# UNIVERSITY OF THE WESTERN CAPE

# **DEPARTMENT OF ECONOMICS**

AN INVESTIGATION INTO THE IMPACT OF THE PRIVATIZATION OF PUBLIC UTILITIES ON THE AFFORDABILITY OF AND ACCESS TO BASIC SERVICES TO POOR HOUSEHOLDS IN DEVELOPING COUNTRIES: Lessons for Rwanda.



Research Report presented in partial fulfilment of the requirements for the Degree of Master of Economics

Supervisor: Elizabeth A. P. Stoltz

October 2005

# **DECLARATION**

I, the undersigned, hereby declare that the work contained in this assignment is my original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

Signature	
Date	



# TO MY PARENTS



# **ACKNOWLEDGEMENTS**

# Upon completion of this document, I would like to extend special thanks to:

God, for the gift of health and strength during the time of this research;

Mrs. Elizabeth A. P. Stoltz, my supervisor, for her insight, courage, criticism, sacrifices and guidance;

Dr. P. T. Jacobs, for his professional help;

The Rwandan government, for providing all the financial support;

My family and friends, for their unfailing emotional support.



#### **ABSTRACT**

Three arguments are normally presented as rationale for the privatisation of state owned enterprises. The first relates to the problem of the financing of higher levels of public expenditure; the second is based on the viewpoint that private ownership is more efficient than public ownership; whilst the third claims that the losses of inefficient public enterprise are responsible for excessive budget deficits and other fiscal problems.

Although empirical evidence proves that privatisation enhances economic efficiency, it negatively affects the affordability of and access to essential services, which may have serous consequences for poorer households. This happens through increased prices of essential services, such as electricity and telecommunication, as well as through loss of employment opportunities during and after privatisation.

Many countries, also in Africa, implemented various types of privatisation programmes over the past two decades in order to decrease the relative size of governments and to improve efficient delivery of services. Towards the end the 1990's and after the tragic genocide, Rwanda's Government of National Unity also embarked on an ambitious restructuring programme of its state-owned enterprises.

The main purpose of this study was to assess the likely impact of privatisation on poor households in developing countries. The report presents a general overview of the literature, with a specific focus on Brazil, Argentina and South Africa. It investigates the experiences of these countries and derives lessons that can be learnt. Finally it assesses the possible impact of the privatisation of essential service delivery on poor households in Rwanda.

The main conclusion of the study is that governments should look beyond efficiency benefits of restructuring and focus on the overall opportunity cost of the privatisation of essential service delivery. The specific method of privatisation may determine the final social impact. The case studies also highlight the need for more research into the challenges facing the privatisation of essential service delivery. It is clear that any restructuring should be preceded by a thorough analysis of the likely impact on the poorer sections of the community.

# TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION	1
1.1 STATEMENT OF THE PROBLEM	1
1.2 OBJECTIVES OF THE RESEARCH	3
1.3 DELIMITATIONS	3
1.4 LIMITATIONS	4
1.5 SIGNIFICANCE OF THE STUDY	5
CHAPTER TWO: THE PRIVATISATION OF ESSENTIAL SERVICE DEL	IVERY
THEORY AND EVIDENCE	6
2.1 INTRODUCTION	6
2.2 THE MEANING OF AND RATIONALE FOR PRIVATISATION	6
2.3 METHODS OF PRIVATISATION	8
2.3.1 Sales	9
2.3.1.1 Public sales and auctions	9
2.3.1.2 Management-Employee Buyouts	9
2.3.1.3 Mass Privatisation	10
2.3.1.4 Small-scale privatisation	11
2.3.2 Restitution	11
2.3.3 Corporatisation	12
2.3.4 Contracting out	13
2.4THE PRIVATISATION OF ESSENTIAL SERVICES	14
2.4.1 Defining essential services.	14
2.4.2 Should essential services be privatised?	15
2.4.3 Welfare implications of the privatization of essential services delivery	19
2.5 SUMMARY AND CONCLUSION	20
CHAPTER THREE: THE ECONOMIC IMPACT OF PRIVATISATION OF	l .
PUBLIC UTILITIES TO AFFORDABILITY OF AND ACCESS TO ESSENT	ΓIAL
SERVICES	
3.1 INTRODUCTION	
3.2 AFFORDABILITY	
3.2.1 Reasons behind higher prices	
3.2.1.1 Financial sustainability and removal of cross subsidies	
3.2.1.2 Tariffs that reflect the true economic costs of provision	23
3.2.1.3 Profit motivated private firms	
3.2.1.4 Fiscal needs	
3.2.1.5 High quality standards of services rendered	24
3.2.1.6 Weak institutional and regulatory framework	25
3.2.2 The impact on Employment	26
3.2.2.1 Pre-privatisation unemployment issues	
3.2.2.2 Post-privatisation and unemployment	27
3.3 ACCESS	
3.4 SUMMARY AND CONCLUSION	32

CHAPTER FOUR: AN INVESTIGATION INTO THE IMPACT OF PRIVATISATION IN LATIN AMERICA AND SOUTH AFRICA	22
4.1 INTRODUCTION	
4.2 GENERAL OVERVIEW OF PRIVATISATION IN LATIN AMERICA	
4.3 PRIVATISATION OF ESSENTIAL SERVICES IN BRAZIL	54
4.3.1 Background Information	25
4.3.2 Rational for and implementation of the privatisation of essential services	35
4.3.3 The impact of privatisation on prices in Brazil	
4.3.3.1 Telecommunication	
4.3.4 The Impact of privatisation on employment	
4.3.5 Welfare effects of privatisation of essential services	
4.4 THE PRIVATISATION OF ESSENTIAL SERVICES IN ARGENTINA	
4.4.1 Background Information	
4.2.2 Rationale for and implementation of privatisation programme	45
4.4.3 The impact of Privatizations and Prices in Argentina	
4.4.4 The impact of privatization on employment	
4.4.5 Welfare effects of the privatization of essential services	50
4.5 PRIVATISATION OF ESSENTIAL SERVICES IN SOUTH AFRICA	
4.5.1 Background Information	
4.5.2 Rational for and the implementation of privatization programme	
4.5.3 The impact of privatisation on prices of essential services	
4.5.4 The impact of privatization on employment	
4.6 SUMMARY AND CONCLUSION	
CHAPTER FIVE: THE RWANDAN CASE AND LESSONS FROM	
INTERNATIONAL EXPERIENCE	59
5.1 INTRODUCTION	59
5.2 PRIVATIZATION IN RWANDA	60
5.2.1 Background Information	60
5.2.2 The case of Electricity (Electrogaz) and Telecommunication (Rwandatel)	61
5.2.2.1 Electrogaz	62
5.2.2.2 Rwandatel	63
5.3 LESSONS FROM THE INTERNATIONAL EXPERIENCE	66
5.3.1 Affordability issues	66
5.3.2 Access issues	67
5.4 SUMMARY AND CONCLUSION	
CHAPTER SIX: GENERAL CONCLUSION AND RECOMMENDATIONS	68
RIRLIOGRAPHY	70

LIST OF TABLES	Pages
Table 1: Evolution of Relative Prices (All Indexes aligned to 100	on August
1994)	39
Table 2: Employment in Selected Industries, by Public/Private C	Ownership - 1995-
1999	42
Table 3: Selected Indicators of Brazilian Income distribution and	l Poverty, 1990-
1999	44
Table 4: Communications Price Index/CPI (Annual	
averages)	48
Table 5: Argentina: Gini Coefficient 1985-	
1997	50
Table 6: Poverty, 1989-2000,	
Households	51
Table7: Parastatal Jobs 2000- 2001	57
Table 8: Telecommunication recovery after	C 4
1994	04
LIST OF GRAPHS	Pages
Graph 1: Pricing options under natural monopolies	<b>.</b> _
	17
Graph 2: Evolution of Relative	
prices	
Graph 3: Communication sector's Index from 1985-	
1999	48
Graph: 4 Gini Coefficients from 1985-1997 in Argentina	51

# **CHAPTER ONE: INTRODUCTION**

# 1.1 STATEMENT OF THE PROBLEM

In general the aim of privatisation is to enhance economic efficiency. It is believed that greater private sector involvement will foster competition, relieve the burden of state owned enterprises (SOE)<sup>1</sup> on public finances and also stimulate the development of financial markets (Truu 1988). In developing countries the debate on privatisation has emerged as a major policy issue over the last two decades. Privatisation is one of the key elements in structural adjustment programmes that, amongst others, encourage a reduction of the extent of government involvement in the economy (Baylis 2002: 604).

In recent years developing countries have sold off large numbers of SOEs. Nellis *et al.* (2004) report that the accumulated privatisation revenue in 18 Latin American countries reached six percent of the gross domestic product (GDP) of these countries in the 1990's. From 1990 to 2001, private investment in infrastructure alone in the region totalled \$360.5 billion, \$150 billion more than the East Asia-Pacific, the region that is second on the list. Also, in South Africa the post apartheid government inherited more than 300 state-owned enterprises and in 1995, President Thabo Mbeki then Deputy President, announced plans for wide-sweeping privatisation programmes of which some eventually got underway in 1996.

Boubakri and Cosset (2002:1) report that the share of developing countries in global privatisation revenues increased from 17% in 1990 to 22% in 1996. Furthermore, in 1992, the total sales volume in developing countries (\$ 23.2 billion) was, for the first time, larger than the revenue generated by privatisation in industrialized countries.

<sup>&</sup>lt;sup>1</sup> Throughout this paper, the abbreviation SOEs will be used.

Moreover the Privatisation Secretariat (P.S)<sup>2</sup> (2002) of the Republic of Rwanda reports that the Rwanda's Government of National Unity has embarked on a program of comprehensive economic and social reforms necessitated by the tragic genocide, which befell the country in 1994. Recognizing the private sector as the principal engine of economic growth in Africa and elsewhere, the government is of the opinion that their economy should be restructured and has put in place an ambitious privatisation program of its state-owned enterprises. Furthermore, this report by the Privatisation Secretariat (2002) indicates that by the late 1990s, it was evident that the Rwandan socialist experiment was a failure, because with few exceptions, the state-owned enterprises were backward, money-losing albatrosses. For the country to survive, the government recognized that it had to revive private enterprises.

The Privatisation Secretariat further indicates that, since privatisation started in 1996, other assets sold by the government include hotels, a fruit-juice factory, a printing firm, and companies that make insecticides, tobacco products, sugar, dairy products, processed fish, and coffee. Others identified for auction include chicken hatcheries, paper mills, rice products, the national telecommunications company and all water distribution and electricity generation. In 1999 for instance, the bankrupt state oil company, Petrorwanda, was liquidated. Shell Oil bought a portion of its assets and completely renovated 14 dilapidated and environmentally hazardous gasoline stations.

However, mounting empirical evidence of the benefits of privatisation coincides with increasing dissatisfaction and opposition among households, labour unions and policy makers (Birdsall and Nellis 2004: 1617). This dissatisfaction reflects a growing concern about of the benefits of privatisation. Privatisation may improve the efficient delivery of essential goods and services, but often at the expense of access and affordability. The mechanism, through which access is reduced, is through increases in the prices of these essential services and through job losses.

<sup>&</sup>lt;sup>2</sup> P. S. will be used to indicate Privatisation Secretariat.

Black *et al.* (2000: 39) argue that the case for privatisation depends on whether the gains in terms of X-efficiency and technical know-how outweigh the possible losses in terms of allocative efficiency that may accompany the privatisation of state monopolies. Privatisation breaks up natural monopolies and introduces imperfectly competitive private firms with their related negative welfare effects. These firms have a greater incentive to exploit monopoly power commercially, consequently, the prices of essential services tend to increase and employment levels tend to decrease, worsening the position of the poor.

The main aim of this research is to investigate the economic impact of privatisation on poor households in developing countries.

#### 1.2 OBJECTIVES OF THE RESEARCH

The report has the following objectives:

- To distinguish between various methods of privatisation;
- To study the empirical evidence on the privatisation of essential services;
- To determine the economic impact of privatisation of essential services on affordability and access in the case of the poor households;
- To study the economic impact of privatisation in Brazil, Argentina and South Africa:
- To derive lessons for Rwanda from the international experience.

#### 1.3 DELIMITATIONS

It is the opinion of the researcher that not enough research has been done in Africa to ascertain the impact of privatisation on the prices of essential services. Most of the studies on privatisation in developing countries are from Latin America. This paper tries to derive lessons from evidence from privatisation programmes in Brazil, Argentina and South Africa. The utility companies in question are telecommunication and electricity. The time scope is from 1990-2002.

#### 1.4 LIMITATIONS

Due to the fact that secondary data is used, findings should be cautiously interpreted. The research report also focuses on a limited period of time (1990-2002). And also, because the lessons are from only three countries, it will not be logical to generalize findings, and further research on different types of privatisation programmes in other countries is necessary to confirm the claims made in this report.

#### 1.5 SIGNIFICANCE OF THE STUDY

Since Rwanda is at its initial stages of the privatisation of public utilities, the lessons learnt from other countries may assist policy makers to incorporate social welfare dimensions explicitly in the utility reform process.

# 1.6 RESEARCH METHODOLOGY AND CHAPTER OUTLAY

This research is investigative and qualitative in nature. It reviews the existing literature on privatisation to investigate how privatisation has affected poor households through affordability of and access to essential services, and also through job losses. This research uses secondary data sources, such as research agents from the World Bank and United Nations, academic journals and other research projects, archives, reports from Rwandan Official bodies, such as the Ministry of Finance and Economic Planning and the Privatisation Secretariat.

The report is structured as follows: CHAPTER TWO explains the meaning and types of privatisation and then continues to discuss the theory behind and empirical evidence on the privatisation of public utilities. CHAPTER THREE focuses on the economic impact of privatisation on households in developing countries. It investigates the reasons why prices increase after privatisation and the effect thereof on access and affordability, and it also covers issues regarding the employment effects of privatisation. CHAPTER FOUR

presents an overview of the lessons learnt in Brazil, Argentina and South Africa. CHAPTER FIVE represents the Rwandan case and the lessons from international experience. CHAPTER SIX concludes and presents some recommendations.



CHAPTER TWO: THE PRIVATISATION OF ESSENTIAL SERVICE DELIVERY: THEORY AND EVIDENCE

2.1 INTRODUCTION

This chapter establishes the theoretical background necessary to be able to investigate the

economic impact of privatisation on poor households in developing countries. Section 2.2

presents the meaning and briefly explains the rationale for privatization. Section 2.3

focuses on the methods of privatisation and suggests which ones would be to the

advantage of the poor households in developing countries. Section 2.4 discusses the

question of whether essential services should be privatised and focuses on possible

welfare effects.

2.2 THE MEANING OF AND RATIONALE FOR PRIVATISATION

The complexity of the concept of privatisation requires a range of definitions. In order to

provide a comprehensive definition of privatisation, the concept is defined according to

the form it takes, the objective it pursues or the political and economic environment

within which it takes place (Vinkers and Yarrow 1991:112).

With reference to the form, privatisation is regarded as the transfer of ownership and of

control from the public to the private sector with particular reference to the sale of assets.

Truu (1988:253) explains that "it is a process mainly characterized by the transfer of

assets from government to private ownership and the replacement of state planning by

competitive markets, the combined effect of which has been to reverse a long term policy

of greater government control of the economy".

Havrylyshyn and McGettigan (1999:15), refer to Nellis (1998) who defines privatisation

as "...a transfer of ownership such that a majority of the shares or equity in an enterprise

passes from the state or public ownership into private hands". In this regard, Stiglitz

(1992) regards privatisation as a counter movement whereby the size of the government

or its expansion, considered in terms of asset ownership, is converted and transmitted to

6

private organisations. The conversion of assets from public to private ownership is carried out either through the direct sale of governmental properties or through state credits to the public, depending not only on the size and the internal structure of the capital market, but also on the objective of the policy.

Considering the objectives, Etukundo (1998) sees privatisation as a set of policies aimed at transferring fully or partially, the ownership and control of public enterprises to the private sector, and at the same time encouraging competition among market participants and thereby emphasizing the role of market forces in stead of statutory restrictions and monopoly power. Within this perspective, Ramanadban (1987:4) states that privatisation should be viewed not only in the structural sense of who owns an enterprise, but also in the substantive sense of how far the operations of an enterprise are brought within the discipline of market forces. Thus, the process includes the creation of institutions that would ensure the development of competition within the economy, that would enact laws to enforce the respect of contracts, and that would endorse or implement laws with respect to bankruptcy so that non-performing firms would leave the market and make room for more dynamic ones.

The assumption concerning the allegedly efficient private hands compared to their counterpart from the public sector, brings Rosen (1999:70) to state that privatisation "means taking services that are supplied by the government and turning them over to the private sector for provision and/or production". The argument behind the definition is that not only can services that are defined as a publicly provided good (education, national defence, health care, correctional facilities) be obtained privately but also often provided more efficiently by the private sector. Therefore, the assumption is that what finally matters to people, is the quality of the service they receive rather than whether the provider is the public or private sector (Rosen (1999:71). The production and/or the provision of a public good does not need to be undertaken exclusively by the government as such, but can be effected either on a contract basis together with the private sector or simply left in the hands of the latter (Black et al. (1999:24).

Privatisation programmes have been implemented for both political and ideological purposes. For example, in post-Allende Chile and also in the UK, France and Greece, early in the 1980s when Thatcher's government and the newly elected socialist governments of Mitterand and Papandreou returned the ownership of public enterprises to private hands through what had been so-called denationalisation, they intended to unleash the forces of competition hindered by state interference in their respective economies. Hence, privatisation (denationalisation) was seen as an ideological process that aimed at reducing government control. This was achieved by passing ownership over to private hands which were supposed to be more efficient economically (Stiglitz 1992).

Other economic reasons for privatisation include the stimulation of the free market and the level of competition; generation of government revenue through the sale of state assets; reducing the level of public debt and broadening the future tax base.

# 2.3 METHODS OF PRIVATISATION

Gupta *et al* (1999: 12) argues that the method used to privatize enterprises will to some extent determine the impact on social welfare. For instance, management-employment buyouts (MEBs) are most likely to minimize the adverse impact (loss of jobs), especially on workers. They, however, explain that in the long run the method is probably less important, because the level of prices and output are determined by many factors (e.g. technology, consumer preferences and commodity prices). In contrast to this, public sales and auctions are likely to have a large adverse effect on workers and consumers due to attempts by the new private owners to make the bid pay off (Gupta et al, 1999).

There are many forms of privatisation but this paper will focus on the major ones which are; public sales and auctions, management and employee buy-outs, mass privatisation, small scale privatisation, restitution concessions, management or lease contracts, the establishment of corporations and contracting out.

#### 2.3.1 **Sales**

#### 2.3.1.1 Public sales and auctions

Public sales and auctions are methods according to which the government transfers its assets, under public offering and to the highest bidder, who may or may not intend pursuing the same activities that were undertaken by the public enterprise on sale (Gupta et al 1999: 12).

Budds & Mcgranahan (2003:20) argue that this sale technique promotes transparency and has the advantage of being flexible, efficient and capable of ensuring maximum revenue earnings to the government. However, they confirm that the approach tends to be both costly and slow due to the complex administrative tasks of preparing each asset for the sale and ensuring that each buyer fulfils the contractual provisions. From a social point of view, the method entails a massive lay-off of workers since the new private owner would probably have to minimise production costs in order to maximize profits (Gupta *et al* 1999: 12). Consequently, this causes social discontentment and political resentment from the public because they consider the sale of public enterprises as exclusively reserved for the wealthy class of society or even for foreigners (when the sale is to outside investors).

Despite these criticisms, public sales and auctions have been the most direct means of turning State Owned Enterprises (henceforth, SOEs) into private assets. According to Andreasson (1998) for instance, the method has been intensively used in Sub-Saharan African countries where more than 30 of 52 countries under study had divested, by the end of 1996, some 2,300 enterprises with a total value of USD 2.7 billion.

This method has the advantage of securing different partners in the sense that the objectives that were pursued by the enterprise are maintained and pursued under private ownership.

#### 2.3.1.2 Management-Employee Buyouts

Management-Employee Buyouts (MEBs) are also labelled spontaneous privatisation. Fisher (1991) says that this method consists of selling or donating shares in the enterprise

to some combination of managers and employees. The process is also likely to be confronted with social and political disapproval as the rest of the population considers the approach a way of empowering "connected" managers. This happened in former European socialist countries (Lieberman 1993). He also claims that these new owners sometimes allocate themselves excessive wages, maintain above-optimal employment and undertake insufficient investment. Looking for a solution, Havryhyshyn and McGettigan (1999), however, are of the opinion that MEBs can secure an efficient outcome should new owners opt for restructuring and modernising their enterprises in order to face competition in the market situation.

#### 2.3.1.3 Mass Privatisation

Mass privatisation, also known as voucher or coupon privatisation, is achieved when the Government gives away or sell vouchers for a minimal charge, which can then be used to acquire shares in the enterprises that are undergoing the privatisation process.

This method helps to overcome the possible shortage of domestic capital by promoting the development of a local capital market, and also avoids a sell-out of national assets to foreigners. The disadvantage, according to Gupta *et al.* (1999:14) is that if small shareholders lack the necessary capacity to manage their portfolios or to monitor the management of the enterprises they have acquired, they will eventually lose out to better-informed or better-placed investors. To avoid this, governments usually resort to the creation of investment funds through which individuals hold their shares. Poland, and the Czech and Slovak Republics are among countries in which ownership interest was pooled into investment or mutual funds.

Lieberman (1997) claims that the negative impact of voucher privatisation is the inflationary effect driven by this approach as well as its rapid progress that generally leaves behind a weak legal framework and poorly defined property rights. However, this method has a high social advantage in terms of the empowerment of that part of the population that was not previously part of the ownership class of the society.

# 2.3.1.4 Small-scale privatisation

According to Lieberman (1993) and Fischer (1991), this type of privatisation involves the transfer of retail shops, commercial establishments, consumer wholesalers and so forth. The method has been used exclusively in transition economies (particularly in Russia) to speed up the process of transforming a previous socialist economy into a market oriented one (Barberis *et al.* 1995). The advantages and disadvantages of the method are the same as those related to mass privatisation.

#### 2.3.2 Restitution

As a method of privatisation, restitution attempts to return state assets to their former private owners in situations where the government's original acquisition is regarded as unjust. The way of giving back assets to their former owners differs among countries. Mostly, new authorities automatically return previously confiscated assets to their former owners without any other form of negotiation. In the former European socialist countries such as the Czech and Slovak Republics, Lieberman (1993) describes how large properties were indirectly returned through a restitution fund, which was credited by an amount equal to three percent of all shares in companies that were privatized by means of the voucher mechanism.

Restitution has the advantage of addressing past injustices, which is essentially a moral issue. It enhances the credibility of policymakers regarding a respect of individual's property rights. Fischer (1991) argues that explicit legal recognition of the rights of former owners not only strengthens the credibility of a country's commitment to the rights of private property, but also prevents the legal confusion over ownership that could arise if the issue were transferred to court.

The approach has some negative aspects. Firstly, it encourages wide-scale claims that the courts and the existing administrative structure may find difficult to handle. As a result, restitution may be selective and therefore non-effective in achieving justice for all

claimants, especially when the authorities, according to Nozick (1974:59) find it difficult to determine "...how far back (they) should go in wiping clean the historical slate of injustice".

Secondly, assets to be given back are rarely restructured before they are returned to their true owners. In some cases, the assets are even returned in an inferior state compared to what they were before the authorities took them away. However, the opposite may occur if the asset that is given back to the legal owner has improved in real value during the time of unjust holding. In both cases, compensation should be considered; if possible, to cover the loss that has occurred to the asset, or to pay the labour that has promoted the asset during the period of unjustified ownership.

On the financial side, Gupta *et al.* (1999: 14) confirm that restitution does not generate any revenues, but they add that in the case of a loss-making enterprise, the public budget at least no longer has to cover the losses. Regarding social welfare, the approach does not take care of any negative impact on employment but focuses only on the change of ownership. Outside transitional economies, restitution has played an important role; for example, in Uganda where the Museveni government restored the businesses confiscated in the 1970s

# 2.3.3 Corporatisation

With corporatisation, the government expects from the existing or newly appointed management of a public company to manage the company in terms of normal business principles. The company is required, among other things, to pay taxes, to raise capital on the open market and to operate according to commercial principles. The corporatised public enterprise is therefore freed from state financial support and subsidies and is required to maximize profits and to achieve a favourable return of investment (De Luca 1997).

De Luca (1997) further explains that in general, the approach does not imply changes in the social aspect of the company. However, if certain social advantages that the employees enjoy are thought to hinder the realization of the objectives, the management may be obliged to reduce or even totally eliminate these in order to meet the goals defined by the government.

#### 2.3.4 Contracting out

In the case of contracting out, a city or a local government goes into contract with a private company to provide essential services, such as to pick up garbage, to keep city parks clean, to manage its hospitals, zoos, remote parks or museums, to provide ambulance services, to run schools and airports, or even to provide police services and fire protection (Silanes, Shleifer and Vishny (1995).

The new service providers, who generally use less labour than the government, would have to provide the same service, directly benefit from the management of the facilities and enable the government not to drain its budget through the subsidisation of these institutions. The services are run efficiently and can ultimately raise profits, which was not usually the case under governmental supervision (De Luca, 1997).

The main advantage of the scheme is that all partners benefit. The government saves money that it spends with public provision. Private enterprises or non-Governmental Organisations realise benefits by running the services, and consumers receive a service of good quality. Rosen (1999:72) cites for example Hart, Shleifer, and Vishny (1996: 30) who report that private prisons (in America) are about 10% cheaper, than public prisons on a per prisoner basis.

In conclusion, having considered what privatisation is and its methods, Vinkers and Yarrow (1991:112) conclude that the method chosen and whether privatisation is appropriate will be influenced by the following factors; who to sell to, what to sell, competition and regulatory policies, the ability of the government to raise money without selling SOEs. Gupta *et al.* (1999: 12) confirm that the method used to privatisation will determine the social impact.

#### 2.4 THE PRIVATISATION OF ESSENTIAL SERVICES

This section explains what essential services are and investigates the problem whether essential services should be privatised.

According to the World Bank (2004) public utilities such as transport, electricity, telecommunication and water are crucial for generating economic growth, alleviation poverty and increasing international competitiveness. The World Bank further argues that greater access to the services of these utilities is a key element to reduce poverty and without which poverty may not be reduced. Therefore it is imperative that in order for millennium goals to be achieved the poor need to gain greater access to transport, electricity, telecommunication and water (Jerome, 2004:2). Recognizing the importance of public utilities, many countries have implemented far-reaching reforms (e.g. restructuring, encouraging private participation and establishing new approaches to regulation) over the past two decades (World Bank 2004). The following section explains the rationale for and challenges facing the privatisation of public utilities

#### 2.4.1 Defining essential services

According to the economic theory, there are three different kinds of goods and services, namely private, merit and public. Public goods are supplied through the state budget; private goods are supplied through the market and merit goods partly through the market and the public budget (Truu, 1988:253).

Ariyo and Jerome (2004:3) take this further explaining that there is no ironclad definition of essential services but there are two generally accepted categories of essential services namely, economic and social. The former, mostly referred to as economic utility, is part of an economy's capital stock to facilitate economic production or serve as inputs to production, for example electricity, roads, and telecommunication. The later encompasses services such as health, education and recreation, water and sanitation which have a direct and interactive impact on the quality of life.

Bayliss (2002:604) says that the greater the market share of the private firm and the more essential the product, the more far reaching will the impact of privatisation be. For instance, safe water is essential for life and health. Reliable electricity saves business and consumers from having to invest in expensive back up systems or more costly alternatives. Widely available and affordable telecommunication and transportation services can foster grassroots entrepreneurship and so are critical in advancing economic development (World Bank 2004).

Blank (2000:36) characterized utilities by some of the following market attributes. The first are the externalities associated with these services: many utilities generate benefits and costs that are greater than those accrued to the specific recipient of services. Private markets are unlikely to take these benefits and costs into account. The second is the informational asymmetry: effective private markets may presume fully-informed consumers making choices. However, this is not the case, in many essential service area, it may be difficult for the recipient to judge the quality of the service provided for example in the hospital care, because many essential services are complex, with multi – faceted inputs (especially for Education or Hospital care). The last is the principal-agency problem: in some of these essential services, the recipient of the service may have a limited capacity for choice and is not the actual decision maker, for instance very ill incapacitated persons. The person making the decision is likely to be someone other than the recipient himself, hence it cannot be assumed that the best interests of the recipient will always be maintained by another individual. If this is the case, the private market decisions of the decider may not produce optimal outcomes for the recipient.

# 2.4.2 Should essential services be privatised?

This section presents various arguments related to the privatisation of essential services. Kay and Mayer (1994) claim that privatisation of certain industries should be ruled out as simply not beneficial to consumers, especially to poor households. They argue that gains are not all one way, that privatisation is intended to change the motivation of management towards profit making. A privately owned company will surely have a greater incentive to exploit monopoly power commercially. The extent may be such that

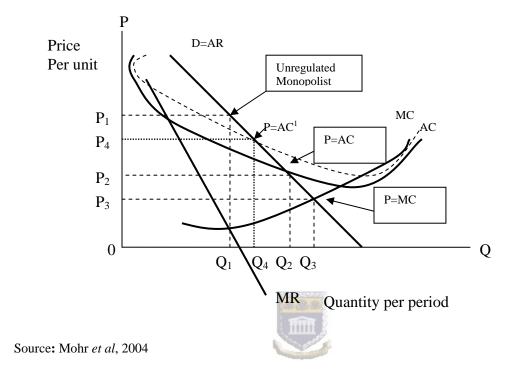
the potential benefits (from privatisation) to households may be less than expected or even negative.

Muhamoud (1998:3) confirms the above statement by further arguing that, without competition, profit maximization by the newly established private firms will not serve the interests of the poor. This kind of conclusion is supported by his observation that there is some disillusionment with privatisation in Britain that probably has much to do with the fact that many of the SOEs like telecoms; gas and even electricity that were privatised, changed from a state of public monopoly to a private monopoly. In other words, despite changes in ownership, firms were not forced by market forces to behave competitively (industrial structure does not change). This is in agreement with a statement by Truu (1988:255) that a misguided transfer of a public utility to private ownership would merely change a public monopoly into a private monopoly, which may make matters even worse with negative social welfare implications

Mohr *et al.* (2004) agree and explain that some form of government intervention is necessary in the case of natural monopolies because the private firms would produce at inefficient levels, charge too high prices and earn economic profits. They further state that the government cannot force competition by legislating that there should be a minimum number of firms in the industry, since in many cases economic resources would be wasted if there were more that one producer. If the cost of production increases (after privatisation, lets say due to increase in quality standards), it may prove to be costly as seen in the graph (AC<sup>1</sup>) below and has thus been reflected in higher tariffs (P<sub>4</sub>), which will reduce access for the poor population.

The graph below illustrates the problem of efficient pricing in the case of the deliveries of services such as electricity and water. If the private monopoly is unregulated, equilibrium will be at price  $P_1$  and  $Q_1$ . Marginal cost pricing, which will secure allocative efficiency, will yield a price  $P_3$  and quantity  $Q_3$ , but the monopolist will make a loss because price will be less than average cost. Average cost pricing will yield a price  $P_2$  and quantity  $Q_2$ , the firm will make only a normal profit and need not be subsidised. Improvement of the

quality standards may increase the average cost to  $AC^1$ , as a result prices will increase from  $P_2$  to  $P_4$  and quantities will be reduced from  $Q_2$  to  $Q_4$ .



**Graph: 1 Pricing options under natural monopoly** 

Estanche *et al.* (2001:1191) explains that in general, competition is good for all customers including the poor. It reinforces the need to undertake reforms that promote competition and development of a regulatory culture that promotes competition. However he indicates that the only drawback with competition is that it may force the elimination of cross subsidisation, which may hurt the poor. But the impact of the general drop in tariffs or availability of services which usually accompanies competition may more than compensate for the effects of the elimination of cross subsidies.

The World Bank (2004:5) further claims that markets are too small (in many developing countries) for substantial competition to emerge. With electricity provision, for instance, 60 developing countries have peak system loads below 150 megawatts, another 30 between 150 and 500 megawatts, and possibly another 20 between 501 and 1000 megawatts. The report argues that even a 1000 megawatt system will probably not

encourage competition. From the above it may be concluded that the benefits of competition that come from unbundling will be limited in many developing and transitional economies.

Stiglitz (2002: 54) indicates that there are some important preconditions that have to be satisfied before privatisation can have any benefits. Furthermore, he states that it is unfortunate that privatisation has been pursued rapidly under the conditions laid down by the IMF and the World Bank. The score cards were kept for countries making a transition from communism to market economies. Those who privatised faster were given high marks. According to the evidence, privatisation did not bring the benefits that were promised. Bayliss (2002: 604) takes this further saying that in the developing world there was not much choice. He says privatisation has featured prominently in the conditionality arrangements that the World Bank and IMF establish with the governments of developing countries. Privatisation is often a condition for the release of aid funds and has been tied to eligibility conditions for the debt relief by the World Bank and IMF.

Jauch (2002:2) further states that African countries were told by the World Bank and IMF that privatisation would lead to greater efficiency, higher productivity and better service delivery. It was further assumed that privatisation would generate wealth, which would eventually trickle down to everyone. However, he presents the following empirical evidence from the studies on privatisation in several African countries (2002:2):

- 60 000 jobs were lost in Zambia while several hundred thousands workers were retrenched in Ghana.
- Prices of essential services increased in Zambia. A privatised bus company
  dramatically increased the bus fares and closed down unprofitable, mostly rural,
  bus routes. As a result many Zambians now walk many kilometres to their work
  places and schools because they can no longer afford the fares or because the
  buses no longer service the areas where they live.
- In Nigeria the prices of Kerosene increased by 6000 % between 1985 and 1995. Postal and telecommunication s services increased their prices between 2 500 and 5 000 % during that period while electricity prices increased by 883%.
- In Ghana the introduction of cost recovery programmes were part of privatisation and resulted in increased fees for health and education services. As a result, these services became less affordable for the poor.

• In Zimbabwe, privatisation also led to retrenchments and increased prices for services. The cotton company of Zimbabwe, for example reduced its workforce from 3 000 to 500 after privatisation.

Considering the evidence above, it is clear that the answer is not as simple. Due to the nature and importance of basic services, privatising such services should be given much more attention in order to minimize the adverse effects on the position of poor households. It has been highlighted that if the benefits of privatisation are to be realised, then competition is a key factor. However in many developing countries, markets are too small for substantial competition to emerge.

#### 2.4.3 Welfare implications of the privatisation of essential services delivery

The main aim of privatization (See Section 2.2) is to enhance both production and allocative efficiency. It is generally believed that highest levels of economic efficiency would be attained in the private sector. The sale of public assets to the community at large may result in a broadening of wealth-base of the country. However, it may also imply more money in the hands of only a few.

Successful privatized firms will pay taxes and thus contribute to government revenue, which can be spent on the provision of basic services to the poorest households. This will also broaden the tax base. SOE's are also generally dependant on public subsidies and privatizing them, would save the taxpayer a lot of money.

One of the general characteristics of SOE's is the extent of inefficiency of administration. This confers a social cost or excess burden on the community. However, higher levels of efficiency may not imply greater equity. According to the literature, job losses before and after privatization may be a real problem. Should privatization of essential service delivery also result in higher prices, these services may become unaffordable to the poorer households in the community. This means that privatization may cause a more unequal distribution of income and wealth.

As explained, the taxpayers may eventually benefit, but who are the taxpayers? Surely they do not represent the poorest households in the community. It is clear that with privatisation there are winners and losers. But who are the winners and the losers? And whom do the politicians regard as the most important?

To apply the Kaldor-Hicks compensation criterion, should the winners win so much that they can compensate the losers, the end-result may be a Pareto gain. However, this research is concerned about the position of poor households in developing countries. Governments in these countries should take care of the implications on social welfare and be willing to compensate the poorer households.

#### 2.5 SUMMARY AND CONCLUSION

Privatisation can be regarded as a process of starting with a full or a partial transfer of ownership from state to the private sector. The process pursues the ultimate goal of creating and developing an economy in which the private sector is the engine of economic growth and development.

Furthermore the method used for privatisation will to a large extent determine the social impact of privatisation, especially concerning poor households. There is a concern that the gains of privation will not be reaped because of lack of competition in the privatised monopoly firms and the profit minded private owners who have less concern for the poorer households. Hence privatisation of the utility sector deserves special focus because of its socio economic implications on the welfare of the poor

# CHAPTER THREE: THE ECONOMIC IMPACT OF THE PRIVATISATION OF PUBLIC UTILITIES ON AFFORDABILITY OF AND ACCESS TO ESSENTIAL SERVICES

#### 3.1 INTRODUCTION

As mentioned in Section 1.1, an increasing range of countries has attempted to decrease government control of public utilities through various forms of privatisation since the 1980's. Developing countries also sold off large numbers of SOEs over the past decade. During the period of 1990-2001, 132 developing countries transferred the operating risk of about 2500 infrastructure projects to the private sector. This led to more than \$750 billion in investment commitments for developing countries (Jerome, 2004:8).

Cook (1999:550) claims that privatisation transactions of the utility sectors in developing countries accounted for over a third of all the privatisation efforts since 1988. The privatisation of the telecommunications industry has been the most significant when compared to the other infrastructure sectors, and accounts for 60 per cent of total sales in developing countries.

However, the impact of privatisation on poor households (and social welfare) has been neglected (Bayliss 2002:604). Bayliss claims (2002:603) that privatisation has demonstrably damaged the poor, either through an increase in prices of essential services or through loss of income due to unemployment, which results in reduced affordability of and access to basic services. Jerome and Ariyo (2004:13) claim that the impact of privatisation of essential services is twofold: it affects affordability and access. The former is as a result of higher prices charged that the poor are unable to pay. The latter would occur as a result of "cherry" picking and a rise in connection costs. They further explain that reforms can give rise to the following four broad sources of affordability restrictions: tariff increases to cover costs, increase in costs caused by required increases in services quality standards, tariff balancing needed to reduce cross subsidies and formalization of payment of usage.

This chapter provides a general descriptive overview of the impact of privatisation on the affordability of and access to essential services.

#### 3.2 AFFORDABILITY

As explained earlier (Section 3.1), affordability issues come as a result of charging higher tariffs that the poor cannot afford. This is further accentuated by the fact that there are job losses before and after privatisation. This section discusses reasons why prices increase and also the impact of privatisation on employment.

# 3.2.1 Reasons behind higher prices

Baylis (2002: 614) explains that the relationship between privatisation and prices can be complex. However, the privatisation of essential services often leads to increased prices that poor households cannot afford to pay. The reasons are financial sustainability and removal of cross subsidies; profit motivated private firms; the legitimate need to have a viable investment; higher quality standards of services rendered and weak institutional and regulatory framework. They are discussed in the paragraphs below.

#### 3.2.1.1 Financial sustainability and removal of cross subsidies

Privatisation often coincides with other policy measures to contribute to financial sustainability. When considering the impact of privatisation on tariffs it can be difficult to isolate the impact of ownership change. Price increases are often needed in developing countries to make utilities financially sustainable and price increases can also occur under public ownership.

Whilst this is a separate issue in theory, often in practice financial sustainability is a prelude to privatisation. Furthermore, financial sustainability does not necessarily have to rely on the notion of 'full cost recovery', as both external subsidies and internal cross subsidies can be provided on an equitable and sustainable basis. However, privatisation in

World Bank and donor-funded programmes often goes hand-in-hand with the removal of subsidies and this can increase prices (Baylis 2002: 615)

#### 3.2.1.2 Tariffs that reflect the true economic costs of provision

Although privatisation has the potential to reduce the costs of service provision, the price to the customer may increase. Due to political considerations, many publicly owned utilities often charge tariffs that are lower than the true economic costs of service provision. This means that privatisation may reveal the true costs of these utilities hence an increase in price. Birdsall and Nellis (2003:1623) argue that steep price increases following privatisation have been common (but not universal) in divested network or infrastructure industries. The argument of reformers is, however, that trying to protect consumers by keeping the price of essential services artificially low, is not allocatively efficient. It is considered better to leave the (previously public) firms under private owners to operate under profit-maximizing ownership and use other state mechanisms (such as taxes and/or regulation) to protect consumer welfare and to take care of acceptable levels of income distribution. They, however, acknowledge that it is plausible that price increases required to cover variable costs and expand the network will fall more heavily on the poorer households, who may be spending a higher percentage of their incomes on these services than the more wealthy

# 3.2.1.3 Profit motivated private firms

Bayliss (2002:612) argues that private firms are interested in profits, and not concerned with social objectives. His argument is that policy makers do not seem to see this as a conflict, rather they regard the process of privatisation as being the need to harness the dynamism and efficiency of the private sector to make it operate for the social good. This may be valid in a competitive market where the energy of profit maximization needs to be directed towards innovation and efficiency in order for the firm to survive. However, where there is any kind of market power exercised by a single enterprise or group of enterprises, the implications for social welfare are debatable.

In Uganda, for instance, the electricity company was privatised in 1999. By mid 2000 the tariffs were increased by over 100% (Byanyima, 2003). In Peru, the basic monthly rate for electricity rose from 5.86 US\$ in 1994 to 14.90 US\$ in 1998 (Melo, 2000:8). The record of the water (which is an essential service) privatisation globally reveals that prices have increased sometimes by very wide margins to realize profits or to raise money for more investments. On the contrary, some experts believe that the increase in profits is due to cost cutting through layoffs that follow privatisation and which results in increased labour productivity hence increased profits. There is thus a potential conflict between the legitimate needs of private operators to have a viable investment proposition and the poor who naturally feels privatisation should improve services at an affordable price (Estanche *et al.*, 2000:1180).

#### 3.2.1.4 Fiscal needs

There is evidence from a survey of 600 concessionary contracts from around the world, that in most cases contracts are awarded to the highest bidder, suggesting that governments tend to use the auction to address more immediate fiscal concerns, rather than the needs of the poor. As a result of the above, the prices generally increase by a large percentage due to the need to have a profitable private investment and to increase quality of services at the same time (Guasch 2000).

# 3.2.1.5 High quality standards of services rendered

Estanche *et al.* (2000:1185) agree with Jerome, arguing that prices have also increased due to quality changes, because the improvement in quality services has proved to be costly. A major source of dissatisfaction with the state owned utilities has been the low quality of service provided, therefore improving the quality of service often requires a substantial investment to upgrade and expand the capacity of the network. This will logically be reflected in higher tariffs (Jerome and Ariyo 2004:16). Another issue is the balance between quality and tariffs imposed by regulators on a private provider, which may be based on standards relevant for the average customer, and this would definitely not be an adequate balance for poorer households.

# 3.2.1.6 Weak institutional and regulatory framework

To add to what Jerome suggested in Section 3.1, another reason why prices of essential services increase, is because institutional and regulatory capacity is weak. Weak governments may not be in position to keep control of prices (Shirley 2002:15). This is in line with what happened in Guinea, where the water company over charged customers (a fact that was only discovered in the course of a World Bank audit), due to the weak and inefficient government administration that could not make the private operator to comply with the financial disclosure requirements. This meant that the regulator had no way of verifying the costs and the basis for tariffs settings (Menard *et al.*, 2000).

Furthermore, a World Bank report (2004) indicates that the effective regulation including the setting of adequate tariff levels is the most critical enabling condition for infrastructure reform. The World Bank report goes on to say that protecting the interests of both the investors and consumers is crucial to be able to attract the long term private capital needed to secure adequate, reliable infrastructure services and to secure social support for reforms. However, it is also indicated that drafting proper regulation is the greatest challenge facing policy makers in developing and transition countries.

From the above discussion, it is clear that prices do rise after privatisation, and this affects poor households adversely. Stiglitz (2002:56) confirms this saying that although the privatised firms were more efficient in production than the government, they were also often more efficient in exploiting their position which negatively affected consumers.

Lower unemployment levels after privatisation further accentuate the negative welfare effects of privatisation on poor households. This will be discussed in the following section.

# 3.2.2 The impact on Employment

In general, policymakers and workers (revealing their feelings via trade unions), fear that, following the privatisation of SOEs<sup>2</sup>, jobs and wages will be cut. Indeed, both governments and workers expect the level of employment to drop. The new private owners no longer benefit from government subsidies as discussed earlier (Section 3.2.1.1), and will have to deal with the over-employment that normally characterizes former SOEs. The literature on the subject provides evidence that in some cases employment reduction occurs before privatisation and sometimes thereafter. But, whether the layoffs occur before or after privatisation is not the real issue. Fact is that essential services, such as water and electricity may no longer be affordable to households where the breadwinner is without a job. The following section discusses these two dimensions.

#### 3.2.2.1 Pre-privatisation unemployment issues

A number of issues have to be taken into consideration in analysing the impact of privatisation on employment. For instance, Kikeri (1997) indicates that in some cases the adverse impact of privatisation on employment may seem small, as layoffs may have been made prior to restructuring. He refers to Chile, saying that significant job losses in telecommunications and electricity companies occurred before privatisation; consequently, when divesture took place, layoffs were limited. In Argentina, close to 30 percent of the workers in five major privatisations had lost their jobs by the time privatisation eventually took place (Gupta *et al.* 1999:4).

It is further envisaged that the reductions in employment by the state owned enterprises prior to privatisation could be significantly greater than the reductions afterwards by the newly privatised firms. This is confirmed by a study that was done in Egypt by Omran (2004:1034) who found that there were significant reductions in the levels of employment in both state owned enterprises as well as privatised firms. What is significant about his study is that the job losses in state-owned enterprises were far greater than in the

<sup>&</sup>lt;sup>2</sup> As the South African' Trade Union COSATU highlighted it in its two-day national strike against the privatisation of the telephone and electricity public companies early in October 2002.

privatised firms. The reason for this is that state-owned firms are normally restructured before they are privatised and the Egyptian government also offered early retirement packages to employees that were quite generous.

Another reason why a reduction in employment may occur before privatisation is given by De Luca (1997). He explains that the government would try to make the enterprise more appealing (i.e. more efficient and profitable) to investors. Reducing employment levels prior to privatisation also assists in attracting investors to invest in the companies that are earmarked for privatisation. However, from the literature it is clear that job losses do not only occur during restructuring, but also after privatisation.

# 3.2.2.2 Post-privatisation and unemployment

While the precise impact of privatisation on employment may vary across industries, Baylis (2002:616) argues that the evidence in general points towards reductions in employment after privatisation. He quotes the International Labour Organization (1999) who summaries the above assertion: "... the privatisation and restructuring processes in water, electricity and gas utilities have in general resulted in a reduction of employment levels, sometimes affecting up to 50 per cent of the workforce. Employment cuts appear to be to be more severe under certain forms of privatisation, such as the contracting out of certain parts of the industry and total privatisation (Section 2.3.1.1), or where there is a combination of privatisation and restructuring. Moreover, employment increases after privatisations are rare and usually follow periods of large-scale retrenchment".

Birdsall & Nellis (2003:1622) claim that privatisation causes more job losses amongst semi-skilled workers, compared to the case of higher–income earners with higher levels of skill. Moreover, low-income workers may find it more difficult to find new jobs (or even if they do find new jobs it may be lower paying jobs, or in the informal sector of the economy).

.

La Porta and Lopez-de-Silanes (1997) also confirm that job losses occur in the post-privatisation period. In their sample drawn from privatised firms in Mexico, they document that the number of both white- and blue-collar workers employed nearly halved. They claim that the mean (median) number of white-collar workers decreased by 53.5 percent (46.3 percent), whilst the mean (median) number of blue-collar workers decreased by 53.4 percent (60.9 percent). According to the researchers these figures may be an underestimation since only job losses directly after privatisation were considered.

It is believed that the main reason for the reductions in employment is that state-owned enterprises were generally over staffed and therefore SOEs enterprises have excess labour that needs to be shed. This is necessary in order to bring both employment and labour costs in line with that of similar private firms (Kikeri & Nellis 2004:101).

Chong & López-de-Silanes (2002:43) did research of labour force data of 308 privatised firms in 83 countries, with operations dating from 1982 to 2000. In their sample, 78 firms indicated that labour force downsizing was done after privatisation, most of which was compulsory. This is consistent with studies done in other regions such as in Latin America, Africa and some industrialized countries. In Latin America it was found that generally downsizing measures occurred within a large percentage of firms, about 81% of firms, while in Africa the percentage 78%. The downsizing measures were often the only option to secure a viable investment.

Stiglitz (2002:56) argues that the social costs associated with unemployment due to privatisation should be taken into account. According to him the social costs that are not taken into account by the private firms are: increased levels of crime, social and political unrest and urban violence; anxiety among workers, a greater sense of alienation and an added burden on the family. It is therefore important to focus on all these aspects when considering the effects of privatisation on employment

In conclusion, it is clear and proven that privatisation leads to higher unemployment levels, which may be inevitable as a result of the general over-staffing. But Stiglitz (2002:56) warns that economists are supposed to focus on the total social costs (Section

3.2.2) associated with unemployment, which private firms simply do not take into account. This is extremely distressing, as unemployment is one of the major problems facing developing countries.

#### 3.3 ACCESS

Higher prices for essential services and job losses impact on affordability, but logically also affect the access of poor households to these basic services. In other words, what affects affordability will affect access (the two are intertwined). The following paragraphs explain how access is reduced through "cherry picking", disconnections and higher connection costs, which eventually lead to reduced access.

Bayliss (2002:613) discusses one of the ways through which access gets reduced after privatisation. He is of the opinion that, through "cherry picking" the private investors are selective about the customers they serve. This behaviour of private investors is driven by the motive of profit maximization. In the energy sector in Africa, private firms prefer to supply high load industrial users but this has an implication for poor households. Bayliss (2002) refers to Chiwaya (1999:305) who states that: .... "One possible consequence of private power participation in a small economy is that independent power generation may remove high-load factor customers from the grid system. This is likely to result in increasing the costs of serving the remaining customers and thus in more defections, with higher costs and lower system reliability to be borne by the economy in general..."

Private firms also show selectivity in their disconnections of non-payers (Bayliss 2002:614). The usual pattern with electricity and water privatisation is a rapid expansion in the level of billing and installation of meters (mechanisms put in place to collect the outstanding bills from their customers). To increase connections is a lesser priority and investing in the network infrastructure is usually at the bottom of the list.

Birdsall and Nellis (2003:1621) agree with the above assertion, explaining that the investment costs of state owned enterprises are typically subsidized, and they can

therefore afford to charge very little connections costs, if at all, for network expansion. Contrary to this, privately owned firms have no access to subsidized funds, so they often charge substantial one-time connection fees or charges to cover the costs of the network expansion. High connection charges therefore often serve as obstacle to service expansion by private providers.

It is clear from a study done by Melo (2000:14) that poor households are very sensitive to the changes in their levels of real income. Increases of prices logically reduce the purchasing power of their income. Also, job losses during and after privatisation negatively affect the percentage of the poor users who suspend and abandon service. In one of the studies done under Latin American operators, the medium income area shows the percentage of households who abandon these services (in the telecommunication services) to be 1% per month, while in low income areas it is 2.5% per month, and in the case of prepaid cellular users it is 6% (Melo 2000:14).

In Botswana, however, the water utilities increased the proportion of the population with access to safe water; the number of households served increased from 30,000 to 330,000, while the daily consumption rose from 5 to 84 mega-litters (Bayliss 2002). However, he reports that the utility company in Botswana operates on commercial principles and sets tariffs that allow a "fair" return on its services and assets employed. Moreover, all the corporations maintain a policy of cross-subsidisation.

In the case of Guinea, the price of water rose to unaffordable levels as a result of privatisation. Prices before privatisation were very low at \$0.2 a cubic meter and they were expected to increase to \$0.7 before falling to \$0.68. But what happened in reality is that prices rose by more, reaching \$0.8, and as a result there was a steep fall in collections and a rise in the number of inactive connections (Bayliss 2002).

The general the impact of the privatisation of pubic utilities on the affordability of and access to essential services of the poor households are summarized according to the research done by Estache *et al* (2001) in Appendix 1. It clearly explains the micro

linkages, which are felt directly by the poor. The first relates to affordability issues that may arise from privatisation. As already discussed (Section 3.2.1), there are many reasons why privatisation may warrant higher prices. This may effectively reduce the ability of the poor to afford the price charged for the provision of services, if there is no coordinating initiative by the government. The second relates to the impact of privatisation on access to basic services by poor households. It is thus evident that privatisation will aggravate the problem of non-access of poor households to utility services because private providers would focus on high income areas in which they can maximize the return on their investment

Poverty often appears to be an abstract concept, especially from the perspectives of researchers and policy makers in developing countries. Therefore, the "best" definition of poverty remains a matter of considerable academic and political argument (Ariyo and Jerome (2004:13). According to the Ariyo and Jerome (2004:13), "poverty is a pronounced deprivation in well-being". In this context, poverty refers to hunger, lack of shelter, being sick and unhealthy, not knowing how to read, joblessness, fear for the future, lacking access to clean water, powerlessness, vulnerability, lack of opportunities representation and loss of freedom, and social exclusion. Accepting this definition of poverty, it is clear that the privatization of essential services may adversely affect the already serious levels of poverty in developing countries

#### 3.4 SUMMARY AND CONCLUSION

If all prices and nominal incomes rose equally, poor households would not be negatively affected, but the rise is not equal. Many will loose and only a few may benefit. Increases in prices reduce the real value for money (causing a reduction in the purchasing power) and therefore negatively affect the distribution of income in an economy, which will worsen the position of poor households.

It is explained why prices generally increase as a result of privatisation. Price increases are triggered by the following factors: the need to recover investment costs, the need to improve the quality standards, profit motives, uneconomic prices charged earlier by the state-owned enterprises; and weak institutional capacity which is typical of developing countries.

This leads to a reduction in access in terms of low expansion (cherry picking), absence of subsidies to the new private owners, which makes the connections very costly, and poor households failing to afford these essential services because of hiked prices. The adverse employment effects accentuate the adverse price effects of privatisation as discussed in Section 3.2.2. Together these effects may seriously affect the welfare of poorer households in developing countries.

There is thus an urgent need for a strong regulatory framework in developing countries and for policy makers to be poverty focused when carrying out these reforms.

# CHAPTER FOUR: AN INVESTIGATION INTO THE IMPACT OF PRIVATISATION IN LATIN AMERICA AND SOUTH AFRICA

#### 4.1 INTRODUCTION

As indicated earlier in Section 2.3, in recognition of the importance of essential services many countries implemented far-reaching reforms over the past two decades through restructuring, encouraging private participation and embarking on various new approaches. As mentioned earlier (Section 1.3, limited research has been done on the impact of privatisation in Africa and most of the studies done in developing countries are from Latin America. Jerome and Rangata (2003) refer to research in Latin America on the impact of these restructuring programmes on affordability of and access to basic services, but mention that, despite a general upsurge in research, there is limited empirical evidence on privatisation in Africa. Apart from theoretical prescriptions, not much is known about the process and outcomes of privatisation exercises in Africa despite strong protest and much lobbying from the general public against its implementation.

This explains why Brazil and Argentina have been chosen by the researcher to investigate the economic impact of privatisation on the affordability of and access to essential services of poor households. Given the fact that the researcher is studying in South Africa, it seems logical and interesting to include South Africa in the study. In all three cases the main focus of the investigation is on the privatisation of the electricity and communication sectors. However, in the South African case special reference is made to the privatisation of the provision of water. (The provision of water is a very sensitive issue in South Africa as many of the poorest households still do not have access to clean water.)<sup>3</sup>

The first section of this chapter gives a general overview of privatisation in Latin American countries. The second part focuses on the case of Brazil and explains how households were affected by focusing on the impact on access, affordability and levels of

<sup>&</sup>lt;sup>3</sup> Although the situation has remarkably improved since 1994.

employment. The third section discusses Argentina's case in a similar manner. The final section presents the South African case and as explained also focuses on the provision of water, (principle of 'cost recovery' as one of the reasons why prices increase) and also on the views of COSATU<sup>4</sup>. The last section concludes.

#### 4.2 GENERAL OVERVIEW OF PRIVATISATION IN LATIN AMERICA

Nellis *et al* (2004) give an over view of privatisation in Latin American countries and state the following: ... "Privatisation swept through Latin America in the 1990s. Most of the region's public enterprises (everything from banks, power plants, and telecommunication systems to roads, water, and transport services) were sold off to the private sector. In the 1990s, the accumulated privatisation revenues in 18 Latin American countries reached 6 percent of gross domestic product (GDP)". As indicated in Section 1.1, from 1990 to 2001, private investment in infrastructure alone in the region totalled \$360.5 billion, \$150 billion more than that of the next most attractive region, the East Asia-Pacific. More firms, and larger ones, were sold in Latin America and more proceeds were raised than in almost any other part of the world. The end results, according to economic and financial assessments, were positive. However, at the same time Nellis *et al* (2004) report that privatisation has provoked more popular discontent and criticism in Latin America than in other parts of the world. There was stronger political opposition, more outrage and more violent demonstrations.

Nellis *et al.* (2004) explain that the arguments by the proponents of privatisation in Latin America are based on technical studies, which conclude that private sector involvement improves the performance of firms, their operating efficiency and the level of production also increases. Another study on a large sample of privatised firms (and covering Argentina, Brazil, Chile, Colombia, Mexico and Peru) found an average increase in profits of up to 30 percent. Efficiency gains averaged a remarkable 67 percent and output levels increased by an average of 34 percent. Empirical evidence also indicates that infrastructure privatisation, representing more than half of all sales in Latin America,

-

<sup>&</sup>lt;sup>4</sup> Congress of South African Trade Unions

improves the financial and operating performance of most firms, eases investment constraints, extends network coverage and access and also generally results in improved quality of services.

Nellis *et al.*also mention that, after privatisation, the percentage of rural towns connected to long-distance telephone service increased from 25 to 33 percent in Bolivia. In Mexico, the waiting time for new telephone connections dropped from 890 to 30 days. In Argentina, the number of telephone lines more than doubled after privatisation. It is therefore obvious why economists, finance ministers, and investment bankers all regard privatisation as a success in Latin America.

However, Macedo (2000) claims that, in general, households in Latin America have a much less positive view of privatisation. For example, a clear majority of people surveyed by *Latinobarómetro*<sup>5</sup>(2001) in 17 countries in the region felt that they have not benefited from privatisation. However, the results of a follow-up survey in 2002 indicate a decline in anti-privatisation sentiment in Colombia, Peru, Brazil, and Ecuador, but find increasingly negative views in Uruguay, Bolivia, Chile, Mexico, Venezuela, and Argentina.

The strongest criticism was against the privatisation of essential services, particularly electricity, water and passenger rail sectors. It can be explained by the perceived loss of sovereignty, that is, the turning over of what is regarded as valuable national assets to multinational firms or to firms based in 'rival' neighbouring countries (Macedo 2000). There is also a general perception that privatisation leads to steep increases in the prices of basic commodities and to increased unemployment.

The following sections focus in more detail on the impact of utility privatisation on affordability and access in Brazil, Argentina and South Africa.

-

<sup>&</sup>lt;sup>5</sup> Latinobarómetros is a public opinion survey conducted in 17 Latin American countries by the nonprofit Corporation

#### 4.3 PRIVATISATION OF ESSENTIAL SERVICES IN BRAZIL

# 4.3.1 Background Information

The Federative Republic of Brazil is the largest nation in South America in terms of both size and population (Michaud *et al.* 2002). The country accounts for approximately 47% of South America's landmass and has a population of 157 million people, which makes it the sixth most populous nation in the world. Graced with the world's largest concentration of rain forests, most of the land in Brazil is uninhabited, with 81% of Brazilians living in urban areas.

Brazil has an annual GDP of \$775 billion, making it the tenth-largest economy in the world. The country experienced hyperinflation in 1993, however, the rate dropped sharply to 7.2% per annum in April 1997 (Michaud *et al.* 2002). They further indicate that Brazil has one of the most advanced industrial sectors in Latin America and is one of the world's leading producers of hydroelectric energy, accounting for over 90% of the country's power. Due to its large population and strong industrial sector, Brazil is also the largest consumer of electricity in the region – five times more than Venezuela, which is second.

# 4.3.2 Rationale for and implementation of the privatisation of essential services

The Brazilian energy sector was dominated by vertically integrated, state owned companies since the 1970'. However, fiscal problems during the 1980s led to underinvestment in the generation of capacity and maintenance (Michaud *et al.* 2002). In 1982, Mexico defaulted on its foreign debt payments which negatively affected the Brazilian economy in particular and South America in general. Many utilities that once enjoyed low interest loans, backed by government guarantees, lost this source of cheap finance. Michaud *et al.* (2002) also report that the government decreased the extent of economic assistance to public utilities at the same time. As a result, the cost of borrowing increased at the time when borrowing became necessary for the utility

companies and investment in the Brazilian power sector as a result plummeted from 1980 until 1996

In 1994, the Brazilian government decided to terminate the guaranteed 10% rate of return on assets (ROA) in the utility sector in the belief that this would bring some market discipline into the energy sector. In 1995, the government decided that the electricity sector should be deregulated in order to achieve the full potential of the sector. The federal government thereafter passed initiatives requesting utilities to unbundle their generation, transmission, and distribution activities. Additionally, Brazil has created a wholesale electricity market to establish spot prices that reflect generation costs.

The Brazilian privatisation programme has been a major one by international standards. Brazil began with the privatising of state-owned utilities in 1996. This was part of an ongoing effort to transform the economy from a state-run to a market-driven economy, and economists agreed that privatisation was necessary for Brazil to sustain long-term economic growth. Anuatti-neto et al, (2002) mention that from 1991 to July 2001, the state transferred the control of 119 firms and minority stakes in a number of companies. In the companies where the Brazilian government had a majority shareholding (hereafter, state-owned enterprises, or SOEs), and in those where it had only a minority (thereafter, called state-owned minority controlling stakes, or SOMCS), the auctions produced US\$67.9 billion in revenue, plus the transfer of US\$18.1 billion in debt (Anuatti-neto et al. 2002). The government also sold US\$6 billion in shares in firms that remained as SOEs, obtained US\$10 billion from new concessions of public services to the private sector, and sold US\$1.1 billion in scattered non-control stakes owned by BNDES, the National Social and Economic Development Bank, in various private companies. This dimension, one of the largest in the world, makes the Brazilian program worthy of attention.

During the mid-1990s a number of institutional changes were also made, which permitted a widening and deepening of privatisation by the inclusion of public utilities. In 1995 constitutional amendments ended public monopolies in the sectors of telecommunication

and gas distribution. In the second half of the 1990s, the privatisation of electric power companies accounted for more than two thirds of the value of state level privatisation, the largest sector of privatisation was telecommunication industry. It was auctioned in July 1998 and its revenue amounted for more than a third of all privatisation revenue (Baer and Bang, 2002).

# 4.3.3 The impact of privatisation on prices in Brazil

According to Bear and McDonalds (1998:511) Brazil had a problem with inflation. The perception was that the government would use the sale of its enterprises as tools of macroeconomic policy and also to control the general rise of prices. This was especially true in the case of the electricity sector. Bear and McDonalds (1998) also indicate that, allowing tariff increases in this sector below the rise in general price level, contributed not only to a decline of internally generated investment funds, but often resulted in losses which forced the government to provide subsidies. This in turn increased government expenditure that worsened the government budget deficit, which was usually financed in an inflationary manner. Public policy was thus self-defeating! Given the constant pressure for fiscal sustainability and the world wide movement towards more market orientated policy approaches and smaller public sectors, together with Brazil's need for foreign capital to boost the countries investment ratio, public utilities providing essential services were privatised.

However, directly afterwards it was announced that the privatised companies would be allowed to raise their tariffs by 10% and that they would also be able to have yearly tariff adjustments based on the general price index (Bear and McDonalds (1998:512). Privatisation necessitated a drastic revision of public utility rates in Brazil. Following privatisation, the newly established regulatory agencies introduced more realistic, but higher prices, particularly in the sectors of electricity and telecommunications (Anuattineto *et al*, 2002:21). More specific figures are presented in the following paragraphs.

# 4.3.3.1 Telecommunication

In this sector tariffs were raised dramatically in 1995. For example, residential subscriptions were raised by a factor of 5 and electricity tariffs went up considerably faster than most of other prices. Bear and McDonalds (1998: 511) report that the basic problem for Brazil's public utilities in general and the power sector in particular was that privatisation was taking place without a clearly defined regulatory framework, which means a lack of institutional support. As mentioned in Section 3.2.1, this is one of the general reasons explaining increasing prices.

A comparison was made by Anuatti-Neto et al. (2002) between various price indices at the industry level and an overall price index in order to indicate the relevant changes. The CPI-A calculated by IBGE (the Brazilian Census Bureau), took the prices of August 1994 as reference for the other indices.

**Table: 1 Evolution of Relative Prices**<sup>6</sup>

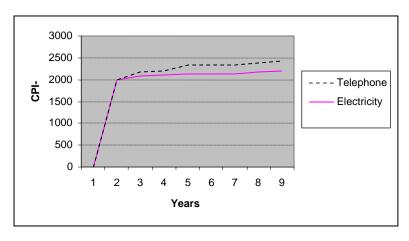


Year**	CPI-A IBGE	lectricity 7	Telephone
1993	10,7	n.a.	n.a.
1994	108,9	100,0	88,6
1995	133,4	103,5	108,5
1996	146,1	130,5	199,2
1997	153,8	143,2	199,2
1998	156,3	143,2	199,2
1999	170,3	173,2	199,2
2000	180,4	194,2	239,1

Source: Anuatti-Neto et al. (2002:22).

**Graph: 2 Evolution of Relative prices** 

<sup>6</sup> All Indexes aligned to 100 on August 1994



Source: Compiled by the researcher from Anuatti-Neto et al. (2002:22).

Telephone tariffs were increased when the telecommunications industry was being prepared for privatisation, as early as 1996. In particular, the minimum monthly tariff for access to a line increased sharply (In 1994, CPI was 88.6; by 2000, CPI increased to 239.1). Refer to Table 2. The implication of this is that affordability of and access to electricity and telephone services became problematic and hard especially for poor households.

It is however, believed in Brazil that these price increases resulted in substantial gain to the telephone companies, and that this happens at the expense of the poor. But no one in Brazil would dispute the fact that it was accompanied by a massive expansion of services, (thus access increased) to the point of destroying the market that previously existed for trading telephone lines (Anuatti-neto *et al.*, 2002: 13).

# 4.3.3.2 Electricity

In this sector the tariff restructuring began in 1995. Privatisation itself started in 1997 and the concessionaries signed up an incentive contract which had a non-controllable costs clause (Anuatti-neto *et al.*, 2002: 14). This means that the new investors could set prices without any government intervention. The increase of prices and the abolition of illegal connections left poor households worse off; which means that essential services became less affordable, or at the worst, these households were excluded from access to these services.

On the other hand, the report by Anuatti-neto *et al.* (2002) concludes that price increases benefited the new private owners in particular in the telecommunications and electricity industries.

#### 4.3.4 The Impact of privatisation on employment

In Brazil, the SOEs over the years became a significant source of employment, both in terms of numbers and total salaries (Bear & Bang 2002:514). The social and political pressures generated by rapid labour force growth and a high level of rural – urban migration contributed to the willingness of successive governments to absorb labour in the public sector in excess of real needs. However, they claim that privatisation reversed this trend in public sector employment. In a number of cases even before firms selected for privatisation were put up for sale, they were "fattened up" to make them more attractive to potential buyers by eliminating excess employment. For example, in the case of the Federal Rail Road System (RFFSA), about half of the 40 000 employees were laid off even before privatisation and afterwards, private operators further reduced the labour force to about 11 500. In the major public ports, the number of workers employed was reduced from 26 400 in 1995 to 5 000 in 1997, with a further reduction planned to bring the number down to 2 500 workers (Bear & Bang 2002:514). Substantial reduction in the work force also took place in the steel and electricity sector after privatisation

Table 2 presents data on employment levels for those industries where the most important privatisation has occurred. In public utilities, privatisation came later, and in a less complete fashion in the electricity industry. It is clearly seen that until 1997 the private sector was responsible for less than 5% of employment in this industry, for less than a third in water and sewage, and a quarter in telecommunications. By 1999, the larger part of employment in the telecommunications industry was provided by private companies.

In the electricity and water and sewage sectors, employment is still largely by public enterprises, but now with a significant mix (i.e. equal shares in employment levels). In the case of electricity provision, the table shows a clear reduction in employment after

privatisation. In the case of telecommunication, the impact on employment is less clear. One of the reasons, according to Anuatti-Neto *et al.* (2002: 19) is the fact that following privatisation the services provided expanded very rapidly. Worth mentioning is the case of the water and sewage industry. Although still largely government owned, and not expanding as fast as telecommunications, its employment record is rather stable in comparison to the other industries shown in the table.

Table: 2 Employment in Selected Industries, by Public/Private Ownership – 1995-1999 Number of Employees as of December 31<sup>st</sup>

Sector	1995	1996	1997	1998	1999
	Total	Total	Total	Total	Total
	Public %				
	Private %				
Electricity	149100	128545	99871	111225	95870
	97	97	95	64	55
	3	3	5	36	45
Water and					
Sewage	135313	146791	159588	145375	149822
	68	72	66	66	62
	32	28	34	34	38
Telecommunica					
tion	107689	113126	117740	105284	109478
	80	77	75	19	26
	20	23	25	81	74

Source: Adapted from Anuatti-Neto et al. (2002: 19)

From the evidence it can be concluded that privatisation has had its costs to part of the workers directly employed by the former SOEs who lost their jobs either in the process of

adjustment for the sale or thereafter. This reduction in employment gave rise to some of the gains reported in the previous section (4.3.3), in particular the electricity sector.

However, it is assumed by Anuatti-Neto *et al.* (2002: 20) that, as privatised firms invest and expand their activities, at some point (which is not known or specified) this will increase employment, although the same workers are not necessarily rehired and some of them might continue to bear the costs of displacement and relocation.

# 4.3.5 Welfare effects of privatisation of essential services

The economic efficiency arguments for eliminating overstaffing (layoffs) are straight forward but had the economic gains resulting from the layoffs spread over to Brazil's poorest, then, privatisation would have made an ambiguously positive contribution to the wellbeing of the poor.

Antoniou (1992:238) explains the welfare effect using Nickolas Kaldor's proposition that if any reform is going to improve welfare then winners and losers will have to be considered. He explains that the final effect can be positive if winners can profitably compensate the losers. However in this case Bear and Bang (2002 514) state that there is no credible evidence to that effect.

They further explain the link between the regulatory framework and its impact on the prices after privatisation in Brazil. The argument is that a large part of privatisation process focussed on public utilities and an essential element was the restructuring of the regulatory system so as to attract private operators who would adequately maintain and expand public services. The evidence available to date suggests that the regulatory climate in Brazil moved substantially in favour of the new private owners of the former public utilities. Bear and Bang conclude that regulatory changes shifted income to the new private owners from a much larger group of consumers. For instance, that in the city of Rio de Janeiro, while the consumer price index rose by 189.7% between August 1994 and Feb 2000, the price index for public services rose by 264.7%. This has a negative impact on affordability of and access to essential services.

On aggregate, however, the distribution of income in the country did not worsen during the 1990s. This is clear from the Gini and Theil coefficients in Table 4. However, the percentage of the population who is poor increased during the second half of the 1990s, the period when privatisation was being vigorously implemented.

Table: 3
Selected Indicators of Brazilian Income distribution and Poverty, 1990 – 1999

Year	Gini Coefficient	Theil Index	the 20% richest and the	Gap between the 40% erichest and the 40% poorest	percentage of	
1990	0.62	0.78	31.2	26.9	43.8	63.2
1995	0.60	0.73	28.0	24.1	33.9	50.2
1999	0.60	0.72	27.2	23.3	34.1	53.1

Source: Adopted from Baer and Bang (2002: 516).

#### 4.4 THE PRIVATISATION OF ESSENTIAL SERVICES IN ARGENTINA

# 4.4.1 Background Information

Argentina has 36,000,000 people with Roman Catholicism being the main religion. Though Argentina has rich natural resources and heavy deposits of coal, lead, copper, zinc, gold, it has been suffering from recurring economic problems in the past decade. By the year 1989, when President Carlos Menem took office, the country had huge external debts, inflation of 200% per month, and GDP growth was plummeting. To combat the economic crisis, the government embarked on a path of trade liberalization, deregulation and privatisation 7.. The government privatised most of the previously state-controlled companies. The following paragraphs focus on the rationale for and the impact of privatisation programmes in Argentina.

# 4.2.2 Rationale for and implementation of privatisation programmes

Prior to the 1990s, the government of Argentina directly administered a substantial part of the economy. Telephone services, the provision of electricity and many other sectors of the economy formed part of the public sector (Ennis and Pinto 2001). The magnitude of the utility privatization programme was very large relative to the size of the economy. Not less than 154 privatization contracts were signed during the 1990s.

The telecommunication sector of Argentina was fully nationalized in 1948 (Cook 1999). In 1956 this SOE became known as ENTel. Its management was completely politicised with the chief executive officer and other senior managers being appointed by the president, and its operations were often constrained by contradictory policies issued by a variety of government departments and agencies. The pricing structure and revenue mechanisms of ENTel were designed to meet social needs such as subsidizing welfare programmes, whilst limiting its funds necessary for maintenance and expansion of the net

\_

<sup>&</sup>lt;sup>7</sup>On line [available]: www.mapsofworld.com/country-profile/argentina1.html

work. ENTel's financial performance was considerably affected by politically motivated tariff structures. During the 1980s high taxes, low prices and increasing levels of debt due to exchange rate fluctuations, resulted in huge losses.

Prior to 1992, the Argentine electricity sector comprised of four national utilities. Similar to the position in most Latin American countries, the dominance of a public monopoly remained the legacy of the nationalizing wave during the 1950s and 1960s. This situation changed in the early 1990s when radical restructuring commenced which aimed to improve efficient service delivery as well as the reliability of the electric supply system. A confusing and non-transparent structure characterized the regulatory regime in Argentina before privatisation. A separate agency, (the Federal Commission of Electricity Energy) was established with authority to co-ordinate regulatory and tariff structuring. Spiller and Martorell (1996), explain that in reality the interests of politicians dominated the regulatory regime, with pricing and investment regulation effectively controlled by the Ministry of Economics. By the 1980s, the Argentine Electricity supply industry also faced long run marginal costs well above average revenue. This resulted in inefficiencies that hampered the performance of the sector. By the 1990s, the distribution companies and end-users were still highly subsidized and average operating costs were extremely high relative to the retail price (Cook 1999: 567).

The privatisation process began in March 1988, with an agreement between the Argentinean government and Spanish Telefonica International to purchase a 40 per cent stake and gain management control of ENTel (Cook 1999:560). This bid was however rejected and the discussion over privatisation soon resumed with a plan to divide ENTel into Northern and Southern regional companies. Each company were to be responsible for local services in its region under a monopoly concession initially granted for five years and later extended to a maximum of ten years to be more attractive to the investors. Cook explains that core investors were sought to purchase a 60 percent stake in the new companies and foreign control was permitted. 40 percent of the shares in the two companies was reserved for employees and 30 percent national and international stock market.

In the electricity sector, radical reforms took place between 1992 and 1994, through the disintegration of the industry's structure into generation, transmission and distribution (Newbery 1994). Newbery further indicates that the main aim with the restructuring was to encourage competition, realign tariffs with marginal costs through effective price regulation, and to secure additional investment for capacity development. According to Lalor and Garcia (1996) an independent dispatch agency, Compania Administradora del Mercado Mayorisat (CAMMESA) was established in Argentina. This agency was responsible for managing the bulk electricity market. In an effort to improve the transparency of the system, the regulatory agency Ente Nacional Regulador de la Electricidad (ENRE) was given a greater degree of autonomy to award licenses, determine tariffs and act as an arbitrator in conflict resolution. Transmission and distribution companies are granted 15-year concession agreements, with the possibility of an extension for a further ten years. In Argentina, there is no price regulation for generating companies (Siddique 1995).

# 4.4.3 The impact of Privatizations and Prices in Argentina

According to Cook (1999:564) tariffs were raised repeatedly to improve the profitability of the INTel Company. In February 1990, they were raised by 50 % for local and distant –calls, and in July by a further 120% and 70% respectively. At the expense of the endusers, the government agreed on the eve of the sale to raise them again by another 27 %. He further indicated that price distortions were not corrected and very high rates for connection and long-distance services were imposed. This implies that the new private owners could exploit the consumers as they please. As a result, it can be concluded that privatization negatively affected the poor households.

To investigate the impact of privatization on prices, relative price changes are considered and also the change in access to electricity and telecommunication services. It is clear from the research done by Ennis and Pinto (2001) that fixed charges increased after privatization which makes telecommunication relatively more expensive for low income households

# **Table 4: Communications Price Index/CPI (Annual Averages)**

Year 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 Price

 $index \ ^{100} \quad 89.79 \ \ 89.27 \ \ 87.39 \ \ 105.1495.79 \ \ 82.08 \ \ 73.06 \ \ 70.96 \ \ 71.78 \ \ 73.93 \ \ 76.26 \ \ 83.32 \ \ 85.72 \ \ 86.49 \ \ 89.29 \ \ \\$ 

Source: Ennis and Pinto (2001)

**Graph 3: Communication Sector's Price Index from 1985-2000** 

Source: Compiled by the researcher from Ennis and Pinto (2001)

As indicated in the table 5, the price index in the telecommunication sector increased from 70.96 in 1993 to 89.29 in 2000. By 1993, the privatized telecommunication companies dominated most of Argentina's telecommunication sector. It improved both the companies' profits and the government's tax revenues, but at the expense of the household sector (Cook 1999). In terms of service performance, the network grew by 12 percent in the first 4 years after privatization, compared to 5 percent in the previous 5 years. Telephone coverage rose from 9.4 lines per 100 people in 1985 to more than 14 in

1994. However, Cook concludes that consumers were not impressed because they were adversely affected by price hikes.

In the electricity sector, tariffs were raised but this has been rationalised as an improvement since they more accurately reflect the economic costs of services provision (Cook 1999:572), as earlier note in section 3.2.1.2. Despite the gains, there were concerns raised over the effectiveness of the regulatory process. Distribution utilities found it difficult to improve efficiency, electricity thefts remained high and the system still experienced difficulty to collect overdue payments (Lalor and Garcia 1996). Recent experience shows that there is a tendency for new companies to install additional transmission lines in areas close to the main areas of consumption in an effort to minimize their investment levels. This means that access gets reduced through "cherry picking" (See Section 3.3). Loopholes in the present regulatory system allow this situation to arise and if left unchecked, it could result in an excess supply in the urbanized regions and an under-supply in rural areas where the majority of the poor households reside.

# 4.4.4 The impact of privatization on employment

Worth mentioning is the effect of privatization on the employment levels. Ennis and Pinto (2001:31) summarize the employment effect of privatization of the large employers prior to privatization. They were the railways (FFAA); the oil-company (YPF), and the electricity and telephone companies. They indicate that on average, these firms decreased the number of jobs by 67%. The FFAA experienced the largest absolute reduction in workforce (75,000 jobs, representing a decrease of 82%), but the largest relative change occurred in YPF (a reduction of 83% of the jobs). Though these are large variations in the employment levels of the specific sectors, the above mentioned researchers confirm that the relative importance in terms of aggregate employment in Argentina is not all significant. Prior to privatisation, employment in the relevant firms amounted only to 2.3% of the total national.

As discussed earlier in Section 3.2.2.1, the layoffs of workers may happen before privatisation and this was the case of Argentina. Cook (1999:560) states that, the

workforce was reduced by attrition, the working week was extended to by 7.5 hours, job guarantees were ended and workers rights were curtailed. Although this was to improve the company's attractiveness to investors, these measures served to severely strain labour relations.

# 4.4.5 Welfare effects of the privatization of essential services

The law of tariff structuring in Argentina establishes that pricing should be in accordance with cost principles and hence rules out cross-subsidization (Ennis and Pinto 2001:7). There are some subsidies for pensioners, charities, and non-profit organizations that are financed by the government. There is also a National Electricity Fund that finances broader regional subsidies. In 1994, Edenor and Edesur entered into an agreement with the government to provide electricity to "very poor" neighbourhoods in special ways (collective meters, etc.). The agreement affected 650,000 users that before the agreement were usually illegally connected, with attendant inefficiencies and safety issues. From Table 6, it's clear that on aggregate, Argentina's income distribution did worsen in the 1990s when privatization had picked up, according to the Gini coefficient. It rose from the average of 0.449 in 1990 to 0.464 in 1997. This could be attributed to adverse effects of privatisation on unemployment and increase in prices (Ennis and Pinto 2001:4)

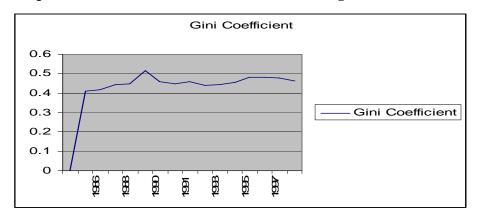
Table 5: Argentina: Gini coefficient 1985-1997

Year	Gini Coefficient
1985	0.409
1986	0.417
1987	0.444
1988	0.449
1989	0.515
1990	0.461
Avg. 85-90	0.449

1991	0.461
1992	0.442
1993	0.443
1994	0.457
1995	0.484
1996	0.484
1997	0.48
Avg. 91-97	0.464

Source: Ennis and Pinto (2001:3)

Graph 4: Gini coefficients from 1985-1997 in Argentina



Source: Compiled by the researcher from Ennis and Pinto (2001:3)

The number of the poor households increased from 2,454,049 in 1989 to 3,151,416 in 2000 as indicated in table 7. The percentage of the poor increased in the second half of the 1990s, when the privatisation picked up speed.

Table: 6 Poverty, 1989-2000, Households

Years	Households	Poor	UBN	PL	UBN & PL
		%	%	%	%
1989	2,454,049	42.7	4.3	25.3	13.1
1990	2,402,101	32.9	7.6	16.2	9.1
1991	2,438,498	26.4	10.1	10.6	5.7
1992	2,708,341	23.2	9.6	8.6	5
1993	2,957,260	21.4	8.3	7.8	5.3
1994	3,057,137	23.1	8.9	8.7	5.5
1995	3,053,578	24.4	6.2	12.5	5.7
1996	3,015,566	26.1	6.1	13.2	6.9
1997	3,179,442	26	7	10.7	8.3
1998	3,243,848	26.1	7.8	9.6	8.6
1999	3,151,904	27.6	8.7	9.8	9.1
2000	3,151,416	28.5	7.8	11.1	9.6

Source: Ennis and Pinto (2001:4)

Note: UBN: Unsatisfied Basic Needs: PL: Poverty Line

Privatization led to the increase in prices of the essential services in question although

access also improved. It is also clear that the weak regulatory framework caused "cherry

picking" by the investors who strive for maximum profit. If left unchecked, it may result

in poor households being excluded.

4.5 PRIVATISATION OF ESSENTIAL SERVICES IN SOUTH AFRICA

4.5.1 Background Information

Since South African is the only African country included in this research, this section will

mention a few issues relevant to the African economies and will then focus on South

Africa. Sarbib (1997) reports that 583 million Africans (10% of the world's population)

produce only 1% of its GDP, while 262 million Africans, or 45% of the population, live

on less than \$1 a day. He goes on to say that about 200 million are without access to

proper health services, and 47% without access to safe water.

South Africa has total population of 44,344,136 people<sup>8</sup>. It is a middle-income, emerging

market with an abundant supply of natural resources; (The country is the world's largest

producer of platinum, gold and also chromium) well-developed financial markets and

communication, energy and transport sectors. However, economic growth has not been

strong enough to alleviate South Africa's serious unemployment situation. Also

challenging economic problems remain (partly due to the legacy of apartheid), especially

absolute poverty and lack of economic empowerment among the disadvantaged groups.

Economic policy of the South African government is fiscally conservative, and focuses

on liberalizing trade as means to stimulate job creation and household income. The

government also succeeded in brining the inflation rate down to acceptable levels.

<sup>8</sup> This paragraph relies strongly on :www.cia.gov/cia/publications/factbook/geos/sf.html

52

# 4.5.2 Rational for and the implementation of privatization programme

Jerome and Rangata (2003:10) report that the white apartheid regime, in spite of its antisocialist stance, surprisingly enough, created a seemingly large public enterprise sector, since the early 1920s with the establishment of the Electricity Supply Commission (Eskom) and the former South African Iron and Steel Corporation (Iscor). In 1940, the Industrial Development Corporation (IDC) was established to support other new industries. The IDC helped to establish many other state corporations, including the Phosphate Development Corporation (Foskor); the South African Coal, Oil, and Gas Corporation (Sasol); and the Southern Oil Exploration Corporation (Soekor). In addition, many state corporations also founded subsidiary companies in partnership with private firms, and many held controlling shares of stock in private firms. These enterprises were established primarily to strengthen import substitution industries, which had started to grow during World War I, by providing infrastructural improvements and basic materials. Eventually, these enterprises were used as platform for "white" employment and social benefits as well as creating a support base among the white working class and Afrikaner business owners (Jerome and Rangata 2003:11).

As mentioned earlier (Section 1.1), the post-apartheid government of South Africa inherited over 300 state-owned enterprises (SOEs), with four of the firms accounting for 86% of aggregate turnover, 94% of total income, 77% of all employment, and 91% of the total assets of these enterprises. These "key enterprises," as they are collectively described in the government's Policy Framework Paper, are in telecommunications (Telkom), energy (Eskom), transportation (Transnet), and defence (Denel) (Ayogu 2001:3). None of these firms are scheduled for outright privatisation in the near future. The debate concerns the wisdom of the government's model of reform, its so-called "matrix of options"<sup>9</sup>.

\_

<sup>&</sup>lt;sup>9</sup> In South Africa the government prefers to use the concept of restructuring as opposed to privatization as it refers to 'the matrix of options'. This means the redesign of business management principles within enterprises. The attraction of strategic equity partnerships, the divestments of equity either in whole or in part where appropriate, and the employment of various immediate, turns around initiatives.

In August 2000, the Department of Public Enterprises published the Policy Framework for an accelerated agenda for the restructuring of State Owned Enterprises (Jerome and Rangata 2003:11). The document endorsed NFA's objectives and aims at increasing the efficiency of SOE's through improved governance and competition, whilst trying to attract foreign investment, technology, and expertise through full or partial privatization. It anticipated that at least R 40 billion, representing about 5% of GDP would be generated over the period 2002-2004. It targeted four key enterprises: Telkom (telecommunications), Transnet (transport), Eskom (electricity), and Denel (defence).

# 4.5.3 The impact of privatisation on prices of essential services

South Africa represents a case of price increases due to the principle cost recovery (See Section 3.2.1.4). In South Africa, heavy lobbying by private multinational water companies, such as Suez, together with advice from the World Bank helped persuade local councils to privatise their waterworks (Marsden 2005). Some communities began turning their utilities into commercial enterprises as a preparatory step to outright privatisation. Others immediately contracted the provision of water out to the private sector. Urged by the World Bank to introduce a "credible threat of cutting service," the local councils began cutting off people who couldn't pay. An estimated 10 million people have had their water cut off for various periods of time since 1998. The result has been cholera and other gastrointestinal outbreaks (Marsden 2005).

In the same report, Marsden further indicates that in South Africa, the water companies use a user-pay policy that imposes high rates with little concern about people's ability to pay. These rates are then enforced by water cut-offs, despite the serious dangers to people's health that these actions may create. The water companies are chasing a business with potential annual revenue estimated at anywhere from \$400 billion to \$3 trillion. Water is a basic need and, if they have to, households will pay just about anything to get it.

McDonald (2002:16) reports that The Department of Water Affairs and Forestry introduced the principle full cost recovery in South Africa in the province of KwaZulu

Natal in 2000. Due to the introduction of this principle, the monthly rate and registration fee became unaffordable for the thousands of low-income households. Since 1996 tariff increases of about 600% have been recorded in the water sector. Because low-income households were no longer able to afford water they were forced to consume water from a nearby stream or river. This led to the outbreak of Cholera in mid- August 2001, where 105 297 had the disease and of these 224 people had died. The introduction of full cost recovery contributed directly to the outbreak of cholera, with serious implications for poor households. The introduction of prepaid meters has also reduced access to water by the poor (Flynn-Fill. & Naidoo 2004).

The problem is not only confined to the water sector, even within the electricity sector there seems to be a problem with regards to affordability. A survey on electricity was done covering 200 households in Soweto. It was found that a large majority of households were unable to afford the electricity that they consumed. Some tried to reduce their consumption by using other sources of fuel such as coal, or even by cooking less and even resorting to using candles and paraffin at night for light. The main problem with regard to the full cost recovery principle, is that the low-income earners were unable to afford connection fees or the pre-paid amounts (McDonald 2002:16-17).

In South Africa middle-income suburbanites have been found to be paying less than low-income township residents, for the same or even better quality of service (McDonald 2002:18). This was found to be the case in a wealthy suburb in Northern Johannesburg, known as Sandton, were households were paying relatively less on average per kilowatt hour of electricity, compared to residents of Soweto, a poor township in Johannesburg.

Regarding the Telecommunications utility company, Jerome (2004) mentions that it was privatised in 1997. This took place through the competitive sale of shares to SBC Communications, a Malaysian company, and through the Johannesburg Stock exchange to promote BEE. The remaining shares are listed on the Johannesburg Stock Exchange as of the 4<sup>th</sup> of March 2003. Telkom has considerable monopoly power, when it comes to its

fixed line network. Over the years, the progress of fixed line networks has been declining in South Africa.

Jerome (2004) further indicates that the cost of local telephone calls has increased, for example, a 3-minute peak call increased by about 26% per annum between the period 1997 and 2002. Due to the high prices of the local call service two million subscribers have been disconnected. Higher prices render basic services unaffordable to poor households. It has been argued by McDonald (2002:18), that full cost recovery should be implemented with some kind of progressive block tariffs. This is a kind of system were the per-unit cost increases as consumers consume more of the service. In this case a subsidy is created from high income earners as they are charged more than the actual costs involved. The extra proceeds can be used to provide free or cheap supplies of the service to the poor

# 4.5.4 The impact of privatization on employment

Ayogu (2001:11) indicates that COSATU supports the restructuring of state-owned enterprises and local government to improve their capacity to deliver basic services...." But according to the Labour Union, privatisation will help achieve these ends." Therefore, COSATU has demanded that privatisation of basic services and national infrastructure be halted at once, and furthermore, that any restructuring of the SOEs must improve services for our communities and especially for the poor. Basic services are listed as water, sewerage, rubbish disposal, electricity, welfare, and basic housing, health, transport, education, telecommunications and cultural services (such as stadiums, parks and libraries). The Union's basic argument regarding privatisation is that ".....it is inherently difficult, if not impossible, to compel private interests to serve the poor or intervene strategically to restructure the economy." The Union demands that the government re-examine the desirability of relying on market forces to govern the delivery of basic services.

COSATU (2001:9) states that "state control is necessary to ensure adequate, adequate quality provision of services to the poor, and to initiate strategic investments to

restructure the economy." Furthermore, the Union argues that almost all government policies on privatisation admit the need for regulation even though the government lacks the necessary capacity and commitment to ensure effective regulation.

Sekgobela (2003:8) further indicates that, given the high rate of unemployment in the country, COSATU is opposed to the privatisation process because of the inevitable job losses. For instance, he indicates that Telkom is a dominant wire line operator in South Africa with 43 million access lines. By 2003 it employed 35 000 workers, and has 16,752 fewer as at September 2002 compared to the number of workers in 1997. It is expected to shed even more jobs per year between the financial years 2003 to 2007.

Table 7: Parastatal Jobs 2000-2001

Enterprises	2001	2000	Jobs gained or lost
Eskom	33,032	35,707	-2,675
SA Post office	25,943	28,633	-2,690
Rand Water	3,249	3,235	14
Safcol	4,043	5,362	-1,319
Telkom	43,797	49,128	-5,331
Transnet	86,100	90,514	-4,414

Source: Adopted from Sekgobela (2003: 22)

Table 7, indicates the reduction in employment levels within the duration of only a year (2000-2001) in a few parastatal enterprises. In the telecom sector, 5 331 employees lost their jobs, in Escom 2 675 jobs lost. Therefore COSATU's reservations are justifiable.

Ayogu (2001:11) indicates that, development cannot be measured only by financial criteria, and restructuring is not a means of improving government finances and enterprise efficiency at the expense of the poor. Rather, the success of restructuring will be measured by its contribution to improving the standard of living of the majority of the population. The goal of restructuring should therefore be to secure sustainable economic and social benefits for the whole community.

#### 4.6 SUMMARY AND CONCLUSION

The overview of the impact of privatization in all three countries indicated that privatization has led to the increase of the prices of these essential services. In Argentina, the number of the poor households has increased. In terms of service performance, the network grew (access increased) in the first 4 years after privatization as compared to the previous 5 years. Access to telephone lines increased, however the service became less affordable to households, because of the higher prices.

In Brazil, the household sector was also negatively affected by increasing prices in both sectors, and also by job-losses in the electricity sector. The impact on employment in the telecommunications industry is less clear.

In South Africa, low-income earners were unable to afford connection fees or the prepaid amounts. Thus privatization strained the affordability of and access to these essential services. Since 1996 water became much more expensive, with disastrous effects as explained in Section 4.5.

# CHAPTER FIVE: THE RWANDAN CASE AND LESSONS FROM INTERNATIONAL EXPERIENCE

#### 5.1 INTRODUCTION

Rwanda is a relatively small country in the centre of Africa (The area of the great lakes). It shares borders with Tanzania, Burundi, Uganda and the Democratic Republic of Congo. It had about 8 100 000 inhabitants in 2002, but the civil war and genocide of 1994 left more than 1'000'000 killed and 1 000 000 left the country. The urban population represents 17% of the total. The GPD pc of the country is less than US \$ 200 (Denis 2005).

By the late 1990s, it was evident that the Rwandan government's socialist experiment had failed (Republic of Rwanda PS 2002). With few exceptions, state enterprises were inefficient and making huge losses. For the country to survive, the government recognized that it had to revive private enterprise. As mentioned earlier (Section 1.0), the Rwanda's Government of National Unity embarked on a programme of comprehensive economic and social reforms after the 1994 genocide. Recognizing the private sector as the principal driving force behind economic growth in Africa and elsewhere, the Rwandan government felt it should not be left behind and has put in place an ambitious privatisation program of its state-owned enterprises. This programme was established by the Law, no.2 dated 11/3/96, on Privatisation and Public Investment. The Presidential Decree no. 08/14 dated 3/5/96 put in place the institutions to implement this programme. In October 1997, the Privatisation Secretariat actually commenced with its work (Republic of Rwanda P. S 2001a).

Although privatization has not occurred on a large scale in Rwanda, the researcher thought it would be beneficial to investigate the privatisation process in Rwanda and to focus on what the country can learn from international experience. This chapter firstly discusses the privatization process in Rwanda and thereafter specifically focuses on the privatisation process in the electricity (Electrogas) and telecommunication sectors

(Rwandatell). The third section identifies some lessons that Rwanda can learn from international experience.

#### 5.2 PRIVATISATION IN RWANDA

#### 5.2.1 Background Information

According to the Rwanda P.S (2001b), the enactment of the Law on Privatization and Public Investment in March 1996 occurred less than two years after Rwanda had experienced a war and genocide. As a consequence of the war, many enterprises were destroyed. Some of them were severely damaged or completely abandoned, requiring major investment for rehabilitation that the government could not afford. Moreover, many former employees did not return to their previous workplaces (Many of them were either killed, fled the country or preferred to look for other opportunities) as new opportunities were now offered to them.

The enterprises that were more or less still active after the genocide were really lacking the financial support necessary at that stage. Many of them were heavily indebted and consequently close to bankruptcy (Rwanda P.S 2001c). For instance, Ovibar, a banana processing SOE had cumulative losses of almost USD 123,000 in 1997, despite the fact that it was totally exempted from paying taxes. Kabuye Sugar Office (KSO), a sugar manufacturing plant, stopped paying its personnel and had cumulative salary arrears amounting to USD \$151,000. Petrorwanda, a company involved in the storage and distribution of oil, had total liabilities of USD \$ 2.4million.

The privatization of former public enterprises started with the companies that were severely damaged or nearly abandoned. For many of them, the privatization process consisted of the transfer of the buildings and plots and often took place between the Privatization Secretariat and the new owner without the presence of any former employee or representative of the former Managing Board. The extent of the destruction was so bad in some cases that some enterprises like the Rwandan Paper Mills, Mukamira Maize

Factory, Gishwati dairy, and Ituze Tourist Village failed to raise any interest from private investors despite the launching of several invitations to bid.

In the case of the companies that were more or less still active such as Ovibar, and KSO, their privatisation permitted the safeguard of the materials and equipment of production that had escaped destruction and theft. According to the Republic of Rwanda P.S (2001b), privatization has helped to stop the continuous deterioration and the plundering of public assets since the 1994 war. The process also made possible the resumption of economic activities that had ceased to exist after the outbreak of the war in 1994 or that were hindered after the genocide.

The following section investigates the privatisation of public utilities (electricity and telecommunication), which are the main focus of this research. Firstly, it explains why the privatization of these enterprises has taken time to be completed and then focuses on lessons that can be drawn from the economic impact of the privatization on affordability of and access to essential services in other developing countries.

# **5.2.2** The case of Electricity (Electrogaz) and Telecommunication (Rwandatel)

The process of privatising Electrogaz and Rwandatel has been slow. The following common reasons are offered for the slow and cautious path taken in privatising these enterprises (Republic of Rwanda P.S;2001d).

- They are viable enterprises in that they have been in the process of restructuring since the end of the war and for that reason they are not in a decayed condition as was the case with most of the previous privatization.
- Their management goes beyond the circle of the enterprise and includes the well-being of the population, ensuring cheap electricity to households and industries, and delivering a sound telecommunication service to both households and enterprises.
- They constitute the largest employers in the national economy, which means that their privatization is likely to worsen the problem of unemployment

# 5.2.2.1 Electrogaz

Denis (2005) gives an overview of the provision of electricity in Rwanda, and indicates the following: only 6% of the population has access to the grid (20% in urban areas and 2.5 % in rural areas) and 1% of the consumers use 56% of the available electricity. The actual production is 249 GWh. 22.5 MW and 96 GWh are thus short to meet the actual demand. The total installed capacity is 54. 5 MW, but only 37.5 MW are available.

The SOE Electrogaz suffered from the effect of the 1994 war, as did other enterprises in the country. The water and electricity infrastructure had been damaged, plundered or completely destroyed, office material and valuable documents had disappeared including those allowing the identification of clients. The turnover of the company had decreased from +/- FRw 4, 5 billion (10, 5 Million US\$) in 1993 to less than 900 million (2, 1 Million US\$) in 1994 (Republic of Rwanda P.S 2001c).

The same publication indicates that, despite the rehabilitation (for instance, government subsidies and new change management) that took place after 1994, most of the infrastructure is still dilapidated and old. For instance, it is reported that 78% of the water pipes were installed more than 20 years ago.

As a result, the technical losses (by 1994) due to either fraudulent or illegal connections amounted to 33% for electricity and to 50% for water. Together with these technical losses, there are commercial losses <sup>10</sup>, constituting financial claims towards clients, which for electricity and water combined attain 60 %, equivalent to nearly FRw 17.5 billion (USD 40,7 million) at the end of 1999. Nevertheless, rehabilitation has enabled the recovery of the enterprise and already a turnover passed from FRw 3, 7 billion (8, 6 Million US\$) in 1995 to 10, 5 billion (24, 5 Million US\$) in 2000, making the enterprise financially promising.

<sup>10</sup> That is the difference between the amount billed and the amount actually collected by the company's financial services

62

Despite the increase in turnover observed since 1995, the production and distribution of electricity and water are still underdeveloped. There is a huge gap between the national needs for and the national production of electricity, which means that many households do not have access. In 2000, the national production of electricity reached 109,865,010 Kwh while the domestic consumption amounted to 202,861,127 Kwh, resulting in a deficit of almost 93 000 000 Kwh, which had to be imported from the DRC and Uganda. In previous years, the national production had been less than 50 % of the domestic consumption leaving the country in a total dependency on foreign electricity (Rwanda development indicators 2001:121).

The Rwandan government decided to privatise the management of the Electrogaz company for five years and in a second step, turning the contract into a concession (See Section 2.3.3). Five enterprises are already competing for the management contract. They are: the consortium Manitoba Hydro/Roche (Canada); the consortium Lahmayer International/VEAG /Hamburger Wasserwerke (Germany); Tata Electric Companies (India); The consortium TPF/SDWE/SPE/ALE (Belgium); and Eskom enterprises (South Africa) (Republic of Rwanda, Rwandatel. 2002).

#### 5.2.2.2 Rwandatel

Rwandatel was created in March 1993, following the Law relating to Telecommunication Institutional Reform<sup>11</sup>, with the institutional mission of establishing, maintaining and managing any kind of telecommunications infrastructure. A while after its creation, the 1994 war erupted causing damage to human resources, material and equipment similar to that suffered by other enterprises elsewhere in the country.

Despite the efforts made in recent years to rehabilitate the relevant infrastructure, Rwandatel, with 286 employees, remains one of the telecom operators in Africa with the

-

<sup>&</sup>lt;sup>11</sup> The Law was published in November 1992

lowest employment rate (International Telecommunication Union 2001). Rwanda has a low phone line penetration of 0.3 lines per 100 inhabitants, access has slightly improved due to the recent (1998) introduction of cellular telephony by Rwandacell. (For instance the consortium consists of three share holders, of which MTN-South Africa has acquired 100,000 subscribers after 4 year. Worth mention is that fact MTN is the only mobile company in the country, and hence enjoys the benefits of monopoly powers. This has its own adverse welfare effects on the poor).

The report by the Rwandan P. S. further indicates that this multiplied the rate of penetration by more than two from 0.13 lines per 100 inhabitants in 1995 (access has increased). Table 8 shows a sharp drop of fixed telephones from 13,354 to 7,892 lines in service between 1993 and 1995 and a quick recovery that increased up to 18,500 (234.4 % increase) fixed telephone lines in 2001 (Republic of Rwanda, Rwandatel. 2002). In brief, Table 8 shows the setback caused by the events of 1994 and the quick recovery of the sector after the genocide. The recovery is a result of recent investments in equipment that helped to upgrade the system of networks and to increase the number of telephone lines in urban areas. It is claimed in the above report that telephone services will soon come to rural areas when microwave links that connect distant areas without using underground cables are established.

Table: 8 Telecommunication recovery after 1994					
ITEM	1993	1995	2001		
Personnel Rwandatel	323	295	286		
Personnel Rwandacell	N/A	N/A	71		
Population	7 Million	6 Million	8 Million		
Telephone lines capacity	15,840	12,432	61,000		
Fixed telephone lines in	13,354	7,892	18,500		
service					
Cellular Voice Channels	N/A	N/A	2,700		
Cellular phones	N/A	N/A	30,000		
Teledensity (LP/100H.)	0.16	0.13	0.3		

Source: International Telecommunication Union (2001)

Rwandatel is being credited for having invested in and introduced internet access to Rwanda since 1998. The sector that boasts to have more than 2,700 subscribers in 2001 is one of the prominent telecommunication services of the future, according to the International Telecommunication Union (2001).

The Telecommunication Union's report further indicates that two laws (The Telecommunications Law and the Law on the Regulation of Certain Public Utilities) have been promulgated in preparation for the forthcoming privatization of Rwandatel (International Telecommunication Union 2001). The importance of these laws, and especially that related to telecommunication, is to express clearly the liberalization of the sector that enables more than one enterprise to provide public networks and/or public telephone services within national boundaries. There is also legal provision for the agreement later on of an interconnection principle in order to allow all users to communicate freely amongst themselves, regardless of the telecommunication networks to which they are connected or the telecommunication services they use.

The shareholding of Rwandatel, following the cabinet decision, will have this shape: 51% of the privatized company will be reserved for the strategic investor, 5% will go to the employees, 43% of the shares will be offered to national investors, and the government will hold a golden share of 1% giving it the power of regulator and the right of the vote on certain decisions. All this sharing is to prevent the new owners from creating a monopolistic situation. The following section focuses on the lessons that Rwanda can learn from international experience.

#### 5.3 LESSONS FROM THE INTERNATIONAL EXPERIENCE

The focus of this section will firstly be on affordability issues and thereafter on access to essential services.

## 5.3.1 Affordability issues

The affordability of essential services to households is affected by tariff increases to cover costs, increases in costs resulting from increases in quality standards (Section 3) and profit maximization behaviour of private investors.

From this research, it is clear that price increase after privatization, in all the cases studied. Publicly owned enterprises charge tariffs that are lower than the true economic cost of provision. As seen from the intended process of privatizing Electrogaz, after the five years of management contract it will go for the concession method, and this empowers the private dealer to charge high prices that do satisfy his own goals. This is so because of the institutional framework in developing countries is very weak, and it fails to monitor the behaviour of the private enterprises like in the case of Guinea (Section 3.3). Rwanda is not an exception, and should therefore be cautious about this issue.

It was also indicated that if the gains from privatization are to be realized, then competition and regulation play a key role. However introducing competition in these monopolies is very hard as indicated by Bayliss (2002). The regulatory framework in developing countries is often very weak, which gives that private investor the opportunity to exploit the poor since there are rarely proper safeguards put in place.

In the case of Rwandatel, the government tried to divide the company so as to have different providers and hence to stop the monopolistic situation. However, they ignored the fact that it is still an imperfect competitive situation, where the market participants (supply side) will agree to do as they please. These companies are natural monopolies, and therefore it is very hard to introduce any kind of competition. The Rwandan government should consider this a serious matter.

## 5.3.2 Access issues

This issue is three fold; one is the potential increase in the initial connection fees as seen in the Brazil and Argentina case. The fee for obtaining a connection to the infrastructure service is likely to increase substantially when privatized firms reflect the actual costs of connections. Secondly, the quality of service is likely to improve, but the resultant higher prices may make network services unaffordable for the poor. Thirdly, private firms are "cream skimmers", because private firms are profit maximisers, and therefore will only invest where they expect to make a commercial return and also choose which type of consumers to take on. For instance, it is indicated in Section 3.1 that in the energy sector in African, private firms prefer to supply high-loaded industry users. But this has implications for the household sector.

As noted earlier (Section 5.2), the Rwandan government subsidizes their utility companies, and therefore they charge low prices, It has been proven that privately owned utilities have no access to subsidies and hence will charge high prices to cover the costs of the net work expansion ( for example the South African case). These high connection charges hurt the poor, for they cannot afford to pay, thereby denying them access to these essential services. It was also seen in the case of South Africa that it's actually the poor that pay more than the rich. Private operators have no incentives to serve poor customers because the cost of providing for them is way too high, that the economic price charged will not be affordable by the majority poor.

## 5.4 SUMMARY AND CONCLUSION

Rwanda should try to address these lessons that seem to have been ignored. The government tends to focus more on the efficiency gains of privatisation, but they forget the important issues that affect especially poor households in the country. The poverty levels may reduce and the economic growth may increase, but the Gini coefficients will increase as seen in Brazil and Argentina cases. Hence there is a need for caution.

### CHAPTER SIX: GENERAL CONCLUSION AND RECOMMENDATION

The report identifies some sources through which privatisation negatively affect the position of poor households. These are: increases in tariffs, reduced access, lower levels of employment and worsening poverty levels. It is clear from the research that privatization is one of the structural reforms that can have an adverse social impact. It can also worsen the distribution of income and wealth in a poor developing country.

The reasons behind higher prices are; the profit motive of private investors (which is accelerated by the imperfect market that goes hand in hand with monopolistic nature of public utilities); the need for cost recovery; the need of the private investors to improve the quality of service provision as well as the fact that there are no subsidies for private investors. The balance between the quality and the price is usually based on some notion of the average consumer, hence not specifically focussing on poor households.

The appropriate and efficient regulation of privatised companies is critical to prevent transforming public monopolies into private monopolies. Regulation will ensure that the enterprises improve the price and quality of the goods and services they provide. But strong institutional support is critically important. Governments in developing countries implemented some kind of welfare approach, through for example, tolerance of illegal connections to utility services and over staffing in public enterprises. Such policies are now internationally condemned as economically inefficient. However, their removal constitutes a significant welfare loss to the majority of poor households. There is thus a need for safety-nets. The cases of Brazil, Argentina and South Africa should send a clear warning to the Rwandan government about the likely consequences of privatisation. Private investors are not driven by the desire to deliver basic services at affordable rates but rather by the desire to make profits.

The method of privatisation may to some extent determine its social impact. MEBs are most likely to minimize the adverse impact, especially on workers. In contrast, outright public sales and auctions are likely to have a larger adverse effect on workers and

consumers due to the new owners' incentive to make the bid pay off. One way to mitigate this is for the government to incorporate employment guarantees in the sale. If policies are to be poverty focused, then blanket privatization (or a 'one shoe size for all' kind of policy) should be abandoned in favour of a case-by-case approach. Also alternative options can be considered and evaluated; privatization should not be the only option.

These few case studies also bring to attention the need to further investigate the challenges facing the privatisation of basic services, while at the same time overcoming the developmental difficulties of delivering basic services to the majority at affordable prices. Any future restructuring of public sector services will need to be preceded by a thorough analysis of its impact on the poor. From the case studies it is also clear that weak institutional capacity can seriously hamper the efficient and equitable outcome of the privatisation process. Before embarking on too ambitious privatisation programmes, governments should see to the strengthening of the regulatory capacity of public administration.

The impact of privatisation through prices should also be assessed further in economic, historic and social context. With respect to future research, it is particularly needed to further clarify the full opportunity costs, to look at the impact of privatisation at the industry level and at the important role of the regulatory agencies. In Africa, research in this context is an absolute imperative before more countries embark on large-scale privatisation. If the privatisation of essential services results in higher prices, then there are serious welfare implications. The benefits in terms of economic efficiency should be balanced against the negative welfare effects. Governments in developing countries, and especially the Rwandan government, should carefully consider policy measures to alleviate the plight of the poorest households, by considering measures such as price discrimination and targeted programmes through the expenditure side of the budget.

Finally the researcher agrees with Joseph Stiglitz who states that (Section 3.2.2.2) economists are supposed to look beyond the efficiency benefits of restructuring and focus on the overall opportunity costs of these reforms.

#### **BIBLIOGRAPHY**

Andreasson, B. (1998). Privatization in Sub-Saharan Africa: Has it worked and What Lessons can be learnt? Gothenburg, Sweden. [Online]. Available: http://www.swedevelop.com.

Antoniou, A. (1992). Applied Microeconomics. Durban: Butterworths

Anuatti-neto, F.Barossi-Filho, Carvalho, A.G and Macedo, R (2002). Benefits and Costs of Privatization: Evidence from Brazil. *FIPE and IDB- Inter American Development Bank Final Report*.

Ariyo, A. and Jerome, A. (2004). Utility privatisation and the poor: Nigeria in focus. *Global Issue Papers*. No. 12.

Ayogu, M.D (2001). Debating "Privatization" of Network Utilities in South Africa: Theories, Fables, and Facts, presented at the TIPS 2001 Annual Forum.

Bear, W. and MCDonalds (1998). "Role of international capital" A return to the past? Brazil's Privatization of Public Utilities: The Case of the Electricity Power Sector. *The quarterly Review of economics and Finance*. 38. (3): 503-523

Baer, W. and Bang, T.J. (2002). Privatization and Equity in Brazil and Russia. *KYKLOS*. 55 (4): 495-522.

Barberis, N., Boycko, M., Shleifer, A., and Tsukanova, N. (1995). How Does Privatization Work? Evidence from the Russian Shops. *National Bureau of Economic Research*. NBER Working Paper No. 5136

Bayliss, K. (2002). Privatization and Poverty: The distributional impact of Utility Privatization. *Public service International research Unit*. Working Paper No. 16 (1).

Birdsall, N.and Nellis, J. (2003). Winners and losers: Assessing the distributional impact of privatization. *World Development* 13 (10): 1617-33.

Black, P.A., Calitz, E., Steenekamp, T.J., and Associates. (1999). *Public Economics for South African Students*. Cape Town: Oxford University Press

Blank, M.R. (2000). When can public policy makers rely on Private markets? The effective provision of social service. *The Economic Journal*. 110 (462): 34-49.

Budds, J. & Mcgranahan, G. (2003). Privatization and the provision of urban water and sanitation in Africa, Asia and Latin America. *International institute for environment and* 

*development, London.* [Online]. Available: <a href="http://www.iied.org/docs/urban/Water\_dp1.pdf">http://www.iied.org/docs/urban/Water\_dp1.pdf</a>.

Boubakri, N. & Cossat, J. (1998). *The* financial and operating performance of newly-privatized firms: evidence form developing countries. *Journal of Finance*. [Online]. Available: <a href="http://www.crefa.ecn.ulaval.ca/cahier/perfo-fi.pdf">http://www.crefa.ecn.ulaval.ca/cahier/perfo-fi.pdf</a>

Byanyima, W. (2003). UNIFEM Roundtable on Economics and Rights; Interconnections in the Context of HIV/AIDS and Feminised Poverty. [On line] Available: http://www.un.org/esa/coordination/ecosoc.

Chong, a. & López-de-Silanes, F. (2002). Privatization and labour force restructuring around the World. Unpublished paper issued by Inter-American Development Bank and Yale University. [Online]. Available: <a href="http://www.feem.it/NR/rdonlyres/113F5030-BAC7-4382-85CE-3B2B192FAFCB/653/10902.pdf">http://www.feem.it/NR/rdonlyres/113F5030-BAC7-4382-85CE-3B2B192FAFCB/653/10902.pdf</a>.

Cook, P. (1999). Privatization and Utility Regulation in Developing Countries: The Lessons so far. *Annuals of Public and cooperative Economics*. 70(4): 546-587

Cook P. and Uchida, Y. (2001). Privatization and economic growth in developing countries. Centre on Regulation and Competition. Working paper series. No.7.

COSATU. (2001). COSATU Position Paper on Privatization. [Online]. Available: <a href="http://www.COSATU.org.za/docs/2001/privatpp.htm">http://www.COSATU.org.za/docs/2001/privatpp.htm</a>.

De Luca, L. (1997). Labour and Social Dimensions of Privatization and Restructuring Public Utilities Water, gas and Electricity. *International Labor Organization (ILO)*. [Online]. Available:

http://www.ilo.org/public/english/employment/ent/papers/travint1.htm.

Denis, V. (2005). Overview of the small hydro in Rwanda. Online [Available] www.mhylab.com

Ennis, H. & Pinto, S.M. (2002). Privatisation and income distribution in Argentina. Unpublished paper delivered to a seminar on privatisation and Inequality in Latin America, Inter-American Development Bank and Universidad de las Americas, Puebla, Mexico, May

Esteche, A. Gomez-Lobo, A. and Leipziger, D. (2001). Utility privatization and the poor: lessons and Evidence from Latin America. *World Development*. 29 (7): 1179-98.

Etukundo. A., 2002. Issues in Privatisation and Restructuring in Sub-Saharan Africa. ILO. Working Paper IPPRED-5. [Online]. Available: <a href="http://www.ilo.org/public/english/employment/ent/papers/ippred5.htm">http://www.ilo.org/public/english/employment/ent/papers/ippred5.htm</a>.

Fischer, S. (1991). Privatization in East European Transformation. *National Bureau of Economic Research*. Working Paper No. 3703

Guash, J.L. (2000). The impact on performance and renegotiation of concession design: Lessons from an empirical analysis of ten years of concession experience. *Mime*, Washington, *DC*: World Bank

Gupta, S., Schiller, C., and Ma, H. (1999). Privatization, Social Impact, and Social Safety Nets. *IMF Working Paper WP/99/69*. Washington DC: IMF

Havrylyshyn, O. and McGettigan, D. (1999). Privatization in Transition Countries: A Sampling of the Literature. *IMF working Paper* WP/99/6. Washington: IMF Jauch, H. (2002). The Big privatization Debate – African Experiences. *Labour Resource and Research Institute (LaRRI) for Namibia*.

Jerome, A. (2004). Infrastructure Privatization and Liberalization in Africa: The Quest for the Holy Grail or de Grace? 4<sup>th</sup> Mediterranean Seminar on International Development. University of Balearic Islands palma de mallorca Spain.

Jerome, A. and Rangata, M (2003). The Tortuous Road to Privatisation and Restructuring of State Assets in South Africa: Lessons from African Privatisation Experience. Development Policy Research Unit. School of Economics, University of Cape Town

Kay, B.J. and Mayer, C. (1994). Privatization and Economic Performance. *Oxford University press*.

Kikeri, S. and Nellis, J. (2004). Assessment of privatization. *The World Bank research Observer* 19 (1): 87-118.

Lalor P. Garcia H, (1996) Reshaping Power markets –Lessons from Chile and Argentina. *Public policy for the private sector.* Washington DC, world Bank Note No.85

La Porta, R., and Lopez-de-Silanes, F., 1997. The Benefit of Privatization: Evidence From Mexico. National Bureau of Economic Research. Working Paper 6215

Lieberman, I.W. (1993). Privatization in Latin America and Eastern Europe in the Context of Political and Economic Reform. *Washington DC: World Bank* 

Mahmoud D. (2003) "Introductory notes: Towards an Economic Agenda for the New Administration. NESG Policy Dialogue Series. 2 (1).

McDonald D. (2002). No money, No service: South Africa's poorest citizens lose out under attempts to recover service costs for water and power. *Alternatives Journal*. 28(2): 16-20

Macedo, R. (2000). Privatisation and the Distribution of Assets and Income in Brazil. *Carnegie Endowment for International Peace*. Washington, DC. Working Paper No.14

Marsden, B. (2005): [Online] Available: <a href="http://www.publicintegrity.org/water/report">http://www.publicintegrity.org/water/report</a>.

Melo, J.R. (2000). Telecommunication and the poor. Infrastructure for Development: Private Solutions and the poor.

Menard, C. Clarke G. and Zuluaga A.M. (2000). The welfare effects of private sector participation in urban water supply in Guinea. *World Bank Washington DC*. Policy research working paper. No 2361.

Michaud, C., Noto, J.M and Palasek, M (2002) Southern Company and Brazilian Investments. *The CEMIG Experience Emerging Markets* –

Mohr, P. and Flourie, L. (2004). Economics for South African Student. *Pretoria, Van Schaik publishers*.

Nellis, J. Menezes, R and Lucas, S. (2004). Privatisation in Latin America The rapid rise, recent fall, and continuing puzzle of a contentious economic policy. *Centre for Global development*. Series *Washington*. 3(1)

Newbery, D. (1994). Regulatory Policies and Reforms in the Electricity Supply Industry. DAE Working Paper No. 9421, Cambridge, Department of Applied Economics, University of Cambridge.

Nozick, R. (1974). Anarchy, State and Utopia. New York: Basic Books

Ramanadbam, V.V. (1987). Privatisation in Developing Countries. *Routhledge London and New York*.

Privatization database, types and techniques of privatization. [Online]. Available: <a href="http://www.privatization.org/collection/WhatIsPrivatization/Privatization\_techniques.htm">http://www.privatization.org/collection/WhatIsPrivatization/Privatization\_techniques.htm</a>

Republic of Rwanda, Privatization Secretariat.(2001a). Privatisation, Three, Years Later. *Rwanda Privatisation*, No. 05. February: 1-23

REPUBLIC OF RWANDA, PRIVATISATION SECRETARIAT, (2001b). Tabarwanda's Second Wind. *Rwanda Privatisation*, No. 09. September/October: 1-15

REPUBLIC OF RWANDA, PRIVATISATION SECRETARIAT, 2001. Turning Electrogaz into a Powerhouse. Rwanda Privatisation, No. 06. April: 1-15 c

REPUBLIC OF RWANDA, PRIVATISATION SECRETARIAT, 2001. Privatisation at Cruising Speed. *Rwanda Privatisation*, No. 10. November/December: 1-15.d

REPUBLIC OF RWANDA, Ministry of Finance and Economic Planning, 2001. Rwanda Development Indicators. No.4 (July). Kigali: Imprimerie de Kigali.

INTERNATIONAL TELECOMMUNICATION UNION. 2001. Human Resources Strategic Development and Training Plan: Rwandatel. (Chair: A. Diez). Geneva.

Republic of Rwanda, Privatisation Secrétariat (2002). Empowering the Private sector. [Online] Available: <a href="http://www.minecofin.gov.rw/agencies/privatization">http://www.minecofin.gov.rw/agencies/privatization</a>

Rosen, H.S. (1999). Public Finance. Fifth edition. Princeton: Irwin McGraw-Hill

Sekgobela, S. (2003). The Restructuring of State Owned Assets: Does it Pay? Development Policy Research Unit. School of Economics, University of Cape Town

Sarbib, J. (1997). Privatization in Africa: present and future trends. African development bank group. *Annual meeting symposium in Abidjan on "private sector development in Africa"*, World Bank

Siddique, S. (1995). Financing Private Power in Latin America and the Caribbean. *Finance and Development*, 32(2), 18-21.

Shirley, M. (2002). Experience with privatization: A new Institutional Economics Perspective. *Journal of African Economies*. 11(1): 10-31.

Spiller, P. and Martorell, L. (1996). How should it be done? Electricity Regulation in Argentina, Brazil, Uruguay and Chile. International Comparisons of Electricity Regulation. *Cambridge, Cambridge University Press.* 

Stiglitz, J. E., 1992. Some Theoretical Aspects of the Privatization: Applications to Eastern Europe. *National Bureau of Economic Research*, R1749.

Stiglitz, J. (2002). Globalization and its discontents. *Penguin Group, Great Britain, Clays Ltd.* 

Truu, M. (1988). Economics of Privatization. *The South African Journal of Economics*. 56 (4): 251-268.

Vickers, J. and Yarrow, G. (1991). Economic Perspectives on Privatization. *Journal of Economic Perspectives*. Vol. 5, No2 (Spring), 111-132.

World Bank. (2004). Reforming Infrastructure: Privatization, Regulation, and Competition. Washington D.C. [Online]: Available:

http://econ.worldbank.org/prr/reforming\_infrastructure/text-36236/.



# Appendix 1

Features	Risks	Benefits and mitigating factors
	Affordability	
Increase in price	need to finance quality-related investments.	Increases in average tariffs depend on pre-reform price levels and the distribution of the benefits of private participation between stakeholders. Reform can cut costs significantly through improvements in efficiency or new technologies and effective competition.
Tariff rebalancing	Tariff structure is likely to be reformed in ways that could increase the marginal tariff faced by the poor.	Competition is likely to decrease average tariffs, thereby possibly compensating for the impact of tariff rebalancing.
Formalization and revenue collection		Vulnerable households may desire a formal connection, even at a cost. Safety is likely to increase with the formalization of connections. Informal connection may have been more expensive. Reform can bring technology choices that Lower costs.
	Access issues	
Increase in connection fees		Countries can adopt rules for uniform connection costs across geographic areas.
Risk of "cream skimming" or "red-lining"		Rules against cream-skimming or red- lining can be imposed.
Reduction in availability of alternative services	The fee for obtaining a connection to the infrastructure service is likely to increase substantially when privatized firms reflect costs of connections	affected if foreseen in contracts.
Increase in network cost caused by service quality upgrades	improve, but this may make network	Evidence shows that poor households are willing to pay reasonable amounts for improved quality service.