil in the period 5/12/08 to 28/5/09. It should be noted that problems already existed before privatisation in the electricity sector. Privatisation, however, exacerbated some of these.

620 Information based on interviews held in Argentina in the period 5/12/08 to 28/5/09.

621 See APJAE (2005), p. 23; information based on various interviews held in Argentina in the period 5/12/08 to 28/5/09.
In Brazil, lack of investment in the electricity grid led to major power cuts in the city of Rio de Janeiro in the second half of the 1990s. Additionally, the expansion of generation capacity was insufficient, which contributed to the country’s worst energy crisis in recent history.

The private sector on its own, hence, did not provide the investment necessary to guarantee quality and reliability of electrical supply. On the one hand, this failure can be attributed to the lack of investment incentives and insufficient monitoring of quality standards compliance on the part of the public sector; on the other hand, the reduction in planning capacity can also be explained by the loss of technical expertise and a long-term perspective as a result of huge-scale workforce reductions.

The need to increase investment in nonfossil fuels, as well as in poor rural areas, remains a major challenge for the Argentine electricity sector today. The lack of investment in renewable energy sources during the 1990s and early 2000s, moreover, resulted in a law being passed by the government in 2005, establishing a regimen for the use of renewable energy sources (Law no. 26,190 on electrical energy).

In Brazil, 12 million people still lived without electricity in 2003, mostly in rural areas. The government, therefore, launched the *Luz para Todos* (“Light for all”) programme under the presidency of Lula da Silva in 2003, aiming at providing universal access to electricity. As a result of the programme, 11 million people gained such access.\(^{622}\)

Summing up, privatisation led to massive job losses in the Argentine and Brazilian electricity sectors and at the companies Segba and its successors, as well as Light. These not only affected the workers made redundant, but also impacted on service quality, and contributed to a deterioration of planning capacities of the sector. The 1990s, moreover, initiated a process of deteriorating working conditions in both countries, beginning shortly after privatisation. Overall, they implied less stable labour relations, more flexibility, and an increasingly fragmented workforce. Further data on the impact of privatisation on electricity sector employees would be desirable in order to draw more precise conclusions. In addition, it should be noted that this chapter focussed on short-term effects. A following up of the data to include longer-term effects would be desirable but was beyond the scope of this analysis.

The following chapter presents general conclusions and policy implications of the results.

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Chapter 7. Conclusions

This chapter aims to bring the different results together. The first section reflects on the theoretical and methodological approach applied. Section two contrasts the results for Argentina and Brazil by focussing on similarities and differences in the privatisation process, regulatory context, and impact on employees. The final section derives possible policy implications of the results.

7.1. Theoretical and Methodological Considerations

This book has explored the impact of privatisation on employees and aimed at contributing to the existing literature in the following ways:

- providing a theoretical underpinning of empirical findings by adopting Colin Hay’s concept of historical institutionalism;
- undertaking a contextualised and comprehensive analysis of the employee impact;
- linking the employee impact to privatisation process and regulatory context;
- adopting a comparative approach on three levels (national, sector and company level).

The different privatisation paths of Argentina and Brazil, two countries with broadly similar historical traditions, cultural characteristics, and economic developments, were assessed, with the benefit of insights from economic and political analysis. A broad definition of privatisation was used—a policy process, entailing policy changes determined by structural, contextual, and agential factors—in order to gain a deeper understanding of the phenomenon.

The process of paradigm shift towards privatisation was explained by applying Hay’s (2001) ideational institutionalist approach to the Latin American context. Accordingly, different successive stages of policy change were identified; the historical, political, economic, and ideational backgrounds to privatisation were explored for both countries, providing a broad contextual picture. Hence, elements of discursive and historical institutionalism have been combined and applied to the Latin American context, thus contributing to a second movement in institutional analysis. The theoretical frame adopted allows for singling out the two countries’ varying ways of translating privatisation policies...
into institutional practice. Focussing on the privatisation process, regulatory context, and impact on employees, the following three main questions were addressed:

- What policy outcomes were observed?
- How did these come about?
- Why did they come about?

Furthermore, in accordance with Dombois and Pries (1999), different levels of analysis were considered. Shifting between the global, national, sector, and company levels, different policy dimensions of privatisation were captured, and the results of empirical studies on electricity sector privatisation in Argentina and Brazil and the two chosen company cases, Segba and Light, systematically summarised and supplemented by information from interviews with experts in the field. The findings for the two countries were contrasted, and amended by the chosen theoretical frame.

The results reveal that even though tendencies were broadly similar in Argentina and Brazil, the two countries also showed important differences with respect to the timing and time frame as well as the scope of privatisation policies and regulatory change. Accordingly, there were also differences and similarities with respect to employee impact. The next section summarises the main findings.

7.2. Privatisation Process, Regulatory Context, and Employee Impact

This section presents a summary of the empirical findings, beginning with an outline of the similarities in the privatisation process and regulatory context in Argentina and Brazil, followed by a presentation of important differences between these aspects in the two countries in section two. Section three outlines the impact of privatisation policies on employees, with a view to linking these to the process and regulatory context.

7.2.1. Similarities in Privatisation Process and Regulatory Context

Argentina and Brazil’s economic and political conditions showed broadly similar tendencies of development for much of the last century. Both relied on an agro-export model at the beginning of the 20th century and started to change this export orientation in response to
the Great Depression. Aiming to catch up with other countries, they adopted import-substituting industrialisation as their dominant development strategy between the 1930s and the 1980s. During this period of strong state intervention, governments participated actively in the economy. Many important infrastructure companies were nationalised and further public companies founded; social welfare benefits were increased and labour rights expanded.

Towards the end of the two countries’ last military dictatorships, an opening up of the economy commenced. From the late 1970s and early 1980s, liberal reforms, including privatisation policies, started to be launched, against a background of economic stagnation, high rates of inflation, and increasing external debt. This crisis was most strongly expressed in particularly severe periods of hyperinflation at the end of the 1980s and in the interruption of debt payment and a moratorium on the part of the Argentine and Brazilian governments. Infrastructure companies were, at the time, heavily indebted, since they had been used as tools of macroeconomic policies during the 1980s debt crises and inflationary pressures. As a consequence, there was a lack of public funding for expanding infrastructure services at a time during which demand increased. Public companies were generally in a deteriorated state, and service quality had worsened considerably.

In this context of crisis, a paradigm shift towards privatisation was introduced in Argentina and Brazil, involving various successive stages of policy change. Privatisation programmes were launched for largely similar reasons. Among the official arguments in favour, the efficiency argument, based on economic theory, was of particular importance. However, in practice, decisions seem to have been largely influenced by the need to generate income and settle debts, partly attributable to the considerable pressure exerted by international financial institutions. Privatisation was not strongly opposed in either case; the population was largely in favour. With the benefit of partial collaboration by the unions and a parliamentary majority, the governments of Menem in Argentina and Cardoso in Brazil commenced major infrastructure sector privatisations during their first term in office, largely unhindered. No public debate on the issue was held in either country.

In the electricity sector, the process occurred for largely the same reasons as those for privatisation in general. It was initiated at federal level in both countries and continued by their federative units, which were encouraged by the federal governments to follow their example. A new regulatory framework for the electricity sector was established, oriented on the British model and based on free price formation, competition, and sector activity separation. Fresh legislation was introduced and various institutions created, including independent regulatory agencies with broadly similar functions. Important sector reforms,
however, were only implemented after initial privatisations had been carried out; the regulatory agencies were not yet in place at the beginning of the process. Reform sequencing, hence, did not follow recommended procedure in either case. The rapid launch of electricity sector programmes supports the argument that one of their main aims was to generate proceeds. This is also reflected by the choice of *the best offer in financial terms* as the principle award criterion for public companies, privatised by means of international bidding processes. Important electricity companies were acquired by different consortia, dominated by large foreign companies, often in combination with major national economic groups.

Since their economic policies were considered successful overall—they managed to reduce inflation and restore economic growth—Menem and Cardoso were re-elected for a second term, during which they expanded privatisation programmes. However, as economic indicators became less favourable, opposition grew. Moreover, privatisation outcomes did not always show the expected results: the two countries’ electricity sectors experienced serious power cuts in major cities during the second half of the 1990s, and the newly established regulatory agencies were not able to guarantee price and quality standards. In addition, their focus was on economic regulation, mostly ignoring redistributive issues, environmental concerns, and public-sector worker protection. On the contrary, labour regulation, which facilitated dismissals and the flexibilisation of working contracts and employment conditions, was introduced at the same time as the private sector started to become involved with public service provision. Furthermore, defaulting consumers were increasingly disconnected from the electricity supply. In the light of the negative social impact of privatisation, it is quite understandable that popular opinion also started to change. On the whole, Menem and Cardoso’s second terms in office marked the way to further economic crisis, and their governments were replaced at the subsequent elections.

Despite these similarities, there were also important differences in the ways privatisation was approached in Argentina and Brazil, outlined below.

### 7.2.2. Differences in Privatisation Process and Regulatory Context

The last military regime in Brazil lasted two years longer than the military rule in Argentina, so the democratisation process started a little later in the former. Accordingly, privatisation policies were also launched with a certain delay. Moreover, the paradigm shift
towards privatisation in Brazil involved four successive second-order policy changes, in comparison to only two in Argentina. More governments were involved, and the process, hence, took significantly longer. Likewise, the legislation which enabled privatisation programmes was also passed earlier in Argentina than in Brazil. The laws on the reform of the state and economic emergency had already been passed by Menem’s government in 1989; important legislation in Brazil, on the contrary, was passed by different governments, and the regulatory progress towards privatisation took significantly longer.

The first large-scale privatisation programmes were implemented abruptly and rapidly under the Menem government in Argentina. They had a certain effect of surprise and, overall, were not strongly opposed by unions. The principle union confederation, CGT, at the time supported the government’s policies, since it was aligned to the ruling party. In Brazil, similar policies were initiated under Collor, whose administration enacted the PND in 1990. Union opposition was, however, particularly strong and contributed to a slowing down of the process as a whole. Moreover, Collor had to leave office prematurely—after only 30 months—as a result of corruption charges. Under the subsequent Franco administration, privatisation was still limited to the industrial sector. Only when Cardoso took office were preconditions for public service privatisation established by law and privatisation expanded to include infrastructure sectors as well as the country’s federative units.

In the electricity sector, Brazil opted for a more evolutionary reform process, whereas Argentina again chose a revolutionary form of implementation. Legislation on electricity-sector reform was passed within only two years in Argentina and included deadlines for the completion of different institutional changes. In Brazil, electricity-sector reform legislation was enacted throughout the 1990s and reforms implemented comparably slower and less consistently. All major Argentine electricity companies were unbundled according to their different stages of production before privatisation; unbundling in Brazil, on the contrary, was not taken so far, and many electricity companies remained integrated during the 1990s.

While electricity company privatisation started in the mid-1990s in Brazil, it had already been initiated at the beginning of that decade in Argentina. Concession contracts were the preferred method of management transfer from the public to the private sector for electrical distributors in Argentina, whereas such companies were offered for sale at public auction in Brazil. Privatisation went furthest in electricity distribution in Brazil, but the state maintained an important role in all segments of the electricity supply chain; in Argentina private participation was high in generation, transmission, and distribution activities, and the state largely withdrew from such service provision. During the second half of the 1990s,
spillover effects from the Asian crisis disrupted privatisation in Brazil. In the electricity sector, moreover, the major energy crisis of 2001 brought the process to a standstill.

Hence, while the privatisation process was completed at the national level within a short period of time in Argentina, it was much less comprehensive and clear-cut in Brazil and far from complete at the end of the 1990s.  

Below, the main research results on the consequences of privatisation for electricity sector workers are presented and linked to privatisation processes and regulatory regimes in Argentina and Brazil.

7.2.3. The Impact of Privatisation on Electricity Sector Employees in Argentina and Brazil

“Of course, if allowed to do so, companies will always try to lower their wage costs, especially in labour-intensive sectors with a high proportion of labour costs.” (Brandt and Schultten, 2008)

This section begins with a summary of the most important direct impacts of privatisation on employees (section one), followed by an attempt to establish a link between such a process and regulatory context in Argentina and Brazil (section two). Section three presents further indirect privatisation effects.

7.2.3.1. Direct Impact of Privatisation on Electricity Sector Employees

Employment effects of privatisation in Argentina and Brazil were anything but trivial. The change from public to private service provision was accompanied by massive downsizing at Segba and Light and equally important employment reductions at the sector level. In Argentina, downsizing in infrastructure sectors in the context of privatisation during the 1990s was undertaken to such an extent that it impacted strongly on the unemployment rate, which reached unprecedented levels during the decade. In Brazil, unemployment also started to rise, but comparably less than in Argentina. Employment numbers did not increase in all infrastructure sectors during the 1990s in Brazil. Whereas the gas and electricity sectors

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623 Jeffreys et al. (2009), p. 51, distinguish between clear timetables for privatisation and liberalisation and less clear-cut processes for several European countries and public service sectors.
experienced considerable employment reductions, in water and sewerage, as well as telecommunications employment, numbers showed some increase.

However, at company level, the impacts on employees in Argentina and Brazil were very similar. At Segba and Light, employment decreased by over 40% during the privatisation period. Downsizing was initiated by governments before privatisation and intensified by new private owners. In comparison to Europe, displaced workers were hit particularly strongly due to the lack of adequate social safety nets in Argentina and Brazil, even though employment reduction was carried out mostly in the form of voluntary resignation and severance, with relatively high compensation payments being made. Affected workers had major difficulties reintegrating into the labour market, since they were often highly specialised. Those who set up their own small businesses were generally unsuccessful, since they lacked adequate training. From these workers’ perspectives, the government failed twice:

1. in protecting existing jobs, and
2. in providing viable alternatives through retraining and reintegration programmes.

Moreover, following major employment reductions, the workload increased considerably for the remaining workers. This fact is strongly expressed by the jump in the number of customers per employees at Edesur and Light during the 1990s, which rose more than threefold in the former and doubled in the latter case. In addition, companies relied increasingly on downsizing as a means of minimising costs, driving down overall working conditions, and resulting in flexibilisation of employment and working conditions, as well as fragmentation of the workforce. Furthermore, new collective labour agreements were concluded shortly after privatisation, in the context of which a flexibilisation of working hours and work tasks for the directly employed were introduced. Post-privatisation salaries were relatively high at Light and remained roughly constant at Segba’s succeeding companies. A result-sharing system was introduced in the former and performance based bonus schemes in the latter. Overtime was increasingly used, but partly unpaid. Newly hired workers were generally contracted with less favourable, unstable employment conditions, such as temporary or part-time contracts. With respect to health and safety issues, an increase in work-related accidents—which tend to be fatal in the electricity sector—was registered at Segba’s succeeding companies and at Light’s outsourced operational activities.

Unions, as a whole, suffered an important loss in membership as well as growing fragmentation, which negatively affected bargaining capacities and required changes in negotiation strategies.
The next section aims to link these employment impacts to the privatisation process and regulatory contexts in Argentina and Brazil.

7.2.3.2. Privatisation Process, Regulatory Context, and Employee Impact

As mentioned previously, the privatisation of infrastructure sectors commenced earlier in Argentina than in Brazil, was undertaken at a higher speed, and reached a wider scale. While Argentina transferred all major public infrastructure companies to the private sector during the early 1990s, the Brazilian state continued to play an important role in the provision of public services throughout the decade. Accordingly, the speed and scale of privatisation was high for all three segments of the electricity supply chain in Argentina, whereas it was rather low in generation and transmission in Brazil. In the distribution segment, however, the speed and scale of privatisation in Brazil was also high.

With respect to electricity sector reforms, changes were, again, introduced more rapidly in Argentina than in Brazil. Reform scale was wide, but implementation lagged behind privatisation in both countries. Likewise, the new agencies’ ability to enhance compliance with regulatory norms and standards was rather low in Argentina and Brazil during the 1990s, and regulators’ competences were limited to economic regulation. Labour market reforms were introduced on a wide range in both countries, though at a higher speed in Argentina than in Brazil. Overall, the translation of privatisation policies, electricity sector, and labour market reform into institutional practice took longer in Brazil than in Argentina.

Employment reduction in the electricity sector was also undertaken at a higher speed in Argentina, taken over the whole of the 1990s. The scale of reductions in the sector was massive in Argentina in absolute and relative terms, in comparison to an intermediate level for such reductions in relative terms and a high level in absolute terms in Brazil. The speed and scale of employment reduction were high at both Segba and Light; changes in working arrangements were introduced rapidly after privatisation. These changes were particularly severe for outsourced staff, but also affected the directly employed.

Table 60, below, gives an overview of considerations with respect to the speed and scale of the privatisation process, regulatory context, and employee impact in Argentina and Brazil.

These results, hence, provide some evidence in favour of a more evolutionary—as opposed to revolutionary—process of privatisation and sector reform with respect to employee impact at sector level. Privatisation and sector reforms were launched at a
comparatively slower pace and to a lesser extent in Brazil than in Argentina. Likewise, employment reduction was lower in relative terms at sector level in the former. This finding is, however, subject to limitations. Since sector privatisation and changes in regulation were implemented with some delay in Brazil, their full employment effect might have also shown a delay, hence not yet being reached by the end of the 1990s.

At company level, employment reductions were high in both cases, despite differences in privatisation processes and regulatory contexts.

**Table 60: Speed and Scale of Privatisation Process, Regulatory Context, and Impact on Employees in Argentina and Brazil, 1990s**

<table>
<thead>
<tr>
<th></th>
<th>Argentina</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>General speed of infrastructure privatisation</td>
<td>High</td>
<td>Rather low*</td>
</tr>
<tr>
<td>General scale of infrastructure privatisation</td>
<td>Wide</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Speed of electricity sector privatisation</td>
<td>High in all three segments</td>
<td>Rather high in distribution, low in generation, and low in transmission</td>
</tr>
<tr>
<td>Scale of electricity sector privatisation</td>
<td>Wide in all three segments</td>
<td>High in distribution, low in generation, and low in transmission</td>
</tr>
<tr>
<td>Speed of electricity sector reform</td>
<td>High</td>
<td>Rather low</td>
</tr>
<tr>
<td>Scale of electricity sector reform</td>
<td>Wide</td>
<td>Wide</td>
</tr>
<tr>
<td>Sequencing of electricity sector reform and privatisation</td>
<td>First privatisations before new regulatory framework was established.</td>
<td>First privatisations before new regulatory framework was established.</td>
</tr>
<tr>
<td>Ability of the regulatory agency to enhance compliance with regulatory norms and standards</td>
<td>Rather low; limited to economic regulation</td>
<td>Rather low; limited to economic regulation</td>
</tr>
<tr>
<td>Speed of labour market reform</td>
<td>High</td>
<td>Intermediate*</td>
</tr>
<tr>
<td>Scale of labour market reform</td>
<td>Wide</td>
<td>Wide</td>
</tr>
<tr>
<td>Speed of employment reductions in the electricity sector</td>
<td>High</td>
<td>Intermediate*</td>
</tr>
<tr>
<td>Scale of employment reductions in the electricity sector</td>
<td>Wide in both relative and absolute terms</td>
<td>Intermediate in relative terms,* wide in absolute terms</td>
</tr>
<tr>
<td>Speed of employment reductions at Segba and Light</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Scale of employment reductions at Segba and Light</td>
<td>Wide</td>
<td>Wide</td>
</tr>
<tr>
<td>Speed of changes in working arrangements at Segba and Light</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Scale of changes in working arrangements at Segba and Light</td>
<td>Wide for outsourced staff; intermediate for directly employed</td>
<td>Wide for outsourced staff; intermediate for directly employed</td>
</tr>
</tbody>
</table>

*considering the entire period 1990 to 1999

**Source:** Author’s own compilation
While regulatory contexts have the potential to influence positively the impact of privatisation on employees, this result remained largely unrealised in Argentina and Brazil. On the contrary, labour regulation worsened, the capacities of the regulatory agencies were restricted to economic regulation, and their functionality was limited during the 1990s.

A broadening of the results to include recent changes is required in order to capture the longer-term impact of privatisation on employees in the Argentine and Brazilian electricity sectors. Due to constraints with respect to data availability and resources, not all relevant issues could be presented in detail. Further research is necessary to draw more precise conclusions on changes in employment and working conditions in the privatised industries. A comparison of the impact of privatisation on electricity sector employees for different regions of the world, such as that provided by Hall (2005) for various Latin American countries, would also contribute to gaining further knowledge with respect to general tendencies and lessons to be learned.

The next section presents further indirect effects of privatisation, likely to have been exacerbated by employment reductions.

7.2.3.3. Indirect Impact of Privatisation

“Talking about the redistribution of wealth is not possible if strategic companies are not in the hands of the state.” (Leyría, 2009)  

Latin American countries are characterised by a high concentration of income distribution. Baer (2001), however, stresses that the impact of privatisation policies on inequality was largely ignored at the time when such policies were introduced there, the focus being on economic efficiency gains instead. The author finds that privatisation contributed little to changing Brazil’s unequal income distribution and may even have worsened it—despite heightened company efficiency—since income gains from increased efficiency were mostly captured by the private sector during the 1990s. Whereas important domestic and foreign economic groups were among the winners of privatisation, former public employees of the privatised public companies were clearly among the losers. As a consequence of privatisation, governments reduced their capacity to compensate for an excess supply of

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624 Author’s translation. Information based on an interview with J. Leyría on 8/1/09.
labour. The trend towards high employment numbers in infrastructure sectors was reversed. Large-scale layoffs of workers in the context of privatisation may even have contributed to a worsening of the income concentration in Argentina and Brazil.

In the electricity sector, low-demand consumers experienced post-privatisation price increases in the cities of Buenos Aires and Rio de Janeiro. Downsizing, moreover, impacted badly on sector planning and coordination, which negatively affected service quality. The long-term perspective of energy supply got lost, and, as a result, no further hydroelectric plants were built in Argentina. Buenos Aires and Rio de Janeiro, furthermore, experienced frequent power cuts during the second half of the 1990s; Brazil saw a major energy crisis in 2001. Electricity sector privatisation in Argentina and Brazil during the 1990s, thus, indeed had important social costs.

7.2.4. Final Remarks

The research for this book was approached with a certain degree of openness and flexibility. The chosen theoretical frame allowed for examining the impact of privatisation in the context of privatisation policy and regulatory context. The results presented for Argentina and Brazil, however, reveal that impact tendencies were broadly similar in both countries, despite differences in privatisation policies and regulatory contexts. Particularly at the micro level, employment reductions were high in both of the two company cases considered.

Overall, the empirical evidence regarding the Argentine and Brazilian electricity sectors shows that large-scale privatisation programmes tend to be associated with important employment reductions, rather than gains. This is unsurprising since privatisation in the infrastructure sector involves the introduction of profit logic into the management of such services. Private managers pursue cost-cutting strategies, which may imply significant social costs and usually entail major reductions in employment costs.

The research focussed on the impact of privatisation on employees during the 1990s. To capture the longer-term impact in Argentina and Brazil, further research is required, which might include recent developments, such as the withdrawal of multinational utility companies from Latin American markets in the early years of this century and the beginnings of a limited return to public ownership in Argentina and Brazil.

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“If the aim to provide sustained, affordable, accessible and high-quality services to all citizens cannot be achieved under the conditions of changed ownership structures and new forms or market regulation, alternative measures to be taken into consideration should include a return to public ownership, with high levels of accountability and opportunities for citizens’ participation as well as performance-oriented incentives for high quality and affordable services.” (Flecker and Hermann, 2009)
Appendix

1. Questionnaire Argentina

Personal Information
1. How long have you been working for [company name]?
2. What level of participation did you have in the privatisation process of the 1990s?

Privatisation Process
1. Privatisations in the electricity sector started in 1992 with the privatisation of Servicios Eléctricos del Gran Buenos Aires (SEGBA). What do you think were the main reasons for privatisation?
2. Were other privatisation experiences taken as a role model? Which? Why?
3. What role did the international financial organisations play in the decision to privatise electricity companies?
4. Who participated in the privatisation dialogue (different interest groups)?
5. What was the trade unions’ opinion on privatisation? What did employers’ representatives think of privatisation?
6. Who participated in the privatisation process? How?
7. Were there any difficulties in the realisation of privatisations or attempts to impede the privatisation process? By whom? Why?
8. How would you evaluate the privatisation process? What would you do differently or in the same way in another privatisation process?

Impact of Privatisation
1. What do you think were the main impacts of privatisations with respect to economic and social aspects?
2. How were privatisations perceived by the population?
3. What do you think were the main impacts of privatisations with respect to employment levels, wages, and working conditions?
4. Where any groups of employees affected more or in a different way in comparison to others?
5. How would you evaluate the impacts of privatisations on the electricity sector?
Regulation

1. As previously mentioned, the privatisation of SEGBA took place in 1992. However, the regulatory agency, *Ente Nacional Regulador de la Electricidad* (ENRE), was only established in 1993. What were the consequences of the lack of a functioning regulatory framework at the beginning of the privatisation process of the electricity sector?

2. In your opinion, did different local or international economic groups determine privatisations in the electricity sector?

3. Did the privatisation process result in a concentration of ownership among business groups present on the market?

4. Were there any cases of corruption in the context of privatisations?

5. What are the main challenges faced by the Argentine electricity sector today?

6. What do you think will be the future structure of the Argentine electricity market? Is there any possibility of renationalisation?

7. Would you like to add anything else?

2. Questionnaire Brazil

Personal Information

1. How long have you been working for *[company name]*?

2. What level of participation did you have in the privatisation process of the 1990s?

Privatisation Process

1. Privatisations in the Brazilian electricity sector started with the privatisation of Escelsa and Light in 1995 and 1996, respectively. What do you think were the main reasons for privatisation?

2. Were other privatisation experiences taken as a role model? Which? Why?

3. What role did the international financial organisations and the British consulting firm Coopers & Lybrand play in the decision to privatise electricity companies?

4. Who participated in the privatisation dialogue (different interest groups)?

5. What was the trade unions’ opinion on privatisation? What did employers’ representatives think of privatisation?

6. Who participated in the privatisation process? How?
7. Were there any difficulties in the realisation of privatisations or attempts to impede the privatisation process? By whom? Why?

8. How would you evaluate the privatisation process? What would you do differently or in the same way in another privatisation process?

**Impact of Privatisation**

1. What do you think were the main impacts of privatisations with respect to economic and social aspects?

2. How were privatisations perceived by the population?

3. What do you think were the main impacts of privatisations with respect to employment levels, wages, and working conditions?

4. Where any groups of employees affected more or in a different way in comparison to others?

5. How would you evaluate the impacts of privatisations on the electricity sector?

**Regulation**

1. As previously mentioned, privatisations in the Brazilian electricity sector started in 1995. However, the regulatory agency, Agência Nacional de Energia Elétrica (ANEEL), was only established in 1996. What were the consequences of the lack of a functioning regulatory framework at the beginning of the privatisation process of the electricity sector?

2. In your opinion, did different local or international economic groups determine privatisations in the electricity sector?

3. Did the privatisation process result in a concentration of ownership among business groups present on the market?

4. Were there any cases of corruption in the context of privatisations?

5. What are the main challenges faced by Brazil’s electricity sector today?

6. What do you think will be the future structure of the Brazilian electricity market? Will the hybrid model continue or is there a possibility of further privatisations or renationalisation?

7. Would you like to add anything else?
References


