The Privatisation and Liberalisation of Telecommunications in Bahrain

Hussam Essa Al Khalifa

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ABSTRACT

Many countries have attempted telecommunications liberalization and privatization using different policy approaches, resulting in varying degrees and types of success. This thesis examines the impact and implications of telecommunications liberalization and privatization in the Kingdom of Bahrain. This research demonstrates that properly restructuring competition into the telecommunications market can promote the economic goals of the government such as increasing the private sector participation in the sustainable development of a modernised economy.

This study has shown that there is a direct correlation between the competitiveness of telecommunications market and the level of ICT infrastructure investment in that market, with both of these factors contributing to the competitive ability of that nation to attract multinational companies to set up their business. While there are positive results emerging from Bahrain's overall privatization and liberalization reforms, a major weakness noticed relate to market regulation. The most important factor required for the effectiveness of a regulator in telecommunications market is the transparency with which that regulator conducts itself. Due to the lack of transparency, the independence of Bahrain Telecommunications Regulatory Authority appears to be in question. This study found that even after five years after the market in Bahrain was "liberalised", there is still only one effective competitor to the incumbent monopoly telecommunications operator, and that the competition is solely in the provision of mobile service.

The methodologies used in this thesis include documentary evidence, interviews with policy makers, industry players, and international organizations linked to telecommunications. In the absence of adequate data on the liberalization of monopolistic practices in the Gulf States, views of representative of customers, government policy makers, the regulatory body and the media are sought. The government policy makers are of the view that the role of the government in a liberalization process should be that of a facilitator and regulator rather than service provider and innovator. However, this research reveals that the Bahrain regulatory authority has not paid much attention to facilitate competition. The customer survey indicates that there is a lack of momentum in

telecommunications liberalization process in Bahrain. It was observed that the very structure of the Bahrain telecommunications liberalization model was not designed to promote competition and facilitate new entrants into the market. The alternative model prescribed in this thesis is designed to overcome the weakness noticed in the market regulation and provide the required impetus for achieving sustainable economic growth through liberalization.

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Acronyms

2G	(second generation)
3G	(third generation)
ABN AMRO	(Algemene Bank Nederland-Amsterdam Rotterdam Bank)
ADSL	(Asymmetric Digital Subscriber Line)
ARPU	(Average Revenue Per User)
AT&T	(American Telephone & Telegraph Company)
B2B	(Business-to-Business)
B2C	(Business-to-Consumer)
Bapco	(Bahrain Petroleum Company)
Batelco	(Bahrain Telecommunications Company)
BBBF	(Bahrain British Business Forum)
BCSR	(Bahrain Centre for Studies and Research)
BD	(Bahraini Dinar)
BIX	(Bahrain Internet Exchange)
BMA	(Bahrain Monetary Agency)
BMI	(Business Monitor International)
bpd	(barrels per day)
BPJM	(Bundesprüfstelle für jugendgefährdende Medien)
BT	(British Telecom)
CBA	(cost-benefit analysis)
CBB	(Central Bank of Bahrain)
CEO	(Chief Executive Officer)
CPE	(Customer Premises Equipment)
CSO	(Central Statistics Organisation)
C&W	(Cable & Wireless)
EBITDA	(Earnings before Interest, Taxes, Depreciation and Amortization)
EC	(European Commission)
EDB	(Economic Development Board)
EDR	(European Digital Rights)
ESCWA	(United Nations Economic and Social Commission for Western Asia)
EU	(European Union)

FCC	(Federal Communications Commission)
FDI	(Foreign Direct Investment)
GATT	(General Agreement on Tariffs and Trade)
GCC	(Gulf Cooperation Council)
GDN	(*Gulf Daily News*)
GDP	(Gross Domestic Product)
GPIC	(Gulf Petrochemical Industries Company)
GSM	(Global System for Mobile Communication)
HDI	(Human Development Index)
HFC	(Hybrid Fibre Coax)
ICT	(Information Communications Technology)
IDA	(Information Communications Development Authority)
ILO	(International Labour Organisation)
IMF	(International Monetary Fund)
ISP	(Internet Service Provider)
ISDN	(Integrates Services Digital Network)
ITU	(International Telecommunication Union)
IXP	(Internet Exchange Point)
JTC	(Jamaica Telephone Company)
Kbps	(Kilobytes Per Second)
MENA	(Middle East and North Africa)
MFN	(Most Favoured Nation)
MNP	(Mobile Number Portability)
MPLS	(Multiple Protocol Label Switching)
MTC	(Mobile Telecommunications Company)
MW	(Mega Watt)
NBK	(National Bank of Kuwait)
Next Gen NII	(Next Generation National Infocomm Infrastructure)
NGN	(Next Generation Network)
OBG	(Oxford Business Group)
OFCOM	(Office of Communications)
OFTEL	(Office of telecommunications)
ONI	(Open Net Initiative)
PKI	(Public Key Infrastructure)
PTT	(Postal, Telegraph and Telephone)

RBOC	(Regional Bell Operating Companies)
RPI-X	(Retail Price Index – X [i.e. minus the 'X' factor])
SCV	(Singapore Cable Vision)
SEC	(Socio-Economic Class)
SOTE	(state-owned telecommunications enterprises)
TIA	(Telecommunications Industry Association)
TIFA	(Trade and Investment Framework Agreement)
TOJ	(Telecommunications of Jamaica)
TRA	(Telecommunications Regulatory Authority)
TRA-DRPR	(TRA Development Review Panel Report)
UAE	(United Arab Emirates)
UK	(United Kingdom)
UN	(United Nations)
URL	(Uniform Resource Locator)
US	(United States of America)
US$	(United States Dollar)
USO	(Universal Service Obligation)
VAS	(Value Added Service)
VoIP	(Voice over Internet Protocol)
VSAT	(Very Small Aperture Terminal)
WBA	(Wireless Broadband Access)
WITSA	(World Information Technology and Services Alliance)
WTO	(World Trade Organization)

Chapter 1: Introduction to Telecommunications reform in the Kingdom of Bahrain

Introduction

Telecommunications networks are quickly becoming the nervous system of 21st century human interaction. These overlapping webs are relentlessly spreading further and penetrating deeper into societies worldwide as technological advances are constantly increasing the ease with which we can connect with any part of the globe. Almost all aspects of people's lives are being increasingly affected and facilitated through telecommunications, from business dealings to personal interactions, as well as access to government services, political pursuits, medical research and the drive towards scientific discovery and even the proliferation of the arts. As humans learn how telecommunications can remove the barriers that once limited our reach, our appetite for faster connections and improvements in products and services helps push advancement and innovation in information technologies and services even further. These advancements lead to telecommunications assuming an ever more essential role in our lives, with this cycle spurring telecommunications markets to sprint ahead as some of the fastest growing sectors in the world. Compounding the expansion of the industry has been the tendency of countries around the world to privatise and liberalise their telecommunications sectors, resulting in private ownerships for the majority of all telecommunications networks (*Trends and developments in the telecommunications environment* 2004).

Driven by the prevailing winds of privatisation and liberalisation, this rapid advancement of the telecommunications industry within developed nations is also being sought by nations in the developing world. Many governments in the developing world regard a modern telecommunications network as a means by which to encourage growth in their economies and alleviate the ills plaguing their societies, with privatisation and liberalisation of the sector being the foremost of means by which this modernisation is attempted. It is in this context which this thesis will explore the implications and affects of telecommunications privatisation and liberalisation on the economy and society of the Kingdom of Bahrain.

The history of telecommunications liberalisation

Heavy-handed government management of telecommunications had been the precedent until the well into the later half of the 20^{th} century, given how essential the services are to a prosperous economy. The advent of the telegraph in the 1800s led the United Kingdom (UK) and the other European empires to recognize that high-speed communication was an important engine of commerce and aided the central authority in asserting and maintaining effective control of far-flung colonies. The dawning prevalence of the welfare state and with it the trend towards protective trading practices led to widespread nationalisation or heavier state governance of telecommunications. In the UK the publicly owned post office and telegraph services were amalgamated into a single company under state ownership, while in the United States (US), with its pro-market tendencies, the Bell Corporation became the monopoly operator for telegraph and telephone services.

This framework began to unravel in the last quarter of the 1900s, as struggling markets and a sluggish economic environment prompted many governments to alter their practice of allowing monopolies to rein in their national marketplaces. Margaret Thatcher and her Conservative Governments of the late 1970s and 80s were at the vanguard of the European movement to divest public services to the private sphere; among these services telecommunications was near the first to be up for sale. When parliament passed the Telecommunications Act in 1984, British Telecommunications (BT) became the private provider of services in the UK. Though effectively a monopoly in the domestic market, BT's pricing powers were leashed by a regulator with minimum standards imposed on services. The privatisation of Cable & Wireless, which was firmly entrenched as an overseas long-distance provider, created competition for BT in this area of the communications market. The Conservatives later followed up these moves by further breaking open the market to bring in other private telecommunications companies (Genoud, C 2003, p. 3).

Across the Atlantic Ocean, policy makers in the US developed an awareness that the quality and efficiency of telecommunications services had repercussions for the entire economy, and that a monopoly provider was not optimal for the quality and efficiency of the nation's telecommunications services. Various laws were put in place to move towards liberalising the sector, and in 1974 the federal government filed anti-trust legislation against AT&T, Bell's parent company. An agreement between AT&T and the US department of Justice ended the monopoly in 1984 by breaking the integrated network up into eight separate companies (*The History of AT&T* n.d., p. 1).

Although many other countries carried out policies of privatisation and liberalisation, in many ways the US and the UK set the pace for the rest of the world. Telecommunications liberalisation and the freedom it brought to the market can be seen as a major force behind the string of innovations that have been introduced into the field of communications. Among the more notable advancements are cellular networks for mobile phones, home PC use with Internet access and digital, satellite and fibre-optic information distribution methods. In terms of international trade in telecommunications products and services, the market opened significantly in 1997 with the World Trade Organization's (WTO) Agreement on Basic Telecommunications. Governments have generally recognized that liberalising their telecommunications sector leads to greater efficiency and technological advancement, and that this type of telecommunications environment is necessary for overall competitiveness in global economy. Indeed, the global economy itself has been, and continues to be, transformed by technological innovation and advancement in telecommunications, and from these has emerged the concept that the age in which we live is, or is becoming, an 'information society'.

In search of the 'information society'

The idea that the structure of human interaction and economy has so fundamentally altered due to advancements in telecommunications as to constitute the emergence of an 'information society' finds it's origins, according to Christopher May, in the work of Fritz Machlup. May posits that Machlup was the first to recognize and classify 'knowledge and information tasks separately from normal industrial and social activities' (May 2002, p. 5). Machlup classified five sub-divisions – education; media of communication; information machines; information services and other information activities – where there could be a determination of economic value.

> 'This categorization, and the statistical measurement it enabled, allowed Machlup to claim in *The Production and Distribution of Knowledge in the United States* that in 1958 around 29 per cent of America's gross national product came from these 'knowledge industries' (May 2002, p. 5).

Peter Drucker expanded upon this idea when, in works published in 1968, he contended that in the post-WWII United States, 'the base of our economy shifted from manual to knowledge work, and the centre of gravity of our social expenditure from goods to knowledge', as well, that the 'impact of cheap, reliable, fast and universally available information will easily be as great as was the impact of electricity' (May 2002, p. 5)[1].

As will be discussed in greater detail in this thesis, Bahrain, through enacting telecommunications privatisation and liberalisation legislation, is attempting to spur the transformation of the kingdom into an information society to diversify its primarily resource-based economy, modernise its business practices and raise the quality of life for its citizens.

Telecommunications research, smaller states and the tension between culture and communication

There has been a considerable body of research into privatisation and liberalisation of telecommunications services since the early 1980s, when there was the first movement towards modernising what were at the time generally state-owned and monopolistic services. Research has also been stimulated by technological change with the growth of cellular telephone systems and the internet and broadband. As shall be indicated in the following chapters, theory and evidence on the growth and impact of these services on major developed nations has been extensively considered and is still subject to much on-going research. Studies include major theoretical analysis such as the work by Castells and Kapur (cited in Galperin 2005.) also a considerable number of studies that look at the development of telecommunication industries in developing countries [Curwen and Whalley (2004), Kikeri (1992), Galal (1995)].

However there are much fewer accessible studies concerning the impact of the telecommunications revolution on smaller and less developed states. In particular the development of telecommunications in small but nevertheless economically developing regimes would seem to warrant attention. In this context the Kingdom of Bahrain presents a fitting area of study. In part this thesis concentrates on a study of

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[1] It should be noted that Christopher May himself in *The Information Society: A Skeptical View*, espouses 'that the information society does not imply a fundamentally new way of organizing the economy, but is rather another (albeit recently emerging) form of capitalist society' (May 2002, p. 35), though the 'new economy' or 'new paradigm' is distinct from its predecessor in various important aspects.

telecommunications in Bahrain as the author of this study is a Bahraini national living in Bahrain. This background ensures an interest in the development of the Kingdom and also enables access to the actors and institutions engaged in the economic development of the country in general, and specifically the Bahraini telecommunications industry.

The focus on Bahrain in this study also provides an analysis of a small but relatively wealthy regime which has potentially greater economic impact on the world economy than its population might suggest. Bahrain is in this respect not dissimilar from several other economically influential small states such as Abu-Dhabi in the Arabian Gulf or Singapore in the Far East that have established themselves as significant centres for commerce, initially on the basis of natural resources such as oil, but later through diversification into areas including banking, finance and tourism. Such activities require effective modern communications links that operate on a global scale.

As will be discussed later in this study, in addition to the economic pressures which drive the development of modern telecommunications systems in such smaller states there are, however, cultural and social issues that may create pressures for regulation and state controls over communications. Smaller states need to have a strong sense of their own culture and values to maintain their identity. In desiring to preserve a strong sense of nationhood within an area of growing consumer wealth, there can be anxiety regarding opening a culture to being swamp by the waves of cultural images and values spread from larger and more dominant players in the globalised market. For many this may come down to a fear that American cultural values in particular will overwhelm the traditional values of many smaller states in which affluence is sufficient to enabled many in the population to take advantage of effective means for securing global communication. Thus, in some regimes, while privatisation and liberalisation of telecommunications can be driven by concerns over economic development and diversification of the economy for long-term prosperity, there are groups who may be concerned that such developments will be at the price of loosing traditional community values and cultural independence.

Therefore, there exits the possibility in nations such as Bahrain for an underlying tension between the demand to modernise the economy and communications and the concern for cultural stability and the retention of respected traditions. Thus, as well as focusing on the economic aspects of telecommunications privatisation and liberalisation, this study will also treat these processes in regards to their social dimension.

Pressure for liberalisation in smaller economies

The role of the state in the Kingdom of Bahrain, most Arab countries and indeed most developing countries has been as the sole provider of essential services to their populations. Thus it has been as natural extension of the inherent authority of the state that it be the sole provider of telecommunications services. Given the heavy cost of infrastructure investment to setup and operate a telecommunications network, while the marginal cost of adding each new subscriber to the system is, relatively speaking, almost nothing, normal economic pricing mechanisms of charging fees based on the marginal cost of the service or product are hard to apply. Within states that already favour government provision of services this fosters a conception of telecommunications as a kind of natural state monopoly, and thus to ensure the service is generally accessible at a reasonable price, developing nations often assume the role of sole telecommunications providers for their citizens (Krairit 2001, p. 15).

The rapid development and expansion of telecommunications services and innovations in the developed world, combined with swift growth in many economies in the developing world, has created an increasingly interconnected global economy facilitated through telecommunications. This has fundamentally altered the function and importance of telecommunications in the economy and society (Petrazzini 1995, p. 15) According to Petrazzini, this shifting role of telecommunications eroded the legitimacy of the 'natural monopoly' conception of the sector and spurred the ideological transition towards privatisation and opening the market.

Throughout the 1980s in the developed world, many countries dramatically changed the way their telecommunications networks operated. Citing cumbersome state institutional mechanisms and the need for a flexible means of adapting to the latest telecommunications technologies, nations in the developed world pursued either privatisation, in following the example of the UK, or liberalisation, as was done in the US. Though the early successes were far from complete, as the regulations changed and policies were reshaped, the services and products offered in telecommunications sector diversified and the market grew.

When domestic telecommunications corporations in the developed world began to go international, developing countries came under pressure to invest and upgrade their own telecommunications networks, and although the nationalized telecommunications monopolies in the developing world were generally not performing well in the 1980s, this was by and large not the reason for reforms. Instead telecommunication restructuring was part of a broader package of reforms being instituted throughout the economies of many developing nations in the face of collapsing marketplaces and dwindling government revenues (*Trends and developments in the telecommunications environment* 2004, pp. 1-4). This is in contrast to the developed world, where the momentum for reforms came principally from the demands of the marketplace to modernise.

Early in the 1990s, nations around the Arabian Gulf, among other developing nations, began consultations with the IMF, the World Bank and governments in the developed world for recommendations on how best to restructure their telecommunications sector to encourage growth in their economies. The result was the gradual adoption of liberalisation practices to open up their telecommunications sectors to competition and the divesting of publicly owned telecommunications monopolies to encourage private investment. The results were mixed, with different levels of success achieved given the different fiscal realities and resources available in each nation. The progress of Singapore illustrates how a relatively competent and well-organized state with effective means of regulation greatly increases the likelihood of positive result from liberalisation and privatisation. As a report by the World Bank states:

> Most privatisation success stories come from high-income and middle-income countries. Privatisation is easier to launch and more likely to produce positive results when the company operates in a competitive market, and when the country has a market-friendly policy environment and a good capacity to regulate. The poorer the country, the longer the odds against privatisation producing its anticipated benefits and the more difficult the process of preparing the terrain for sale (Kikeri et al. 1992, p. 2).

Privatisation and liberalisation are commonly associated with each other (Garrison 2004, p. 3), but what they entail is not necessarily the same. Privatisation is the process by which a publicly-owned company is transferred to private control and ownership. Liberalisation is the process by which a monopoly market is opened to competition, whether or not that monopoly was controlled by the state or a private entity (Garrison 2004, p. 3). The prime consideration for Bahrain is whether breaking the monopoly in the telecommunications market will bring economic gain to the Kingdom, and if the benefits have not yet been realized, what lessons can be learnt?

Bahrain embarked on major telecommunications reforms with the introduction of the Telecommunications Law on the 20th of January 2002, and has carried out major steps in the reform process to attract more private investment. This thesis will explore whether these efforts to liberalise the telecommunications market will bring greater benefits to the economy and society of Bahrain than the previous monopolistic telecommunications environment. In learning from the liberalisation experiences of other countries, has the government adopted the policies and regulations which best suit Bahrain and its objectives? While this thesis will evaluate telecommunications liberalisation in regard to its impact on the economy and efficiency, it will also consider the societal impact, which includes both employment and social values. Regarding employment, this study will show that a modern telecommunications system is essential infrastructure in attracting new businesses and allowing businesses already operating in the Kingdom to grow and provide more jobs for the local population, while in terms of societal values, this study will show that Bahrain has a well established framework of laws and structures that aim to ensure national security, sovereignty, national identity and the upholding of Islamic culture and values. This study will also discuss the need for there to be an independent and effective regulatory mechanism for telecommunications in the Kingdom in order for Bahrain to reap the ripest fruit from liberalisation of the sector.

Aims of the study

1. To ascertain the driving forces in Bahrain behind the establishment of a privatised and liberalised telecommunications environment.

2. To ascertain the extent to which privatisation, liberalisation and the regulatory environment of Bahraini telecommunications have been and will be beneficial to the Kingdom's economic development. [In relation to this analysis, this thesis will also offer an alternative structure for telecommunications in Bahrain which – based on the wide array of theoretical and empirical sources examined in this thesis – would almost certainly be of greater future economic benefit to the Kingdom than the current scenario.]

In developing these aims the thesis will have the following objectives:

- A critical analysis of the literature regarding telecommunications liberalisation and privatisation.
- An explanation of the route taken by Bahrain in the process of privatisation, liberalisation and the regulation of telecommunications.
- To evaluate the effectiveness of this process for the wider economic development of Bahrain.

Scope of the study

The thesis will bring into focus the impacts and implications of telecommunications liberalisation and privatisation in the Kingdom of Bahrain. As many countries have attempted these types of reforms using a diverse array of different policy approaches, resulting in varying degrees and types of success, it is essential to examine a number of these examples and garner from their experience lessons which can be applied to Bahrain and the objectives of the Kingdom as it undertakes its own reforms process. An examination of the theories underlying the ideology and practice of liberalisation and privatisation is also warranted and undertaken in this thesis.

As was discussed above, though liberalisation and privatisation are often related, they are in fact different processes with features distinct from each other. Privatisation of the telecommunications sector in Bahrain occurred in 1981, whilst the major reform program the Kingdom has been undertaking in recent years is one of liberalisation. As such, this thesis with examine both privatisation and liberalisation in regards to theory, the experiences of other countries, and the experience of Bahrain. However, the emphasis of the analysis will be devoted to the process of liberalisation, for several reasons: (1) as it will be argued later in this thesis, it is liberalisation of the telecommunications sector rather than privatisation which can result in more profound and sustainable benefits, because while privatisation is essentially just the transfer of ownership from the state to a private body, it is liberalisation which can more dramatically alter the market by allowing for the entry of competitors, spurring efficiencies, competitive pricing, increased services and advancements in technology; (2) as telecommunications privatisation in Bahrain was undertaken more than two decades ago its impact has largely been absorbed within the Kingdom and hence it is liberalisation and the implications of the reforms program now underway which is now more relevant to near and long-term prospects for economic and social change.

Structure of the thesis

This thesis is organized in the following structure: Chapter 1 is the introduction explaining the aims and scope of the study, the statement of problems, and the structure of the thesis; Chapter 2 presents a literature review of the theory related to this thesis; Chapter 3 reviews the growth of the telecommunications industry globally and the trend toward privatisation and dominance by multinationals; Chapter 4: The economic, political and historical background of Bahrain; Chapter 5: Liberalisation in an Islamic cultural context, regulation of information and viability for business; Chapter 6: Methodology; Chapter 7: Liberalisation policy and its application in the Bahrain telecommunications scenario; Chapter 8: Attitudes regarding privatisation and liberalisation among policy makers, industry players and consumers; Chapter 9: Analysis of the driving forces behind telecommunications reforms in Bahrain and their benefits now and for the future, and the Conclusion chapter consolidates the findings and analysis of the study and concludes this thesis.

* * *

Chapter 2: The theories of telecommunications reform

Introduction

Privatisation of a state-owned telecommunications operator is not a particularly new phenomenon. In the 1930s, for example, the Spanish Government sold the state telephone service to the Bell Company. However, liberalisation on a large scale is a more recent development and began on an influential scale in the United Kingdom in 1984. Though this type of reform has been introduced in many countries, the routes to a successful overhaul of the sector are still being uncovered. No one blueprint can or should be applied in every instance, which is especially the case in regards to liberalisation, as normally it involves a more radical change in the marketplace than privatisation. However, through the liberalisation and privatisation reforms which have been attempted, we can still learn what similarities existed in each situation and what the fundamental issues were.

Despite the overlap between the two processes, the forces driving liberalisation and privatisation are essentially distinct, and this must be considered in the formulation of new policies meant to guide the sector, as they may influence whether a nation achieves positive outcomes from either process. Privatisation, in relation to historical precedents, has generally been a precursor to future liberalisation efforts of a state. Therefore it is important, in this chapter, to examine the theoretical foundations of privatisation in order to solidly ground further discussions of privatisation and how it relates to liberalisation, which will take place later in this thesis. This chapter will also shed light on the fact that, contrary to popular ideas regarding privatisation, this process does not inevitably lead to benefits for the consumer.

The advent of privatisation

The Thatcher Government assumed control of the English parliament in London in 1979 and shortly thereafter began to undertake sweeping privatisation reforms, widely regarded as the most significant in history and setting off a wave of government privatisation programmes around the globe. Thatcher's privatisation wave was pervasive, first washing through areas of finance, commerce and industry, then carrying on to once stalwart domains of the state, such as education, hospitals, public transit, roads, airports, retirement funds, and the postal system. Privatisation was held out as the key to cutting government expenditure, injecting private sector efficiency into essential services and thereby eliminating wasteful spending. Indeed, as a World Bank study found, a properly structured privatisation programme can have considerable, long-lasting positive results. The study (Kikeri et al. 1992, pp. 1-5) examined twelve cases in four countries where state-owned enterprises (SEOs) were divested to private owners, and found that these had benefits across the entire economy, in eleven of these cases leading to greater productivity and increased growth.

However there is also the conception that state-owned services do offer greater benefits in certain cases where the government's objective is to increase social well-being rather than maximize savings and efficiency, as welfare targets may be more easily achieved through government's own agencies than regulating profit oriented private businesses. The theoretical work is not able to definitively show whether state-owned or private-owned services are of greater benefit to the general public. Some studies have shown the efficiency of private enterprises is greater than that of public enterprises (Mueller cited in Clarke & Cull 1997, p.4), and efficiency increases for government enterprises post-privatisation (Kikeri et al. 1992, p. 2; Megginson et al. 1994, pp. 403-452), though others would argue that while productive efficiency might increase with privatisation, it is uncertain whether overall economic efficiency is increased and it is questionable whether privatisation is the optimal way to further other government platforms (Czamanski 1999, pp. 10-11).

What is more certain is that privatisation is not some divine remedy that can be used to vanquish all the ills associated with struggling publicly-owned enterprises. Privatisation alone is not able to compensate for a market with weak regulations and without competitors. In Britain, for example, the experience of rail privatisation should be a salutary lesson against the dogmatic introduction of either privatisation or liberalisation for any service. The sale of the rail network by the Major Government in Britain to a monopolistic private owner of the infrastructure, including the track and the rights to supply services on particular routes to other private companies, resulted in a serious deterioration of service quality as many private companies owning a franchise of limited duration failed to invest in new rolling stock and even more seriously Rail Track which, as a monopoly, owned the permanent way invested more in land and building development than track refurbishment. Such action contributed to several serious train crashes and eventually motivated the Blair Government to re-nationalise this aspect of the rail service (Brendan 2002, p. 1-3). It may be argued that where the market is competitive – as increasingly is the case with new technology pushing forward new forms of communication – and where an effective regulatory mechanism is present, private ownership yields substantial benefits. It cannot, however, always be assumed that all forms of privatisation and liberalisation will be effective. Privatisation, to be successful in achieving substantial, sustainable social and economic benefits, must move beyond simply the transfer of ownership from the public to private spheres, and must instead be used as a vehicle to implement deeper market reforms and reshape government's role in the sector and the larger economy.

Defining privatisation

'Privatisation' can have several meanings. A constricted definition is the transfer of ownership and operation of a particular publicly owned enterprise to private ownership and operation. The state in effect relinquishes direct authority over the management of the company, passing this responsibility on to a private party. Privatisation can also refer to a sector, entailing that private interests are allowed to enter an industry or specific area of the economy that, in many cases, was previously under the control of a state-owned monopoly. An example of this could be private interests being granted the right to build and manage assets to generate electricity, but the utility is still under government control. At an even broader level, privatisation can be a process applied to the economy at large, where the first two types of privatisation described above are applied across a wide spectrum. To ascertain how profound this type of privatisation will be, the level of government involvement in different areas of the economy and the ambitiousness of the policy restructuring need to be examined. These three definitions are very much intertwined, with no hard and fast lines distinguishing one exactly from another.

Public choice theory

Understanding the shift in political and economic thinking among Western governments, or those influenced by the West, from tending to take many strategically important private companies into public ownership from the 1920s through to the

1970s, to the current and continuing trend now to privatise these companies, requires some understanding of the theoretical ideas that have underpinned this shift in political and economic culture. The principle motivating ideology is within the 'New Right' values that were increasingly popularised among conservative parties of Britain and the US during the rather economically depressed 1970s. In the context of privatisation these ideas are most firmly established within public choice theory.

Public choice theory, as a sub-set of economic study, effectively began emerging in academic discourse around the mid-point of the 1900s, and at its very basic was seen as a way to analyze taxation relative to public spending – to analyze people's actions in collective decision making in the same manner as one would in the general marketplace. It wasn't until 1986 though that public choice theory entered the spotlight of general, widespread recognition when James Buchanan, a main proponent of the theory, was given the Nobel Prize in economics (Shaw n.d.).

> Economists who study behaviour in the private marketplace assume that people are motivated mainly by self-interest. Although most people base some of their actions on their concern for others, the dominant motive in people's actions in the marketplace – whether they are employers, employees or consumers – is a concern for themselves. Public choice economists make the same assumption – that although people acting in the political marketplace have some concern for others, their main motive, whether they are voters, politicians, lobbyists or bureaucrats, is self interest (Shaw n.d.).

Public choice theory is, however, in many respects a reworking of 18th and 19th century ideas regarding competition within a free market – initiated by classical economists such as Adam Smith and Ricardo – which dominated business and government thinking in most industrialising states of the 19th and early 20th century. The advent of social democratic values and the growth of state welfare economies eclipsed these ideas as predominantly divisive and unfair strategies for operating the macro-economy – i.e. laissez-faire led to wealth for a few but deprivation and squalor for many, and without government regulation may not fully promote stable economic growth. Thus, Roosevelt's 'New Deal' and, in Britain, the Attlee Government's adoption of the Beveridge Report and nationalisation of businesses essential to the infrastructure of the economy created, post 1945, a much heightened degree of state intervention in the economy.

Even in the 1930s these values were being challenged by the Viennese school of economists led by Ludwig von-Mises. When this school of thought was broken up by the advance into Austria of fascist values, scholars upholding the neo-liberal traditions became established in Britain and the United States and were able to gain further popularity for their ideas. The leading figure in these developments was perhaps Friedrich von-Hayek whose polemic *The Road to Serfdom,* written in 1944, while not widely accepted at the time, became the framework for later opposition to the concept of a mixed economy welfare state. Hayek argued that the rational individual will advantage themselves even if supposedly working for the public good and that efficiency and economic growth could only be fostered in a framework of perfect competition. [While many have been the economists who advocated government intervention to curb 'market failures' – an example of this would be a monopoly which crushes competition and stifles development – the followers of public choice theory would also point out that 'government failures' exist, whereby the results a certain government intends do not follow from the actions it initiates (Shaw n.d.).] Hayek recognised that inequalities would result from a classically free economy, but argued 'there is no such thing as social justice', and that seeking equality would create more general damage to society and wealth creation than a society in which there were large disparities between the wealthy and the impoverished.

The ideas initiated in the 1930s by economists such as Hayek were later developed in the US by economists such as Freidman and, importantly in the context of public ownership and nationalisation, the works of the Virginia School of public choice theorists. Arguing from a standpoint that each individual will seek to maximise their own utility in the form of wealth, they argued that public sector bureaucrats will always tend to arrange public services to benefit their own interests rather than the public they supposedly serve. William Niskanen's (1971, pp. 37-38) treatment of bureaucratic motivations highlights the public choice model as it pertains to privatisation. His analysis parallels that of New Right thinkers in that he defines personal utility in a focused and monetary way and sees people as intrinsically out to maximize their utility. This is where we can begin to grasp what Niskanen views as the problem with bureaucracies; while people in business want to maximize profits, a bureaucracy is not profit-driven, which begs the question: what is it exactly that a bureaucrat is looking to maximize? It is Niskanen's contention that a bureaucrat's inclination to maximize is played out in attempting to secure the largest possible budget allocation for his bureaucracy.

As Shaw (n.d.) explains, salient among the posits of public choice theorists is the idea that there is little rational motivation for the individual voter to keep tabs on what their government is doing or to stay up-to-date regarding the latest issues because, effectively, their one vote in a nation of millions means almost nothing in relation to the final outcome of the election – i.e. the expense in energy and effort to stay informed and aware of the goings-on in the political arena far exceed the return of casting a single, well-informed vote, especially when that vote carries no more value than the ill-informed voted of one's neighbours who did not expend the same energy and effort. [It should be noted that this 'ignorance incentive', if one can call it that, hardly exists in the private marketplace however, as one buys with one's own money and one owns what is bought, and thus the impact of ones decision is relatively immediate and tangible].

> [Bureaucrats] incentives explain why many regulatory agencies appear to be 'captured' by special interests... Capture occurs because bureaucrats do not have a profit goal to guide their behaviour. Instead they usually are in government because they have a goal or a mission. They rely on Congress for their budgets, and often the people who will benefit from their mission can influence Congress to provide more funds. Thus interest groups – who may be as diverse as lobbyists for regulated industries or leaders of environmental groups – become important to them. Such interrelationships can lead to bureaucrats being captured by interest groups (Shaw n.d.).

According to Harrington, Vernon and Viscusi (2005, pp. 379-380), the concept of 'capture' was given credibility by empirical observations from the US showing that, up until at least the 1960s, government regulations were distinctly pro-industry and by-and-large helped inflate profits for companies – i.e. regulations tended to limit market entry for competitors and prop prices up above cost. The 'capture' of regulatory agencies will also be shown to be extremely relevant to the situation of Bahrain's telecommunications sector, where more than six years after the liberalisation process was begun, the incumbent monopolist, Batelco, still dominates the industry and the TRA has not taken forceful action to create space within the industry to foster competition – a move that would not be in the interests of Batelco.

Niskanen depicts bureaus operating effectively as hierarchical authority structures, markedly different from the decentralized and innovative tendencies of the free market. While bureaus are essentially 'non-profit' organisations, they are also funded by a regular appropriation (Niskanen 1971, p. 15). Niskanen would describe a bureau as a means by which government expands upon the level of services supplied by the free market without contracting out to a private party in that free market. However, as Niskanen and public choice theory would hold, the employees of these bureaus are no more inclined to act selflessly than any other actors in the economy, but instead of seeking direct monetary profits from their business, members of a bureau are concerned with their earnings, the perks of their job, authority and control, patronage, production within the bureau, simplicity in altering aspects of the bureau and general straightforwardness in running the operations of the bureau (Niskanen 1971, p. 38). Public choice theory also contends that highly motivated and politically influential special interest groups are able to warp the balance of bureaucratic activities and decisions disproportionately in their own favour, which is called 'rent-seeking' [i.e. politically influential special interest groups participate in 'rent-seeking' behaviour to 'capture' bureaucratic institutions, agencies and functions of government]. The everyday dispassionate taxpayer will likely feel it is not worth their time and effort to fight a change in policy or legislation, while the parties which stand to benefit most from the changes will have every motivation to push a strong lobby effort on the bureaucrats. Those enforcing policy decisions may also become 'rent-seekers' as they fight changes that may erode their preferred status. As a result, Public Choice theory would contend that government policy and oversight is bloated and economically inefficient, and that in fact any positive ramifications garnered for the wider public through these policies and oversight are outweighed by the costs to society and the economy (Ricketts 2000, p. ix). Niskanen, after an exanimation of the research, notes that 'all bureaus are too large. For given demand and cost conditions both the budget and the output of the bureau may be up to twice that of a competitive industry facing the same conditions' (Niskanen 1971, p. 33).

It is important, given the context of this thesis, to note which aspects of public choice theory hold relevance in their application to the circumstances of Bahrain. Classically, public choice theorists have considered their arguments in the context of a country where the centre of governmental power resides either partially or mostly in a democratically elected body, voted for by a large segment of the general population; this is not case in Bahrain. As will be discussed in greater detail in Chapter 4, although in recent years there has been an arm of the legislature created whose members are voted into office by the populous – in elections which are free and open, and with seats that are normally contested between a range of candidates – the body of the legislature which they are elected to has only limited power. The constitution of the Kingdom upholds the monarchy as centre of power and the King as the voice of final authority in the affairs of the state.

The above deviation from the classical application of public choice theory in the context of Bahrain does not mean other aspects of the theory do not apply. For example, examinations of rent-seeking behaviour in the public choice theory model hold a great deal of significance in regards to the Bahrain scenario – and in particular to the functioning of the Kingdom's telecommunications sector, with the 'special interest group' in this case being Batelco. This will be discussed in further detail later in the thesis.

Economic neo-liberalism and social conservatism

In the evolution of the world's economies to the contemporary markets of the 21st century, responsible governments have removed 'unconstrained competition' from the list of options by which to run their economic model – i.e. 'a firm is not allowed to blow up a rival's factory or renege on agreements with customers. The government is relied upon to enforce property rights and contractual arrangements' (Harrington et al. 2005, p. 61). It follows that what is in question is not whether the state should be involved in the national economy, but how pervasive such involvement should be.

In many developed countries, it is the public sector which is burdened with the blame for all that is wrong in society. Bloated and unmanageable, overcommitted in all directions and thus ineffective at properly fulfilling any of its obligations, a common perception is that government breeds more woes than it resolves. Many proponents of this view turn to privatisation as the answer, expounding the need for government to divest of its flailing public services and allow the free market room to breathe competition and efficiency into the provision of services. This has not been solely an economic argument either, as some, including Peter Senker, have held that government privatisation reforms are often pursued far more for ideological concerns than as a response to fiscal realities (Senker 1989, p. 180).

Outside the United States, which never fully embraced the social democratic values of the welfare state, the United Kingdom was the leader in the type of neo-liberal politics which brought influence to bear upon countries in the developed world in the closing quarter of the 1900s. Decline in the British economy under post 1945 interventionist governments inclined ever increasing numbers of Conservative politicians to see value in the ideas of Hayek and the Virginia School economists. The Heath Government briefly initiated a process of privatisation but the failure of the strategic Rolls Royce aircraft engine company forced his government to retreat from the policy. Heath's successor as Conservative leader, Mrs Thatcher, was far more resolute in seeking the longer term advantages of 'rolling back the frontiers of the state' and her governments of the 1980s were strongly influenced by the neo-liberal politics of some of their New Right members. The New Right proponents struck at the foundational suppositions upon which popular governance had been based, seeking to withdraw state participation from the operation of the free economy and radically altering the functions of public institutions. Typical sentiments among the New Right can be found in Michael Sullivan's (1992, p. 146) assessment of British welfare state:

> The provision of health care, free at the point of use, encouraged demand that outstripped supply and caused a decline in medical standards; unemployment insurance schemes had encouraged absenteeism and work-shy behaviour; unified secondary education had led to a decline in standards by providing academic education for more children than can reasonably benefit from it; and all, by virtue of their financing out of taxation, had led to an unwarranted curtailment of individuals freedom to make decisions about their own lives and financial resources.

However, while Thatcher led the way on privatisation, behind the British Government's moves was the example shown by the US that, under President Reagan, was shaking off much of Roosevelt's New Deal legacy from the 1940s. As the US economy became the dominant world leader in terms of its size and global reach, its business and economic leaders became highly influential in the spread of privatisation. The economic and consequent military power of the United States also permeated the thinking of the major international organisations for economic regulation, in particular the WTO, the IMF and the World Bank. Access to the resources held by these agencies to bail out the economies of poorer states required those countries to adopt a more competitive liberalised economy, often regardless of internal political and cultural values that might counsel more substantive state control. Many smaller regimes, such as the Gulf States, could readily see that successful growth, even with their substantial oil wealth, was dependent on following the precepts of the world economic leader and moving towards more liberal economic policies.

The free economy, the strong state and the New Right

What drives privatisation? Is it legitimate to assess privatisation as simply a dogmatic preference for private ownership over ownership by the state? There is an evident problem for the proponents of New Right thinking: their ideal balance between the power of government and the freeness of economy is easily enough to propose in the hypothetical, but how to institute this in a practical context is a much more arduous. New Right thinkers have to provide an outline for how the state can be revamped to allow the regulations, structures and culture of a free economy to thrive, while at the same time checking those forces which would destabilize the market order. While New Right philosophy holds the government responsible for the deterioration of the market order, it is through the channels of government which the New Right must seek the public's endorsement of their reform programme. The optimal degree of state involvement in the economy is not easy to ascertain, as a balance must be found between allowing private enterprise to operate without cumbersome state oversight and policing the private sector to guarantee the integrity of the markets is upheld. Without regulation to ensure market functions are properly maintained and private investment rights respected – which likely entails extensive legislation – the state could squander its authority, having its ability to look out for the general good eroded as it lets slip the reins of the market to private interests.

So what is the real driving force behind privatisation? Part of the answer lies in the drive to modernise the economy. Effective and innovative legislative initiatives can embolden markets to try and sharpen their competitive edge, creating an environment where the overall objectives focus on establishing a modern, stream-lined economy. In this scenario the government's role is at the helm, ensuring the economy stays on course, while it is the private sector powering the engines and propelling the economy forward. This is a difficult stance for the government to adopt, and was the source of a number of the most heated rows during Thatcher's terms in office. And while the government withdrew its heavy hand from the sphere of private enterprise, its grip on public services tightened, defying the common notions of a *laissez-faire* state and helping define the New Right as a pervasive and modernising movement. In the following pages it is necessary to consider how far the state can stand aside from the economic process in capitalist countries in general and in telecommunications provision in particular, and leading from this the extent that regulation is necessary.

Is privatisation the right solution?

Most proponents of New Right public choice aims have come to recognise that privatisation by itself is not necessarily going to provide the competitive stimulus needed to promote efficient service delivery. The success of the privatisation process depends in large part on the competitiveness of the market and the effectiveness of the regulatory environment (Jackson et al. cited in *The General Concepts of Privatisation* n.d. p.32), with another important factor being the affluence of the country attempting the privatisation, with some studies showing that the poorer the country, the less likely it is that privatisation will achieve positive results (Kikeri et al. 1992, p. 1). As Parker and Kirkpatrick (2006, p. 193) articulate: 'that effective privatisation of infrastructure programmes in developing countries requires efficient and effective regulation appears axiomatic'. However, effective liberalisation measures to ensure competition following on from privatisation may be a more significant spur to growth in many economic sectors.

The Bahrain telecommunications scenario is a case in point. Privatised in 1981, the Bahrain Telecommunications Company (Batelco), the country's only telecommunications provider at the time, still has not met the expectations of consumers in terms of pricing and product and service selection. For instance until the late 1990s, consumer product choice in regards to both fixed and mobile phones was limited to buying what Batelco sold, as other private companies were not allowed to enter the market. Also by virtue of being a monopoly operator, the consumer had no option but to accept Batelco's prices or go without telecommunications services. While the monopoly situation for telephone equipment and mobile service has changed, Batelco still has a monopoly with regards to fixed lines. From this perspective, it is revealing to examine the views of Jackson et al. (cited in *The General Concepts of Privatisation* n.d., p.32), who note that greater competition and restructuring the market are more important than change of ownership, with privatisation in-and-of-itself not being enough to foster major increases in efficiency levels. The Government of Bahrain, by launching telecommunications liberalisation reforms in recent years, had hoped to introduce competition. However, even after "liberalising" the telecommunications market in Bahrain, Batelco maintained its monopoly on fixed line service, continuing to earn huge profits and consumers still pay heavily for services. [It should be noted though, that private monopoly in the case of Bahrain has its upside too: Batelco continues to be one of the largest job providers for Bahrain, which could be viewed as a contribution to the economic growth of the country].

This scenario is consistent with Cook and Uchida's (2001, p. 20) conclusion that if there is a weak regulatory regime in place after a government has earned large profits from a privatisation, also accompanied by little or no gain in economic efficiency, than the results regarding economic growth will likely be disappointing. Cook and Uchida (2001, p. 19), using data from 63 developing nations[1], re-evaluated the supposed link between privatisation and economic growth, uncovering that the two are only minimally related, suggesting that privatisation could actually decrease economic growth. Furthermore, while the performance of a privatised SOE in a developing country may not improve post privatisation, it has also been show in some cases to actually decrease 'because limited regulatory capacity of governments would make arm's length regulation of private monopolies cumbersome and, possibly, unworkable' (Ramamurti 1996, p. 38). These results are consistent with the conception of the broader market and regulatory climate, as well as the economic, social and political situation, affecting to what extent a market with thrive and an economy will grow post-privatisation.

Jochen Boekhoff, in his study 'Telecommunications in Mexico, Uruguay and Argentina: A Tale of Contrasts', use examples from Latin America to illustrate how it is possible for a SOTE to modernize and bring efficiency to a nation's telecommunications sector much more effectively that a privatized and liberalized

[1] There is no universally accepted and definitive definition for a 'developing nation', but general guidelines include a lower ranking on the United Nations' Human Development Index (HDI) – which is a comparative measurement of life expectancy, education and standard of living – a general lack of modern infrastructure and an agricultural and/or natural resource dependant economy.

marketplace. He notes that by 2003, Uruguay – where a monopoly SOTE controls the sector – had the highest penetration rate of telephone lines of any South American country. Argentina's market was radically different its organization of companies:

> The state-owned EnTel was entirely privatized in 1990. Two companies were formed, Telecom Argentina (with Telecom of France and Sted, Italy, as shareholders) and Telefónica de Argentina (with Telefónica of Spain as the main shareholder). International services were licensed to Starlet (owned by Telintar, Argentina), and cellular telephony outside the greater Buenos Aires area was licensed to Comprehensive Technologies, Inc. (CTI), with GTE Corporation and AT&T as shareholder. Inside Buenos Aires, two other companies, CRM (owned by Movicom, Bell South and Motorola) and Movistar (owned by Telecom Argentina and Telefónica de Argentina) won the license for the cellular network (Boekhoff 2005, pp. 73-74).

Yet even with the presence of so many companies in the telecommunications market in Argentina, competition was effectively non-existent and 'infrastructure investments actually receded post-privatization' (Boekhoff 2005, p. 74). Argentina and neighbouring Uruguay had, before 1990, comparable rates of telephone line penetration, but during the 1990s Uruguay surpassed Argentina in penetration rates: by 2002 Argentina had attained 22 telephone lines per 100 inhabitants while Uruguay had 28 (Boekhoff 2005, p. 74). Wait times for the installation of new connections was also markedly different between the neighbours, with Uruguayan customers experiencing almost no delays by 1997, while Argentineans could expect extended delay periods even up until 2003. Mobile phone charges were just as unequal between the two countries: customers in Uruguay saw rates fall in line with the general global trend, while their neighbours in Argentina saw the privately owned telecommunications companies – which generally operated as region-specific monopolies – hold on to their the inflated tariff rates and charges for products and services. Even investors benefited more in the Uruguayan telecommunications market, earning US$7.5 per each dollar invested in the second half of the 1990s, while during the corresponding timeframe in Argentina investors took in US$4 per dollar invested.

Boekhoff remarked that Argentina endured capital flight and currency dollarisation, which stifled potential growth in the market, while 'the territorial and functional confines of the privatized networks were not designed to create competition, and no anti-trust laws were applied' (Boekhoff 2005, p. 75). By contrast, Uruguay's government had a steady hand at the helm, guiding a quickly advancing telecommunications sector by investing where investment was needed to achieve its goals of establishing a nationwide, modernized telecommunications infrastructure. The most significant conclusion Boekhoff drew from this example is that is privatisation – in and of itself – is not necessarily preferable or more beneficial to a government owned and operated monopoly, even considering the quick pace of innovation and technological adaptation characterizing the global telecommunications industry (2005, p. 76).

An example of this from the developed world is offered by Müller and Toker in their examination mobile telecommunications development in Denmark, Norway, Sweden and Finland. They note that the phenomenal growth of mobile penetration rates and product development in Scandinavian countries in the early 1980s occurred within the context of heavy state involvement and 'very often near monopoly situations' (Müller & Toker 1994, pp. 197-198). Müller and Toker thus posit that Nordic countries illustrate that the parameters needed for successful telecommunications market development are: 'achieving international market size and having high pre-capita income – which lower the relative cost of using cellular phones – and effective marketing' (Müller & Toker 1994, p. 198).

Thomas and Max Thümmel offer another sobering example of the limits of privatisation in promoting general economic benefit, even in developed nations, in their study 'Privatization of Telecommunications in Japan'. Before 1985, Nippon Telegraph and Telephone Corporation (NTT) was the monopolist SOTE. Partially privatized in 1985, in 1996 NTT and the Japanese regulatory authority inked a deal which would see NTT split, by 1999, into two companies responsible for the regional market and third company exclusively in the market of overseas calling. All three were held by a holding company which itself was semi-privatized, with these moves regarded as progress towards eventually fully privatizing NTT (Thümmel T & Thümmel M 2005, p. 77).

As the two Thümmels note however, the stated goals of 'simplification, improvement in management efficiency and increased transparency' were hardly realized. It had been hoped that a more efficiently run company would translate into cheaper services for customers, but instead the result was to the contrary: customers ended up paying more for local calls, public telephones and monthly contracts, and services that had previously been *gratis* were now charged for, such as directory assistance. More than half of NTT's some 300,000 employees lost their jobs and those remaining saw their wages fall. However, the greatest failing of Japan's privatisation experiment was that it failed in its primary aim of creating competition in the nation's telecommunications industry, which the architects of the policy had hoped would then lead to greater competitive performance of the economy generally (Thümmel T & Thümmel M 2005, p. 77).

The Thümmels attribute the poor results arriving from privatisation to 'persistent monopoly structures' that allowed NTT to dominate the entire domestic telecommunications market in Japan and stifle the entry of competitors, at the same time that the company was able to aggressively assert itself in the long-distance market. The authors then concluded that:

> Privatisation will not increase efficiency and reduce prices through competition if it leaves monopolistic structures and practices in place. Supervision and intervention by established supervisory authorities such as the JFTC (Japan Fair Trade Commission) must be provided for in privatisation legislation... It is important in the first place, however, to fully assess the likely share of the market of a company to be privatized and its future role as a market player. In this way a privatization structure can be designed deliberately to avoid market dominance by the privatized company. Regulation to enforce competitive practices, ensure technological advances and prevent market control needs to form part of privatization.
>
> The question of state ownership share in any partial privatization requires careful analysis in terms of its potential role as either an anti-monopoly, pro-competition measure, or as a tool to ensure that social benefit provisions and commitments are upheld and not lost in the march to private profit.

However, privatisation, properly planned and executed, can produce significant benefits for not just the industry, but the economy generally [examples abound, and examinations of the American, British, European and other countries' experiences with privatisation and liberalisation of their telecommunications sector will be undertaken in the next chapter]. Chief among these benefits are: increased investment in the sector, improvements in service quality, cutting public expenditure and 'innovation and capacity building' (Beisheim et al. 2005, p. 352). Regarding increased investments, this often comes about given that the public purses are typically tight and large investments in new infrastructure in any given industry can be financially burdensome, and are thus avoided; in the private sector however, if there is an opportunity for future profit, companies will find it enticing to carry out the investment. Regarding improvements in services, 'in the case of telecommunications, the quality of services has improved dramatically after privatisation, although it remains unclear what proportion of that effect has to do with private ownership and how much stems from technological progress' (Beisheim et al. 2005, p. 353). In terms of cutting public expenditure, there exists the general understanding that privatization increases efficiency, in that privatisation usually eliminates previous limitations against shedding redundant staff. In regards to innovation and capacity building, the spur of competition has the tendency to motivate companies to develop faster and in ways more innovative than publicly own companies who feel complacently assured of their security in the marketplace – i.e. competition pushes companies to try and 'get ahead' of their competitors by seeking out the newest and most advanced methods and products, and such is the modernizing effect of privatisation (Beisheim et al. 2005, p. 353).

This final possible result of privatisation, that it can push an industry to increased levels of innovation, could be the strongest of the arguments in favour of privatisation, as it intrinsically includes increased levels of technological aptitude – i.e. a company needs to elevate its skills and knowledge capacity to capitalise on the advantages the latest technological advancements offer in order to attempt to get ahead of its competitors. (Beisheim et al. 2005, p. 353).

The stages of telecommunications reform.

In short, there are three steps that have generally been identified in the process of privatizing and liberalizing a nation's telecommunications company (Ramamurti 1996, p. 34). The first stage is the telecommunications market is dominated by a state-owned-and-operated monopoly. The second step begins immediately after privatisation of the SOTE, either completely or in part, and the creation of a regulated private monopoly, and it is in this phase that the incumbent operator will fight to stay as a guaranteed 100 per cent of the market share tends to allow for the greatest profit. It is common for the second stage to last between five and 10 years. In the third stage the 'regulator will have to ensure that new entrants can interconnect with the monopolist's network on reasonable terms and compete with it fairly' (Ramamurti 1996, p. 34), thereby, in theory and in the optimal outcomes, resulting in a competitive market.

The political process of privatisation

Taking into account the above country examples, it is apparent that ownership can affect the performance of an enterprise considerably. Sunita Kikeri, John Nellis and Mary Shirley (2001) note that in nations both developed and developing, it is exceedingly hard to achieve and maintain a high level of performance from SOEs, and that governments in fiscal trouble will frequently attempt to increase the output and efficiency of these enterprises by hiring new management. The new managers are given incentives to 'shake things up' and carry out new cost-cutting and revenue-gaining measures, which are usually effective but only to a certain point.

> As the crisis dissipates, so does political resolve. Political interference, a common and deadly disease of SOEs, tends to re-emerge – and painfully achieved SOE reforms tend to backslide. SOEs thought to be well on the road to recovery have either stopped improving performance or suffered deterioration (Kikeri et al. 1992, p. 2).

According to William Garrison (2004, p. 7), political ideology contributes significantly to privatisation. This played out heavily in the UK as Thatcher's privatisation plans were envisioned with an overall focus on withdrawing the public sector from the economy and revamping the institutions of Government. The vein of privatisation ran so deeply as to occupy a major portion of the Conservative Government's platform from its election in 1979 until its eventual defeat in 1997. Though born of the Thatcher Conservatives, privatisation became at least accepted, if not actively promoted by the other parties in parliament (Pollitt 1999, p. 30).

As a policy choice however major privatisations, and of particular interest to this thesis, major telecommunications reforms, are often considered contentious moves for a state in the eyes of the public, thus requiring the commitment of the uppermost levels of governments for the outcome to be successful. According to a 1997 World Bank report, governments must also maintain transparency so that each step is fully accessible to public scrutiny to ensure the fairness and the integrity of the process (Guislain 1997, p. 118). In the same report Pierre Guislain notes the importance of 'efficient institutional structures and mechanisms and of providing involved officials with the right set of incentives to ensure effective implementation of privatisation programs' (Guislain 1997, p. 295). One way to do this is to create an arms-length government agency responsible for carrying out the steps towards privatisation. 'International experience shows that clear responsibilities and mandates, streamlines process, access to resources and advisory services, political support, and accountability of the privatisation officials may matter more than the organization themselves' (Guislain 1997, p. 296).

It would seem only natural however, for there to be some inclination among politicians and members of the public service to uphold the institutions they are associated with. As Pete Alcock discusses, this would tend to push public policies in a 'pro-welfare' direction, and 'may explain, for instance, why the Thatcher Governments of the 1980s in the UK were unable, or unwilling, to replace the National Health Service in the country, although their New Right advisors had suggested that this should be a major policy aim' (Papadakis & Gooby, cited in Alcock n.d., p. 13). As Alcock notes, there is significant evidence to imply that the forces guiding the process of politics influence the welfare policies of the state, regardless of the economic environment in which they function.

The need for regulation

The term the 'invisible hand', which purports that each autonomous person increases the general good through the pursuit of his own egoistic behaviour, was coined by the British scholar Adam Smith in his 1776 seminal work *An Inquiry into the Nature and Causes of the Wealth of Nations*. And while the historic successes of capitalist and free market economies would complement the theory that the 'invisible hand' is at play, transferring self-interested gains into wider benefits for the society, this may be limited to the economy of private goods, but not public goods.

Leon Felkins (1997, p. 8) illustrates this point using the fisheries. The example follows that all the fish stocks in the sea are a 'public good', i.e. a commonly shared resource. A fisherman's income is based on the amount of fish he catches, so the inclination of every self-interested fisherman is to catch as many fish as possible to maximize his income. If a fisherman chooses to limit his catch, attempting to preserve the fish stocks for the future, he will simply be decreasing his income and leaving more fish for the others to catch as they maximize their own income. Consequently, every fisherman will fish as much as he can. Given that fish stocks are limited and need time to regenerate, this type of fishing effort will eventually collapse the stocks, leaving no fish for anyone to catch. Far from the invisible hand helping to spread widely the benefits of self-interested behaviour, in regards to 'public goods' it appears self-interested behaviour can lead to commonly shared hardship. Thus there appears to be an obvious need for regulation of the industries dependant on scarce resources, as unregulated competition can be a detriment to all involved.

Applied to telecommunications, aside from Internet Service Providers (ISPs), telecommunications companies need to make heavy capital investments to create mobile and fixed communications networks with national and international reach. In this context, a host of smaller businesses investing heavily in functionally identical yet operationally independent networks covering the same areas would likely be painfully costly, economically inefficient and ultimately unsustainable for all involved, while conflicts would unavoidably emerge as the individual enterprises battled for bandwidth control.

The pillars of regulation

One definition put forward for regulation is 'a state imposed limitation on the discretion that may be exercised by individuals or organizations, which is supported by the threat of sanction' (Stone cited in Harrington et al. 2005, p. 357). But what purpose should market regulation serve? This needs to be defined in order for it to be possible to have an effective regulation policy enforced in the market place. While it will obviously differ for different industries, and needs to be adapted to the specific socio-political and economic contexts of the various regions in which regulation is the enacted, it is possible to identify common 'themes' for regulation among theorists. Nightingale (1995, pp. 255-256) has suggested that, from the conventional perspective, the aims of regulation are to prevent price gouging and glutinous profiteering by monopolists, to ensure dominant firms 'play fair' in their captive markets, and to restrain companies from 'unscrupulous tactics' in undermining rivals. He then posits that in the more contemporary mindset, 'the by-words of the modern regulator are such phrases as "open to entry", "breaking down the barriers to market forces" and "enforcing the pace of change'" (Nightingale 1995, p. 256). Similarly, Walden and Angel (2005, p. 25) hold that principle among the tenets of regulation is the need to restrain market exploitation by monopolistic entities, such as charging excessively for services or products, or, better put, charging substantially more for the service or product than the cost would be if the market were competitive. Littlechild's view is important to consider here, that being:

> Competition is indisputably the most effective means – perhaps the only effective means – of protecting consumers against monopoly power. Regulation is essentially a means of preventing the worst excesses of monopoly; it is not a substitute for competition. It is a means of 'holding the fort' until the competition arrives. Consequently, the main focus of attention has to be on securing the most promising conditions for competition to emerge, and protecting competition from abuse. It is important that regulation in general... does not prejudice the achievement of this overall strategy (Littlechild 1983, p. 11).

Following from this is the principle that regulation should not be used or applied where it is not needed – a market characterized by a healthy, competitive dynamic should not be hamstrung with unnecessary intrusions, as this would warp the natural functioning of the business model. At the same time, in a sector in which competition is being choked and there is an apparent failure in aspects of the free market model, regulation should be used as a tool to form the framework in which competition can be realized. 'It is important to thus recognize that the competitive playing field can be distorted by economic regulation and so due care must be taken in its implementation' (Walden & Angel 2005, p. 25). Related to this, it is preferable that the systems initiated by the application of regulation have the affect of mimicking how it is a competitive market would function, if indeed one existed.

As well, the expenses incurred in the application of regulation ought to be kept lean. Given the hindrances posed to a nation's industries through the application of overly stringent oversight by state institutions, a salient facet of privatisation logic is to decrease 'detailed control over essentially business decisions' (Walden & Angel 2005, p. 25). Market regulation ought to avoid being so heavy as to have its results appear similar to what would be arrived at under a state-owned-and-operated industry.

In regards to the regulation of network industries – such as telecommunications – Finger (2005, p. 294) notes that 'responsibility for insuring public policy objectives falls back from the operators to the political authorities', and that there are five objectives which ought to be aimed for in the regulation of these industries. The following list, taken from a section of Finger's paper entitled 'The Five Main Objectives of Regulation in the Network Industries' (Finger 2005, p. 294-295) illuminates these goals:

> *1 – Liberalization means competition: The most important regulatory function to be provided in a liberalized environment is, thus, to regulate competition, including stimulating it if it does not emerge spontaneously. Where competition in the market is not possible... competition regulation should seek instead to create competition for the market – for example, by awarding a franchise to operate the grid for a fixed period through a competitive bidding process. Thus, competition regulation does apply to all network industries, as well as to all liberalized sectors.*
>
> *2 – Liberalisation requires unbundling, and unbundling means fragmentation: Consequently, a second, most important, function of regulation is to ensure the system's integrity. This matters most where coherence of the network is a pre-condition for the provision of the public service – for example, in railways (coherence between infrastructure and train operators), gas and electricity (coherence between production, transport and distribution), and water. Regulation here must ensure that the different components are well articulated (e.g. that competing trains can access the rail infrastructure, but without overloading it).*
>
> *3 – Political authorities must also ensure that the system evolves and learns from experience: Once different segments of an infrastructure system are unbundled, the actors start to behave strategically (i.e. furthering their own commercial interests rather than those of the system). Regulation must therefore also ensure that the system adapts to changing demands and technology. Telecommunications services must keep up with technological advances; the electricity system must ensure security of supply. This challenging regulatory function requires substantial capacity and competence in the regulator.*
>
> *4 – The regulator must ensure that both 'services in the general interest' (for citizens) and 'universal services' (for consumers) continue to be provided, as operators no longer have an interest to provide such services by themselves, given that these public services are, in general, less lucrative than commercial services. This is especially the case in the access of the poor to basic services. Using the example of water services, Südhoff shows that a poverty-oriented regulation policy is possible through binding guidelines on price, supply and competition... But there is essentially a need for reliable and strong public authorities.*
>
> *5 – Finally, there is the function of regulating access to, and the use of, the scarce (public) resource. Such scarce resources do not exists in all sectors, and regulation here is limited to specific sectors, such as the water sector (water as a scarce resource), the air transport sector (regulation of scarce airspace), and the telecommunications and audiovisual sector (regulation of spectrum).*

Government's role in regulation and accountability

Who does the regulating is also important to consider. Given the large number of articles this author has read in the course of this study which considered the options for regulation in a free market, in none did there appear to be strong support for the supposition that the optimal situation is one where government would assume for itself constant and direct legislative oversight in the regulation of a privatized industry, and in particular telecommunications. This, of course, is not to say that there are not those who believe in heavy, direct and spontaneous state dictation of the rules by which a nation's privatized telecommunications market is to function – it would appear, however, that this point of view is either in the minority or that its advocates are asserting themselves less forcefully in the general body of literature on the subject. The apparent judgment of the overwhelmingly majority those who have studied telecommunications privatisation and liberalisation – despite all the other difference they may have – is that if there is to be a regulator in a free market at all, then it should be an agency at arm's length from the political wrangling, cyclical turnover and ideological instabilities of the elected representatives of the populous – that is independent, or at least semi-independent enough from government to offer market participants a semblance of consistency in policy and procedure through the inevitable inconstancies inherent in democratically elected governments.

This, however, brings about the question of regulator accountability – which will be shown to be a major concern regarding the Bahraini situation. Baldwin and Cave examined the issue of regulator accountability in the UK, though their findings can be used guidelines in the broader context. Among their suggestions was that regulators be required to report annually before a special committee appointed by the government and have hearings made public, as 'such scrutiny would enhance democratic accountability' (Baldwin & Cave 1999, p. 287). Another suggestion they offer involves obliging the regulator to present ministers with regular 'rolling plans of action' for approval, with the ministers then laying out guidelines for how to proceed, which would be taken before parliament for acceptance. Baldwin and Cave contend that this type of accountability structure would keep government from interfering in the process of regulation on a day-to-day basis, while allowing for 'regulatory regimes to be assessed against performance targets and would prevent regulators from pursuing their own personal, ideological or bureaucratic agendas' (Baldwin & Cave 1999, p. 288). Though Baldwin and Cave admit their system is not without its own potential shortfalls, it could be regarded as a possible solution to the threat of regulatory 'capture', described above. They also further suggest that the government could require more stringent cost-benefit analysis (CBA) on the part of the regulator – i.e. require that the regulator scrutinize each major reform it plans to implement, submit a report detailing the possible costs and benefits resulting from the reform and only allow the implementation reforms forecasted to bring about net benefit (Baldwin & Cave 1999, p. 86). Among the possible positive effects of CBA are improved regulator rational in decision-making and increased transparency of the regulatory process, though among the potential faults of CBA is the danger of slowing the pace of regulatory reform to the point where it is unresponsive to emerging issues in the industry.

Examples of regulatory mechanisms

Having discussed a portion of the literature and theories concerning regulation, it would be useful to discuss forms of regulation which have been attempted. One of these is known as 'rate-of-return' regulation. The basic premise of this form of regulation is that there is an optimal – or 'fair' – level of return a company should be able to obtain from its capital investments, and that prices paid by the consumer should be set to allow for this. Thus a company's capacity for profit is capped relative to what is deemed its allowable rate of return on capital (Walden & Angel 2005, p. 25). The trouble with this form of regulation is that it warps the context in which business decisions are made: in seeking to maximize profits, a company would be motivated to grow its capital investment base to manipulate its allotted rate of return. Although operational inefficiency is not naturally in a company's interest, if the cost of inefficiency due to the acquisition of redundant or unneeded capital investments is less than the increased rate of return – i.e. profit – that company is allotted as a result of the extra capital investments, then it is in the company's interest to load up on capital investments to point where the inefficiency vs. rate-of-return equation balances out to profit maximization. The damage this form of regulation can cause to the natural market mechanisms of an industry sector and its economic efficiency is thus obvious. Another issue identified with rate-of-return regulation is it targets the entire business operation, as opposed to being able to select judiciously those segments where regulation is most required – i.e. areas where monopoly market abuses are apparent (Walden & Angel 2005, p. 26).

Seeking to address the evident flaws in rate-of-return regulation, Professor Stephen Littlechild of Birmingham University arrived at the now widely recognized 'RPI-X' formula.

> This formula caps a selected basket of the incumbent's prices for a period of four to five years. These prices can then increase annually by the Retail Price Index (RPI) minus the X factor with the later being set by the regulator in the light of the presumed movement of productivity and costs within the industry. Within this four to five year period, the regulated company can then keep any extra profits generated by increased efficiency. And at the end of the review period, new price controls can be implemented which take account of the efficiency gains in the previous period (Walden & Angel 2005, p. 26).

The RPI-X formula thus allows companies to profit from increased efficiency, thus motivating this type of behaviour – as opposed to straight rate of return regulation, which can motivate inefficient acquisition of capital. The RPI-X formula is not overly complicated or complex to apply and can be targeted to those specific areas of the industry which are deemed to be in need of regulation to avoid monopoly abuse. The formula is not without its own difficulties however, as setting the rate and duration of the price cap requires reliable estimates on prospective future developments in the market – information not always readily accessible to regulators.

Natural monopoly

Regulation is necessary where a service can only be established as a natural monopoly. The case of British Rail cited above is particularly relevant in this context. In telecommunications, the large operational economies of scale have contributed to the monopolistic character of the sector [i.e. while the initial capital investment needed to set up a telecommunications network can be massive, the marginal cost of connecting each additional subscriber through that network is relatively small; with each new customer that is acquired, the average cost of running the network drops, with significant profits resulting once there is a wide subscriber base].

In the history of the US, natural monopolies and their regulation by government often came about in what could be considered 'infrastructural industries' such as transportation, communication, banking, energy, etc. – i.e. industries deemed to be necessary for the rest of the economy and national commerce to function. In regards to telephony, the federal government sanctioned the sector as being in the realm of a 'natural monopoly', and set up agencies to regulate the industry and ensure the growth of the network from coast to coast. According to Horwitz (1989, p. 12) 'The FCC attended to the public interest in telecommunications largely by protection of the existing structures of telephony and broadcasting (and the corporation which provided those services)'. To see to it that goods and services were able to pass efficiently through the networks of these infrastructural industries, legislation was enacted to enforce 'common carrier regulatory controls on the means of circulation' (Horwitz 1989, p. 13). The main idea behind common carrier law was that the service must be offered at a non-exploitive cost and access must be granted on a non-discriminatory basis.

> Non-discrimination would ensure that carriers would serve the needs of commerce rather than inhibit commerce. Part of the provision of non-discriminatory access to their services meant that common carriers were mandated to interconnect their lines with other carriers. Most often carriers were characterized by economies of scale and were granted monopoly franchises. Among other things, such franchises were granted the right to take private property for public use… These legal tools facilitated the construction of an overall network. Regulatory oversight would ensure non-discriminatory service and 'fair' rates. Regulation thus took advantage of certain efficiencies deriving from the monopolistic organization of capital while presumably protecting against the abuses that monopoly power could bring. The key to common carrier law – and the regulation of infrastructure industries generally – rests in the fact that it satisfies the contradictory demand for a unified plan of national development within a system of private property (Horwitz 1989, p. 13).

It should be noted, however, that the relevance 'natural monopolies' once held faded through the 1900s and continues to shed importance today as the lines that once solidly distinguished the realms of certain products and services from others have begun to blur with technological advancements, while information regarding options for the substitution of these products and services has become ever more expansive and available to consumers. As Robinson (2003, p. 168) notes: 'Simply put, few of us are as hostage to any monopolist as we might have been a century ago'; examples include being able to – in some markets – substitute fixed-line telephone services with cellular, fixed wireless or cable telephony, or should electricity utility charges become exorbitant or the service below acceptable, consumers can buy their own generators. The level of service substitution options there are – substitutions which allow an avenue of relief from the grip of monopoly power – have been growing in number as the wheels of technological innovation have spun through the years.

Risks of over-regulation

There are a substantial number of theorists who discuss the dangers of 'over-regulating' an industry – i.e. the dangers of governments or regulators imposing so many preconditions, demands and limits upon participants in a certain industry as to warp its business dynamics and destroy the benefits which would otherwise accrue from competition. Crandall and Hausman make just such a claim regarding the 1996 Telecommunications Act in the US. The proponents of this piece of legislation asserted that, in opening up local telecommunications markets to competition, it expanded upon previous moves by the American Government which saw long-distance markets exposed to competition; the cumulative effect being the establishment of economic environment conducive to the 'deployment of advanced telecommunications and information technologies and services to all Americans' (Crandall & Hausman 2000, p. 74). However, the 1996 Telecommunications Act dramatically expanded the scope of regulation. Among other things it increased the range of services falling under the umbrella of universal service obligations, as well as mandated that regulators 'establish cost-based wholesale prices for incumbents' facilities so that entrants may lease those facilities and be relieved of the burden of building their own facilities', which in turn led to years of protracted legal and regulatory battles (Crandall & Hausman 2000, pp. 74-75). Although competition did begin to develop after the legislation was enacted, Crandall & Hausman contended that it was at an excruciatingly slow place, and that had the regulation been less pervasive and complicated, benefits for the users of telecommunications services would have been more profound and faster to arrive.

> The enormous welfare gains that are potentially available from the development of these new services and from the movement of prices of traditional telecommunications services to competitive levels are being squandered in the belief that detailed regulation is the best route to competition. A much less regulatory regime stressing open entry and simplified reciprocal compensation

for interconnection would have been far more effective in promoting entry and investment (Crandall & Hausman 2000, p. 75).

The strategic importance of the industry

The need to regulate an industry in the private sector may also be a consequence of its strategic importance to the economy. Indeed in many instances this factor has, in the first half of the 20th century, been a major reason behind the nationalisation of the industry. In Britain for example the nationalisation of the coal or rail industries were in a large measure a consequence of the failure of the then private sector to deliver efficiency in businesses vital to the national economy. In the context of this thesis telecommunications also has an important strategic role, especially given that communications on a world wide basis is crucial to financial markets. The successes and failures of the telecommunications sector are not limited to that sector, but impact across the broad spectrum of the entire economy. This has led more proactive governments to establish policies to secure a strong telecommunications sector, which had implied a state-owned telecommunications enterprise (SOTE) as a monopoly in the sector until Thatcher brought the privatisation agenda to prominence.

Effective regulation of telecommunications is imperative for a state seeking to give the commerce and business on which it relies the competitive advantage of mass, worldwide, instant communication. In the context of Bahrain, as shall be argued, this concern is extremely relevant as the Kingdom, as well as other Gulf States such as Qatar, are attempting to establish themselves as both regional and global financial hubs. A substandard telecommunications network could have devastating consequences for the future prospects of Bahrain's economy.

Telecommunication, the information society and the advancement of capitalism

'Society is often seen as the sum of the communications that take place within it', (May 2002, p. 9) thus advancements in the ways and means by which a society communicates – i.e. communication technologies – have the potential to reshape the functioning mechanisms and operations of that society. In *The Coming of Post-Industrial Society* (1974), Daniel Bell illuminated the changing dynamics that innovations in communication technology would bring to societal structures. Specifically he what saw as salient about the 'post-industrial society is the change in the character of knowledge itself' (Bell 1974, p. 24). One aspect of the modern information society, especially in regards to the World Wide Web, is it empowers individual actors in the realm of "mass" communication; theoretically, anyone with a computer and access to the internet can have audience of hundreds of millions of people almost instantaneously. 'This idea of the rise of the individualized knowledge-adept social actor is one of the most repeated elements of the information age' (May 2002, p. 7). Marshall McLuhan, who coined the phrase 'the medium is the message', helped popularize the idea that the ever-rolling wave of technological advancements in communications fields alters our perspective of the world – technology changes how a society sees itself, the environment around it, and even has the ability to redefine what the boundaries of a society are considered to be.

In regards to the theoretical underpinnings of how advancement in telecommunications technology affects the markets and the globalized economy of the modern day, an interesting point of view is taken up by May and his reading Karl Marx and Friedrich Engels' *The Communist Manifesto*, relative to the role communication plays in facilitating capitalism. In the third volume of the *Manifesto*, entitled *Capital*, Marx examines the 'circulation of capital from money to commodity and back to capital again, which allows the extraction of surplus and therefore the accumulation of wealth' (May 2002, p. 37). The idea goes that capital is invested in production, the fruits of production are then sold for more than the original investment and a surplus, or profit, is made – adding to the originally allotment and thus able to be reinvested.

> The faster the circulation (the more times in any given period an amount of capital can be used to produce commodities), the higher the possible overall capital accumulation. This leads [Marx] to note that 'the chief means of reducing the time of circulation is improved communication'. While in this instance Marx was concerned with physical communication, roads, railways and shipping, this was due to the physicality of the products capitalism focused on at the time. In the age of information products, a similar relationship between informational products/services, the speed of communication and possibilities for capital accumulation can be observed. Thus the move to business models which have promised instantaneous ICT-mediated delivery of services or products is intended to radically shorten the cycle Marx observed, from laying out money for production (of goods and services) to getting it back in payment (with profit). But even material goods' cycles can be shortened by the deployment of powerful ICTs (May 2002, p.37)

May then uses the example of Dell computers, where customers can put together the constituents of their order the Dell website, which is feed directly into Dell's processing and production mechanisms, increasing delivery speed (thus decreasing wait time for the circulation of payment money back to Dell), resulting in Dell being an incredibly profitable company. [It should also be noted that the 'do it yourself' customer order website also reduced labour cost of having to employ a human to do the same job]. Thus, through May's treatment of Marx, it would seem to be evident that increased communications capacity (which, in the 'information society', is through ICTs,) directly affects the economic cycle and offers increased potential for wealth accumulation.

Normative issues

Stability and equality

While there may be reservations about the effectiveness of privatisation and liberalisation establishing an efficient and effective service, the most bitter objections to New Right theory concern normative rather than economic and managerial issues. In many regimes left wing opposition to privatisation relates to fears that privatisation and liberalisation will be socially divisive, allowing the wealthy to gain from competitive forces producing more advanced and efficient services but at a cost that puts these services out of reach of the poorer sectors of the community. The trickle down effect also has no value to critics who are arguing that any society should, as its priority, secure equal access to resources and opportunities for all within society. In this context, therefore, the objections in many states to privatisation have been most severe from socialist groups who are unable to accept on normative grounds the inegalitarian tendencies of a free market.

To offset this, regulatory systems may be established, not only to prevent private interests from making excessive profits from a monopoly position or from the formation of cartels between major competitors, but also to ensure the means that will enable the services concerned to reach all sectors of the population, either through subsidy or enforced price controls. In the context of telecommunications this can therefore involve requirements that a basic level of service provision, for example through low technology fixed lines, is widely available and can be supplied cheaply. In regimes where parts of the country are remote and inaccessible, regulation may be necessary to force suppliers to provide telephone services to such areas even though the cost of such provision would not be commercially viable for the companies concerned.

In the context of telecommunications in Bahrain there has been, as will be argued in more detail later, relatively little opposition to privatisation within an oil-rich Gulf State that has sufficient income to provide effective social services for at least its indigenous population, if not the many migrant workers attracted to the Kingdom. Public anticipation of price reductions, improved services and new job opportunities is also aiding acceptance of the telecommunications reform agenda.

Cultural preservation

A second normative challenge to privatisation in countries such as Bahrain concerns opposition to cultural change which may be viewed by some as an opposition to the encroachment of Western or more specifically American values. This factor relates more specifically to telecommunications than any other form of state owned activity and fears of cultural invasion are particularly fanned by the advent of the internet and the World Wide Web. In the context of a devoutly Muslim Kingdom, those citizens who wish to retain traditional values may well be concerned at the erosion of what they see as fundamental social values through exposure to the morals of a secular Western way of life.

While traditional Islamic beliefs inform large segments of society in Bahrain, this does not equate to inherent animosity toward Western culture. Relative to its neighbours in the region, Bahrain is a tolerant Kingdom with a healthy acceptance of diversity, largely attributed to hundreds of years as a major centre for foreign trade passing through the Arabian Gulf. Today many Bahrainis prefer to dress in fashionable Western clothing rather than the traditional Arab garb and women, who are assuming ever more significant social-economic and political roles, often choose not to where the hijab[2] in public. Just over one third of the total population of some 700,000 people are foreign expatriates (*Population Indicators* 2006), and while at times this can give rise to some measure of tension, generally the result has been to breed a more liberal national temperament. Consequently, while there is a degree of concern that exists, and will be

[2] Traditional Muslim headscarf worn by women

discussed more fully in later chapters, people in Bahrain generally do not appear to be overtly alarmed that their social-value system faces immanent erosion in the wake of the Internet and other telecommunications services.

Theories of regulation

Given the economic and business concerns that may emanate from excessive privatisation as indicated in the preceding paragraphs, governments can rarely privatise major strategic businesses without recourse to some form of regulation to try and limit the worst excesses of a laissez faire economy.

The framework for regulation has, however, generally been developed in most countries not on any meta-organisational level as a function of the state that must be planned as a consistent whole with clear aims and objectives. For the most part regulatory systems emerge with the decision to privatise and liberalise on a piecemeal basis to suit the particular economic and political concerns of critics of the specific business in question. Thus, in the pioneering development of privatisation in Britain, regulatory systems were developed specifically on an industry by industry basis within the legislation dealing with a specific privatisation. The consequence has been regulators that are specific to the problems of a specific industry, but also a very variable quality in the extent that regulation may be effective.

A particular concern for governments in relation to the regulatory process is whether the regulator has only the technical function of a referee, in the context of awarding contracts to what are likely to be monopolistic businesses, or whether the regulator has a major role in ensuring many of the normative critiques of privatisation are assuaged; i.e. a regulator who will have a substantive role in controlling the commercial policies of the businesses concerned to avoid profiteering or the unequal distribution of essential services. Simplistically these differences can be classed as light or heavy touch regulation but in practice the position may be more complex, as in certain services where, for example, new competitors can easily enter the field, such as care homes for the elderly, a light touch may be sufficient in respect to price but arguably for an essential service affecting health and safety a more heavier presence in the context of health and safety.

In the context of telecommunications within developed states such as Britain and the US, regulation tends more toward the light touch of the referee between a few large competitors, especially in relation to fixed line provision. The issues related above concerning scarcity of resources necessitate controls over the award of contracts to supply fixed lines, in the context of efficiency and disruption of the environment, and in the context of radio communications to the limits to which wavebands can be technically made available. Thus, regulators such as the Office of Communications in Britain are involved as a relatively impartial umpire of a bidding process for the right to provide fixed lines or wavebands. The process has been used by the central government as an uncontroversial method of gaining revenue through the sale of contracts and hence arguably develops a function over and above simply ensuring that the best provider secures the limited resources available.

In the functioning of a market regulator, among the most important factors regarding its effectiveness, as identified by the International Telecommunication Union, is the quality of 'transparency':

> Transparency is a means of ensuring fairness in the regulatory process... The principle of transparency translates into the practice of making regulatory decisions in an open, objective manner that allows regulators to explain the reasoning behind their decisions and to be held accountable for their actions. Transparency not only helps the public and the regulated industry, it can help the regulators as well. Transparency allows regulators to gain information and consult all stakeholders, thus building some political consensus for their decisions. It also allows regulators to justify their actions by citing the facts provided to them and by making cogent arguments that those actions will serve the public interest. Transparency may inoculate regulators from charges that they have rendered arbitrary decisions, behind closed doors, for reasons of personal gain or to benefit a certain company (ITU cited in Sanchez and Hwa 2003, p. 14).

As will be discussed in later chapters, the issue of transparency is among the major factors playing a role in the effectiveness of the telecommunications regulator in ensuring competition in the Kingdom of Bahrain.

A further normative concern may also involve pricing policy for the service where liberalisation has not been brought to bear on the supply of the service. This proved to be a considerable issue in Britain until the 1990s when liberalisation, partly through the technological developments of cellular phones and multi-service cable provision through fibre optics, enabled telecommunications to be provided through a variety of media. Here again the establishment of competition has ensured that regulation is largely through a light touch.

However a further issue for telecommunications regulation can relate to the normative concerns and particularly the control of what is to be communicated. Within this context, at least until the attack on the World Trade Centre, liberal democratic governments could scarcely for ideological reasons be seen to interfere in the freedom of communication. These regimes are, however, also among the culturally more secure of nations and hence generally have few fears concerning the undermining of traditional values. The pressures to regulate, or even ensure that telecommunications are state owned within smaller countries with more to fear from what may be termed cultural imperialism, puts a further strain on the role of the regulator. For some regimes such as Iran, which is ideologically open in its opposition to Western cultural values, these factors underline a strongly controlled regulation of communication to the extent that privatisation is hardly a credible alternative. Within Bahrain, as in other Gulf States, the picture is more problematic. On the one hand an attachment to Western values is popular and economically good practice, and hence too great a restraint on communication may not help attract the commerce or Western military support necessary for the integrity of small nations, in terms of population. However, to move too far in the direction of opening society to the mass communication networks of the West can also be seen as damaging to the traditions and customs of the society. In Chapter 5 the thesis considers this dilemma in more detail as it relates to Bahrain.

Privatisation in developing countries relative to developed countries

When considering theories if privatisation and liberalisation in application to real-world circumstances, it is important to recognize the differing contexts that exists between developed and developing nations.

> In developing countries, concerns about the accessibility and affordability of infrastructure services are expected to be even more pronounced than in rich economies. The majority of the population lack access to safe and affordable water services, telecommunications and reliable public transport and energy supplies. Privatisation may hurt the poor when prices have to be increased to make supplies economic, making the services even less affordable' (Parker & Kirkpatrick 2006, p. 194).

Things such as 'universal service' agreements, though theoretically coherent and positive from the standpoint of general social welfare, might not carry the same implications in a developing nation, as they do not consider that the very poor do not have the financial recourses to pay for the service, and will thus not seek it out. As well, areas not already 'on the grid' will need to receive infrastructure investments to access the service. Government subsidies have, in the past, been held out as the solution to these issues of affordable access, but have in implementation often been shown to lack focused approach and fail in their desired goals (Estache 2001 & World Bank 2004 as cited in Parker & Kirkpatrick 2006, p. 194). 'Too often the gainers from subsidies and cross-subsidies have been middle-and-higher-income groups, especially where, as normal, they control political power' (Parker & Kirkpatrick 2006, p. 194).

This affects the dynamics of regulator's role in developing countries as there is a much greater public perception that social welfare goals ought to be achieved through regulation, rather than the popular conception being that the regulator ought to be limited to addressing economic concerns relating to efficiency, competition and market viability. External impediments to carrying out the role of regulation more common in developing nations than developed includes the elevated risks of 'social unrest and political intervention' should the regulator be seen to be failing in its perceived obligations (Parker & Kirkpatrick 2006, p. 195). As well, an internal hindrance more prevalent for regulators in developing nations than developed is a lack of qualified and experienced staff to carry out their mandated role, while assessing the impact of different policy approaches can also be made difficult by the lack of mechanisms through which to gather the necessary statistical data for analysis.

Conclusion

In reviewing the selection of theories and literature on privatisation in this chapter, it becomes evident that the degree to which privatisation is successful in bringing about positive results is significantly dependant on the social and political situation under which privatisation is attempted, and the regulatory and competitive environment which exists and is enforced in the marketplace. This may help to explain the relative success of privatisation efforts in developed countries and the less-than-successful results of privatisation Cook and Uchida found in developing countries in specific regard to general economic growth and prosperity, as was discussed earlier. While the examination of the New Right theories like those of William Niskanen outlined the hypothesis that inefficiencies and flaws intrinsic in public services lead to greater general harm than benefit, and that the remedy for this is privatisation, the practical application of this is far more complex – one cannot simply sell a broken down car to a another owner and then claim it is fixed. The efficiency of privatisation policy implementation, the effectiveness of regulatory structures – regarding both resources and competition to spur improvements – and the steadfast will of the politicians are all key pieces of the privatisation puzzle. It is important to emphasize the role of regulation and how, as was pointedly shown in this chapter, an unregulated, laissez-faire approach to a public resource will likely lead to general disutility. In regard to Bahrain, as will be discussed in later chapters, it is weakness in market regulation and leading from that a stifling of competition, which play a significant part in the current telecommunications situation. It is an accepted principle that a regulator should be an institution at arms-length from government, but what are more ccontentious issues are the type of regulation chosen, the influence of industry stakeholders upon the regulator – i.e. 'capture' – and, related to this, how the regulator is held accountable.

The very nature of the telecommunications industry make it strategically essential for every government pursuing economic development in the modern world to ensure the sector is well run. As Bahrain seeks to attract the businesses necessary to establish itself as a financial hub of the future, telecommunications has to be a significant component of the overall strategy. This, combined with possible infringement of modern communications on the value system of the Kingdom, lend telecommunications policy in Bahrain an elevated degree of politicization and complexity.

A look into the expansion of the telecommunications industry globally, the general trend of reforms and the dominate positions held by multinational companies will provide insight into the situations of various countries that participate in the global commerce of fast-flowing information and finances. This will also illuminate the degree to which liberalisation of telecommunications sectors globally results from technological necessity or political ideology, and are thus among the topics discussed in the next chapter.

* * *

Chapter 3: The growth of the global telecommunications industry, multinational dominance and the trend to privatise and liberalise

Introduction

Sweeping structural changes in telecommunications markets world wide have lured capitalists to invest far beyond their national borders, embracing the advancements of the modern economy through Information and Communications Technology (ICT). The ICT sector seems unrelenting in its innovative advancement and the effects are rippling through the world economy, distinguishing the sector as far more than a market isolated unto itself, but more the nervous system which connects the players in all markets. This modern economy seems born of the marriage between ever-more sophisticated products and services, and the increasing global marketplace they help to facilitate. It is difficult to overstate how fast the ICT market is growing: the Internet drew some 50-million people to log on to the World Wide Web within its first four years, with that number still increasing at a dramatic rate (*World Employment Report 2001: Life at Work in the Information Economy* 2001), while worldwide ICT spending is predicted to top US$3.2-trillion in 2007, up from $2.4-trillion in 2003 (*IT and E-Business in Europe: Spending Trends* 2004).

Such massive expansion is not without its growing pains however, as regulators must acclimatize quickly to the rapidly shifting markets over which they are responsible so as not to stifle advancements by the application of outdated and, at best ineffective and at worst detrimental, policies. A coherent strategy to shape the positive progressive development of ITC infrastructure and services within a nation can spur 'sustainable development in the fields of public administration, business, education and training, health, employment, environment, agriculture and science', (*World Summit on the Information Society* 2005, p. 11).

The exceptional growth of new telecommunications technology has not been uniform however. International Labour Organisation (ILO) points out in the 2001 report *Life at Work in the Information Economy* how national income level is a significant determinant of the degree of ITC penetration and there is a clear disparity between developed and developing nations in regard to internet use [i.e. the accessibility and cost of telecommunications are key factors in the frequency of internet use and telecommunications are costlier and less available in developing nations. It should also be noted that more conservative governments often attempt to stem the free flow of information and it has been shown that Internet use is higher where political and civic freedoms and more prevalent (Hultin n.d., pp. 1-2)]. At the same time however, growth in the availability of ICT services in developing countries can help close the economic disparity gap with developed countries as the benefits of investments in enhanced telecommunications networks and services are appropriated across the entire economy, including, but not limited to: '...the ability to control a greater pan of production and organizational activities... lower fixed and variable cost for information acquisition... [and] increased arbitrage abilities' (*Direct Effects of Telecommunications on Economic Development* 2004).

Thus, this chapter will examine the relationship between new technology and the liberalisation of telecommunications markets in the developed and developing worlds, how technology has facilitated a dominant role for multinational companies in a global market, and the successes and failures of nations in regulating and structuring their telecommunications environment.

The changing nature of telecommunications provision

The World Bank highlights what it finds to be the engine of telecommunications privatisation in a 2004 study:

> Underlying the trends in private participation in telecommunications have been major technological and other developments that have facilitated the emergence of competition. Technological changes in the past decade have reduced entry costs, allowed major reforms in the market structure, and spurred competition. The growing demand for more and better telecommunications services in developing countries in a context of tight fiscal constraints has prompted governments to turn to private investment for expanding and modernising networks – and to reform legal and regulatory frameworks to allow private participation and competition. And their commitments to sector reform have been strengthened by international agreements. By 2001, 63 developing countries are signing up with the World Trade Organization's Basic Agreement on Telecommunications, which created binding commitments for its signatories to liberalize telecommunications.

As the privatisation wave was spreading around the globe and country after country began reforming their public service, the telecommunications sector, despite its size and significance, was usually among the first targets of privatisation. Why is this? What changed the conception of telecommunications from that of being a state controlled monopoly to one of being a private, market driven sector? A 1995 article in *The Economist* titled 'Death of Distance' examined how the widespread introduction of fibre-optic-based technologies made it much easier for competitors to enter the telecommunications market as service providers, thus helping to alleviate the apprehension that divesting of the government monopoly would merely result in the creation of a private one (cited in Jerram et al. 1998, p. 10). The benefits of 'optical fibre' networks over copper wire networks is directly related to the means by which they carry information, with the earlier using reflected pulses of light and the later depending on electron transmission through a conductor. Aksh Optifibre Ltd., an Indian company specialising in fibre-optics, discusses the specific advantages of the technology on their website and a number of their points are quoted below:

> *Low transmission loss and wide Bandwidth*: Optical Fibres have lower transmission losses and wider bandwidth than copper wires. This means that with optical fibre cable systems more data can be sent over longer distances, thereby decreasing the number of wires and reducing the number of repeaters needed for these spans. This reduction in equipment and components decreases the system cost and complexity, a major advantage to telecom companies in terms of economics.
>
> *Small size and Weight:* The low weight and the small (hair sized) dimensions of fibres offer a distinct advantage over heavy, bulky wire cables in crowded underground city ducts or in ceiling-mounted cable trays. Once again, cost effectiveness for telecom companies.
>
> *Signal Security:* By using an optical fibre a high degree of data security is afforded, since the optical signal is well confined within the waveguide (with any emanations being absorbed by an opaque jacketing around the fibre). This makes fibre attractive in applications where information security is important, such as banking, computer networks and military systems. This is major requirement for telecom companies today more than ever due to the widely practiced and booming e-commerce scenario.
>
> *Low cost of raw material:* Silica is the principal material of which optical fibres are made. This raw material is abundant and inexpensive, since it is found in ordinary sand, which is a welcome factor to telecom companies due to cost savings compared to copper cables.

Fibre-optic technology has therefore played a major roll in reducing the barriers to entry for competitors in the telecommunications market in regard to costs, especially in reducing the cost of infrastructure investments.

Other barriers to market entry of equal significance however concern state regulations governing telecommunications. In this regard, Donya Krairit (2001, p. 12) states that 'the term "liberalisation" is the commitment and actions taken by a government to open telecommunications markets to new providers and competition', and in this context the American and British examples are worthy of some examination:

Telecommunications in the United States

The Bell Corporation, long the dominant private player of US telecommunications, became the subject of a US Department of Justice antitrust suit for illegally manipulating market competition in the mid 1970s. The two sides reached an agreement resulting in the Bell network being separated in 1984 into seven regional telecommunications providers, known as the Regional Bell Operating Companies (RBOCs) and an independent long-distance provider, AT&T (*The History of AT&T* n.d., p. 1). The RBOCs, which were regulated private monopolies within their regions, were prevented by law from entering the long-distance market as their dominance over access to local network subscribers would have given them unfair competitive leverage (*Growth and competition in US telecommunications 1993-1998* 1999). This allowed competition to begin to take root in the long-distance sector. In the mobile sector the Federal Communications Commission (FCC), the semi-autonomous government telecommunications regulator, granted two licenses in each region – one to the local fixed-line operator and one to an independent competitor. This remained the case until 1993 when regulations governing the limits of spectrum availability were eased (*Growth and competition in US telecommunications 1993-1998* 1999).

In 1994 the federal government adopted an agenda to reform the telecommunications sector through increased capitalisation and competition, with the aim of facilitating better, faster, cheaper and more readily accessible telecommunications services for people and business. The 1996 Telecommunications Act then injected force into liberalisation process by effectively opening almost all areas of telecommunications to competition, granting the RBOCs the right to sell off parts of their networks and allowing competitors to market retail services (*Growth and competition in US telecommunications 1993-1998* 1999). The result in the US is that the telecommunications market has become increasingly competitive.

Telecommunications in the United Kingdom

Britain, on the other hand, has had as wide an experience of constitutional arrangements for telecommunications as any country in the world. The 1969 Postal Act amalgamated the government run postal and telecommunications services, creating a single umbrella SOE for both, called simply 'The Post Office', which lasted until the 1981 Telecommunications Act split the two apart again, creating the separate companies of Royal Mail and British Telecom (BT) (Genoud 2003, p. 3). The 1984 Telecommunications Act then forcefully pushed forward the Thatcher privatisation agenda by selling off just more than half of BT's equity to private parties (the rest of the British Government's stake was sold in 1993, leaving the company entirely privately owned). The 1984 Telecommunications act also legally enshrined Mercury as the only domestic competitor to BT until 1991 and created the Office of Communications (Oftel) to regulate the telecommunications industry in the UK (Genoud 2003, p. 3). In 1985 the first two mobile phone companies, BT Cellnet and Vodafone, began offering services, to be joined by Orange and Mercury One-to-One in 1993, though as Christophe Genoud notes in his 2003 paper, *Comparative study on the effectiveness of telecommunications regulators*, the initial British attempts to create a competitive telecommunications market faltered:

> The period between 1984 and 1991 is known as the 'duopoly policy' phase. This seven-year period was intended to give Mercury the time to build its own network and to become a solid competitor to BT. This strategy largely failed. In 1991, BT had lost only 4% of its market share mainly in the profitable international business segment. As a consequence, the government undertook the so-called 'duopoly review' which resulted in the liberalisation of the local and long distance markets for cable television operators, access providers (voice and data), utilities companies (electricity), and international simple resale operators.

The lack of satisfying results from the UK's experiment with telecommunications duopoly can be gleaned in Cave (2000, p. 94), who notes that Mercury 'followed BT's prices rigidly', and only in specific areas of the market – namely commercial overseas calling – did its rates differ at all from BT's in an attempt to gain market share; it could be said Mercury was only reaching for the ripest of the low hanging fruit. The policy shift after the duopoly review removed most legal restrictions on the entry of other companies, leaving, on paper at least, the gates to the domestic and long-distance telecommunications markets open for competition. Hundreds of licences have since been issued. However, this should not be seen as Oftel removing itself from a regulatory role of influence in the market. From 1993-97 there was a steady tightening applied to BT's price cap, which Oftel worked out under the RPI-X formula [as discussed in Chapter 2]. As well, with revenue from over-seas calling brought into the price-cap calculations in 1991, 'regulation thus became more, rather than less, pervasive' (Cave 2000, p. 94; also see Thatcher 1999, pp. 100-103).

In 1997, with healthy growth of competition in telecommunications provision having been realized, Oftel responded by restructuring BT's price controls program, removing all but one-third of the services that had been subject to the previous price-cap from falling under the new price-limit formula. These actions were seen as significant progress towards the goal of eventually eliminating price controls all together.

Cave notes (2000, p. 95) that 'one of the hallmarks of normalising regulation in the telecommunications industry is the replacement of specific price controls with general prohibitions on anti-competitive pricing', which means the introduction of price windows – i.e. prices are allowed to fall within a range, book-ended by a minimum and maximum that can be charged – and curbs on 'price discrimination' for similar services to dissimilar customers. Since 1994 BT has been required to supply separated accounts for each of its divisional segments – access, network and retail. The importance of this concept – and its potential application to the Bahrain situation as will be examined in Chapter 9 – is that the telecommunications company, in setting prices between its retail and network segments, must uphold its non-discrimination commitments; in other words the amount 'BT Network' charges 'BT Retail' for use of its services must be equal to the amount 'BT Network' charges competing operators buying similar services for interconnection. During the duopoly years the process for pricing interconnection fees between BT's and Mercury's networks was fairly straight forward: the two companies would sit down and attempt to come to an accord over what arrangements were to be made and at what cost, and if there was no agreement forthcoming, Oftel would write the agreement and set the prices for them based on allocated historic costs, as the regulator did in 1985 and again in 1991. The new accounting regime thus morphed the regulator's role regarding interconnection prices 'into a more general problem of setting network or wholesales charges for the dominant firm' (Cave 2000 p. 97; also see Thatcher 1999, pp. 99-100).

> Oftel also refined its approach to determining which of BT's costs should be included in the network, and hence interconnection, charges. In 1995, it issued a new determination of standard charges which excluded a range of cost… as a result of these changes, and of the tightening of BT's incentives to cut costs through the retail price cap, network charges fell by a third between 1993/4 and 1995/96. A consultancy study carried out for BT in 1997 concluded that BT's interconnection charges in the UK were the lowest of 11 companies examined (Cave 2000, p. 97).

[It should be noted that the regulator's role in setting network access pricing caps is not uncomplicated, and there are several issues that a regulator must consider to do so properly, among them: (1) whether price distinctions for the same service should be allowed based on what the final use of the purchased service will be – i.e. should a company selling data-transfer services across BT's lines pay the same price for use of that line as a company offering long-distance call-back service? (2) What qualifications must be met for a company to purchase network connection at wholesale rates? (3) How far and wide should a price-cap be applied? i.e. in areas of the market where there is little competition and potential for market distortion through monopolist power, the case for having a price cap if far stronger than areas of the market where there is thriving competition; (4) In the presence of both network and retail price caps, how should these be coordinated with each other? (Cave 2000, pp. 99-100).]

The British Government gave teeth to the regulation of the telecommunications market with the 1998 Competition Act, whereby Oftel was given the power to fine companies up to 10 per cent of their revenue for unfair trade practices. As well, the 2003 Communications Bill created the Office of Communications, drawing together four separate regulatory bodies and Oftel into one new 'super-regulator' (Genoud 2003, p. 3). As a result, the UK has developed the second largest telecommunications market in Europe (behind Germany), and has fostered one of the most fiercely competitive telecommunications markets in the world.

Telecommunications Reform in continental Europe

Traditionally in European Union (EU) countries SOTEs were part of one unified state-owned-and-operated Postal, Telegraph and Telephone (PTT) agency. The initial collective challenge to the PTTs dominance over the telecommunications sector came when in the 1970s the European Commission (EC) proposed introducing some degree of competition into the market for telecommunications equipment, as previously PTTs had been the sole supplier (Bauer & Steinfield 1994, p. 25). However protective European governments scuttled the agreement before it could be enacted and despite growing pressures to liberalise for the sake of technological and competitive gain, there was no common market for telecommunications equipment until the EC's Terminal Equipment Directive was enacted in 1988 (*Telecommunications Reform* 1995, p. 20).

In an attempt to begin to forming a cohesive strategy for the continent, the EC created the Task Force on Information Technology and Telecommunications in 1983. This led to the establishment of large networks of contacts between policy makers and telecommunications operators in the member states, offering policy advice and sharing information on all things related to telecommunications (Bauer & Steinfield 1994, p. 26). These efforts gave birth to a 1985 recommendation that EC members begin to synchronize some basic aspects of their telecommunications policies, resulting in the unanimous decision by EC states to adopt the Green Paper in 1988 which formally laid out their common objectives. Among these aims were breaking the PTTs exclusive rights over telecommunications equipment by opening that market to more competition and relaxing trade restriction in the value-added fields, while other issues addressed in the agreement regarded licensing, developing EC standards and the role of regulators. Perhaps more significant however is the Green Paper laid the groundwork for far deeper liberalisation in telecommunications services by defining what was called the EC's Open Network Provisions (ONPs).

The ONP included a series of directives which created the framework for how telecommunications provision would develop. Directive 90/387/EEC stated that the common goal was to have a number of service providers able to access the telecommunications network infrastructure of the SOTEs or the private monopoly operators both within member states and between them (European Commission 1997). Directive 95/62/EC prohibits there being a legislated monopoly for service provision for a SOTEs within an EC member state, though it does not ban SOTEs altogether (European Commission 1997). Far from deregulating the sector, the liberalisation initiatives introduced in the Green Paper and the ONPs required a massive amount of new regulation to break the SOTE monopolies and ensure the result lead to the creation of a competitive market where companies within the EC were able to enter adjacent markets on equal footing. While each country pursued implementation of the ONPs in its own way, in 1990 EU countries agreed to adopt deadlines for their full implementation, with Denmark, Finland and Sweden the first to have liberalised their markets by 1996, Holland followed suit in 1997, then Austria, Belgium, France, Germany, Italy and Spain in 1998, and Ireland, Luxembourg and Portugal in 2000.

It should be noted that among EU members, differences in 'cultures, economic conditions and geography' made the application of telecommunications reforms in a homogenous manner across all states untenable (Vallée cited in Steinfield 1994, p. 15). Societal differences meant customer adoption and use of new telecommunications technologies progressed is significantly dissimilar manners; likewise, differences between states led them to employ a variety of regulatory and bureaucratic mechanisms to administer their evolving telecommunications industries. General prosperity levels in each country also influenced customer usage rates and the levels of capital accessible for new investment and development of the industry. Commenting on the EU's reform process as it was unfolding in the 1990s, Steinfield noted that 'the less favoured and more rural economies of Ireland, Portugal and Greece, for example, may not generate the same requirements for integrated broadband communications as in the United Kingdom, France or Germany' (Steinfield 1994, p. 15). Steinfield also commented that the geographic realities and demographic spread of the population around each country would set the cost parameters of new infrastructure and impact the feasibility of various types of service provision.

The pre-existing and resulting telecommunications environments varied in significant ways depending on the country. Finland, which had vigorously and steadily begun introducing competition into its telecommunications market since 1985, is a prime example of the modernising power of liberalisation when combined with well thought out and effective policies. Liberalisation in Finland also did not mean the state disengaged itself from being a telecommunications operator either, as Sonera, which is state owned, along with Finnet (a consortium of more than 40 private local companies), are the two main participants in the country's telecommunications market. As well as being among the first countries to pursue open markets for telecommunications, the

Finnish Government's strategy of investing heavily in training and education to further ITC growth appears to have been very effective. According to the US Department of Commerce (n.d.):

> One striking aspect of Finnish life is how seamlessly information technology has been integrated into production, work and home life. Banks, schools, libraries and hospitals exist virtually as well as physically. Thanks to the early acceptance of strong encryption, e-business has developed briskly and reliably. Several of the world's top Internet security companies are based in Finland. Online banking is so well established that individuals engaging in traditional banking are the clear minority.

The US Department of Commerce also cites Finland's Nokia as among the successes of the country's ITC policies, describing the company as 'the world leader in wireless and wireline telecommunications, the world's leading mobile phone supplier, and the top supplier of fixed telecom networks and services', while the state-of-the-art telecommunications environment in Finland has also attracted foreign corporations such as Hewlett-Packard, ICL and Siemens to locate much of their research and development work in the country.

In Italy, one of the notable characteristics of market liberalisation was the surge in mobile phone usage through the later half of the 1990s: In 1994, Italy had a fixed-line penetration rate six per cent below the EU average and only 1.2-million mobile customers – in 2001 Italy had 36.2-million mobile customers, a penetration rate of sixty-three per cent, well above that for fixed lines and making Italy one of the biggest mobile markets in the EU, with Telecom Italia Mobile's 20-million subscribers the largest number for any company in Europe (*Telecommunications Liberalization Strengthening Italy's Position in World Market* 2001). The Telecommunications Industry Association attributes this to two factors: '(1) life style trends and fashion effects, and (2) competition among operators that began in 1995, after Omnitel had been awarded the second GSM mobile telephone license the year before'. Italy also added two more mobile operators to its market, Wind and Blu Spa, before 2000.

In France, the government began to recognize in the 1960s that the country was in danger of falling behind the rest of the modernized world – and in particular the US – in terms of technological advancement (Servan-Schreiber cited in Bartle 2005, p.112); the risk that American companies could exploit weakness in the French markets was also salient to policymakers. Thus, in the realm of telecommunications, the state devised, initiated and carried out a modernisation program to bring the country's communications infrastructure up-to-date and increase penetration rates (which were below those of France's comparable European neighbours). 'The government saw the importance of a strong high-technology industry capable of competing in world markets. This investment programme was widely seen as successful, and by the late 1980s the telecommunications infrastructure has been transformed to one of the most advanced in the world' (Humphreys and Hulsik cited in Bartle 2005, p. 112).

The French government of the late 1970s had identified the trend toward the globalisation of telecommunications services and markets, as well the potential for the US, and specifically the IBM Corporation, to take an overriding lead in these developments. Uncomfortable with this idea, the response of the French state was to push forward a network overhaul, 'computerising' its telecommunications system and widely expanding the available range of options it offered users, with the central focus being the creation of Teletel, a sophisticated telecommunications information network.

> Globalisation and the IT revolution, however, put the centralist approach under stress. Successful engagement with the international market was crucial for telecommunications operators but the telematics programme was unable to allow that. Although Teletel was successful in France, it became isolated from developments elsewhere and was unable to meet the increasing demand for new customised services for international business users. The limitations of the national strategy became clear as French firms on their own were unable to meet the necessary technological sophistication without some form of international collaboration. The state-led strategy, which involved using success in the domestic market as a springboard to international markets, proved ill suited to the diversification and internationalisation of telecommunications (Bartle 2005, p. 112).

It was through recognition of this fact that the idea of private sector involvement in telecommunications began to gain momentum through the 1980s. Telecommunications liberalisation is France had to be approached more carefully by policy makers though, given the country's history of militant trade union action against any perceived threat to workers' rights, the pervasive welfare state, public institutions or any form of government privatisation. Through the early and mid 1990s, Paris largely tried to cloak its plans for France Telecom – the national carrier – as lawmakers worked out how to resolve two of the most contentious issues regarding privatising the SOTE: the US$20-

billion in workers' pension liabilities and the conversion of the company's employees from civil servants, who cannot be fired, to private sector workers (Friedman 1995). Elie Cohen, an economist at the National Centre for Scientific Research who helped work on France's reforms policies, noted that these issues were less difficult to resolve than might have been expected because France Telecom was a fairly profitable company (cited in Friedman 1995). After the EC's ONPs were implemented in 1998, some competition was introduced but France Telecom remains by far the biggest player in the market, with SFR becoming the only substantial alternative in either fixed or mobile networks, which has led EC and French regulators to censure France Telecom on a number of occasions (*France - Key Statistics, Telecom Market & Regulatory Overviews* 2007). Today France's telecommunications market remains the third largest in Europe (behind the UK and Germany), with significant growth in upgrades for mobile services and demand for those services, as well as a competitive Broadband market which helped lead France to have the highest number of Broadband subscribers in Europe in 2005 (*France - Key Statistics, Telecom Market & Regulatory Overviews* 2007).

Laying the liberalisation groundwork

In studying the European telecommunications scenario, Cave and Prosperetti posit there are three 'behavioural instruments' required for regulation in the in the nascent steps a nation takes towards realising a liberalized telecommunications sector: retail price control, access price control and universal service obligation (Cave & Prosperetti 2000, p. 44-45).

Retail price control is regarded as being essential when the incumbent monopolist, or at least the principal player in the sector at the time, has an effective hold on the market at the 'retail level', as, should no price controls be implemented, the consumer will fall easy prey to excessive profiteering. This is a role that has been traditionally taken up by governments in Europe, ensuring their citizens – the customers – are protected. If and when competition comes to be a factor on the retail scene, 'possibly from firms relying largely on infrastructure belonging to others', price controls fade in their importance, as competition's market mechanisms begin to protect the end user from inflated service and product costs (Cave & Prosperetti 2000, p. 44).

Access price controls are needed to ensure that, in a market which has more than one network competing for customers, everyone who pays to be provided with telecommunications services can connect with everyone else who pays for similar services; companies need to be able access the networks of other companies in order to be able to complete the calls of their subscribers.

> This requires a system of interoperator wholesale or network access prices. Especially in the early stages of competition, entrants will require significant access to the dominant incumbent's network, and this relationship will almost inevitably necessitate regulatory intervention (Cave & Prosperetti 2000, p. 44-45).

[Cave and Prosperetti suggest that the need for access price controls will decrease as 'infrastructure is duplicated'; however, as this author noted in Chapter 2 of this thesis, 'telecommunications companies need to make heavy capital investments to create mobile and fixed communications networks with national and international reach. In this context, a host of smaller businesses investing heavily in functionally identical yet operationally independent networks covering the same areas would likely be painfully costly, economically inefficient and ultimately unsustainable for all involved'. Thus this author would question whether major development of infrastructure duplication would be optimal, or even healthy, for a nation's telecommunications sector.]

The third behavioural instrument required in seeking to create a liberalised market, as suggested by Cave and Prosperetti, deals with universal service obligation (USO). Commonly, state authorities had compelled the national telecommunications champion to supply all corners of the country with services at the same, or similar, level of cost to the customer, regardless of the fact that some areas – such as cities – are much easier and cheaper to wire into networks then residences in the far-flung country-side. New companies penetrating such a market and being exempt from USO would most likely aim for the low hanging fruit in the urban centres, where the relatively low cost of service provision would make for relatively quick and easy profits. This, obviously, would put the incumbent USO-bound telecommunications company in a weaker market position with regards to maintaining competitiveness, and inevitably there would be calls for levelling the playing field. Cave and Prosperetti suggest one method for this would be to devise a cost-sharing equation, whereby all operators in the market would cover a percentage of the extra costs the incumbent operator bares by virtue of USO.

'For universal service, the concern has been, first that it would be used as a pretext for delaying competition, and second that high USO contributions imposed on entrants would choke off competitors' (Cave & Prosperetti 2000, p. 45).

The importance of interconnection

The foundational role network access plays in the establishment and maintenance of competition in the telecommunications market is difficult to overstate. A pivotal aspect of any strategy aimed at fostering free market competition is a regulatory situation which ensures that competitors can link into 'networks that they cannot duplicate' (Cave & Prosperetti 2000, pp. 48). An example of this is offered by Taylor and Williams (1995, pp. 116-117) as well as Thatcher 1999, p. 99), who illustrated how allowing rival companies interconnection to BT's network was essential in establishing a competitive telecommunications market in the UK.

> The price that entrants have to pay for access to the incumbent's network is crucial to their commercial success, yet the incumbent has two motives for charging high access prices. The first is a simple desire to maximize monopoly profits; the second, which arises if a network owner is also competing in the retail market, is the desire to raise its rivals' costs and maintain a dominant position in that market (Cave & Prosperetti 2000, pp. 48-49).

Regulatory authorities have thus applied access pricing controls – among these being calculated, pre-set tariffs the incumbent can charge other companies operating through specific areas of its communications web, instituting a general cap on returns relative to what it costs the incumbent to provide network access, or enforcing a policy of non-discriminatory network access. Implicit in the justification of such moves by regulators or government is 'the advantages of economies of scale and scope that the incumbent enjoys are the consequence of previous public policy decisions and should therefore be equally available to new entrants' (Taylor & Williams 1995, p. 117).

The foundations and principles of global trade liberalisation

The General Agreement on Tariffs and Trade (GATT), signed in 1947, laid the foundation for the normalisation of international trade relations in goods and services. Its successor, the World Trade Organisation (WTO), came into being January 1, 1995 – both stronger in mandate and broader in scope – with the directive of 'liberalising and managing the international trading system' (Farrell 1999, p. ix), and to this end the WTO was enshrined as a legal entity with powers far beyond those of the GATT. In the first three years of its inception, the WTO achieved 132 member countries, with another 29 negotiating entry, establishing the organization as *the* global trade organisation and regulator.

There are four principles upon which the WTO bases it objectives for trade liberalisation; paramount among these is the principle of non-discrimination, which involves two aspects: (1) an importing country needs to treat equally products and services regardless of the country of origin, which is known as the 'most-favoured-nation' (MFN) clause; (2) inside a nation, foreign goods and services must be offered equal market footing as goods and services of domestic origin (Farrell 1999, pp. 1-2). The second WTO principle 'establishes the right and duty to reciprocal exchange of market-access commitments', which aims to encourage liberalisation by means of having nations 'exchange concessions' on tariffs and protections (Farrell 1999, pp. 2-3). The third principle relates to ensuring market access, while the fourth principle fortifies the requirement for fair competition – i.e. firms ought to compete on a 'level playing field' (Farrell 1999, pp. 3-4).

World Trade in Telecommunications

Thus, telecommunications liberalisation policy is normally not limited to opening the markets inside a nation, but includes opening the doors to foreign enterprises as well. Given the importance of telecommunications, most governments are loath to let companies from other countries have a stake in their domestic markets – that is unless their domestic companies can enter the markets in those other countries. This is where the WTO has stepped up, becoming the pre-eminent international body facilitating telecommunications liberalisation globally by coordinating agreements between countries. Perhaps among the most significant accomplishments of the WTO was to finalise the 1996-1997 negotiations on the Basic Telecommunications Agreement between 69 nations. WTO Director-General at the time, Renato Ruggiero, commented after the deal was concluded that it could save customers around the world one-trillion dollars (US) over the next decade, which was equivalent to some four per cent of global GDP at 1997 prices (*WTO Telecom Talks Produce Landmark Agreement* 1997, p. 1). The US, as the origin of one third of global telecommunications revenues, was by far the largest participant at the talks and world wide consensus could not have proceeded without it (Jerram et al. 1998, p. 11). A primary US concern had been that while it was willing to accept foreign companies operating in the American market, other governments would not make reciprocal pledges, which would have effectively handicapped American companies. In retaliation against foreign companies with protected monopolies in their domestic markets, the US had considered limiting the international services they could offer American customers (Jerram et al. 1998, pp. 11-12). However the final deal adopted broad regulations to ensure competition, covering markets representing 90 per cent of total world telecommunications revenues (*WTO Telecom Talks Produce Landmark Agreement* 1997, p. 1). Though there were schedules and conditions specific for each country in adoption of the agreement, in general it allowed companies from all signatory nations to offer services and invest in the markets and companies of the other signatory nations.

Multinational dominance of telecommunications and market convergence

The end of the 1980s heralded a new era for telecommunications corporations as large-scale consolidations began to be an industry norm. Sylvia Chan-Olmsted and Mark Jamison, in their 2001 study *Rivalry through Alliances: Competitive Strategy in the Global Telecommunications Market*, explored this topic thoroughly and as such their work will be draw upon heavily in the following section to illuminate the role of multinational corporations in the increasing global telecommunications market. They describe (on p. 2) how the markets have been transitioning:

> The marriages of AT&T with TCI and Media One, MCI with WorldCom, and Vodafone with Mannesmann set the stage of a rapidly changing global telecommunications market as players such as British Telecom (BT), AT&T and DoCoMo acknowledged their plans to build competitive advantages in the world market through combinations with other companies... we are also seeing mergers between major wireless players such as Vodafone and Airtouch, between old and new media companies such as Time Warner and America Online, and between old and new network companies such as US West and Qwest... the nature of competition today in the global telecommunications industry seems to centre around market activities that aim at gaining competitive advantages through strategic combinations of resources and presence in multiple products and geographical areas.

Chan-Olmsted and Jamison note how four formerly separate industries are rapidly coming together as the new 'multimedia information industry': telephone, mass media (print, broadcast and cable), consumer electronics and computing. This new umbrella industry offers products that draw upon four primary commodities: customer devices (i.e. PCs, telephones, TVs, etc...), networks to move information around, network devices (i.e. email & voice-mail hosts and other services which hold and process information for customers), and software (i.e. digital information used by customers such as music, videos, databases, etc...) (Chan-Olmsted and Jamison 2001, p. 4).

The barriers between the different mediums of transmission are also disappearing, whereby one medium can now play surrogate to another, creating price competition between them. While through most of the history of voice telephony the service providers used fairly uniform technology with the differentiator between them being the charges for service over different distances (i.e. local, long-distance and overseas calls), modern technological advancements have mostly removed distance from being a function of cost and now it is the different technologies that compete for a share of the market (Fransman 1998, p. 31). To illuminate this point, Martin Fransman notes that there are 'at least seven distinct technologies that can be identified which are involved in the process of local access. They are: optical fibre, copper/XDSL, co-axial cable TV, fixed radio access, mobile cellular and PCN, satellite, and powerline [using electrical cables]' (Fransman 1998, p. 22). This can lead to situation where, even in markets which appear to be dominated by one player, there may in fact be a level of effective competition. Fransman cites the example of BT in the late 1990s, which appeared to have a market share of around ninety per cent on local access in the UK, but in the following excerpt of a letter sent in 1996 from BT to the then British regulator Oftel[1], the company asserts that new technologies have blurred the boundaries of how the local access market is defined, and therefore complicated competitive assessments of the market:

> When analysing the market for access from the point of view of the customer wishing to obtain access to the telecommunications networks in the UK, there are a number of products that can reasonably be regarded as substitutable. Analogue lines [based on copper cables], ISDN lines [integrated services digital network capable of carrying voice, data, text and video], telephone lines offered by cable TV companies, fixed and mobile radio access and PCN [another mobile service] are all currently available alternatives. The cost of access to the customer may vary depending upon the technology used, and the different means of access may be regarded as more or less substitutable, taking into account functionality, price and the speed of delivery... the different technologies are likely to become more and more substitutable and the degree of

[1] Following mergers with other regulators, the former British regulator Oftel is now known as OFCOM.

> substitutability over time needs to be taken into account when determining whether a number of different alternatives are in the same market, and whether that market can be described as competitive (BT cited in Fransman 1998, p. 22)

Chan-Olmsted and Jamison (2001, p. 5) illustrate the substitutability of different types of telecommunications technology in noting how 'credit card verification services' and 'airline reservation services' now use digital satellite technology instead of telephone networks, and how VoIP and email are also becoming means of communication which increasingly substitute for the traditional phone call. As the differentiation between services erodes, fixed-line, mobile and Internet services become viewed more as variants of the same service and not wholly distinct, which has resulted in many companies offering discount packages including all three services for one price (Chan-Olmsted and Jamison 2001, p. 5).

Chan-Olmsted and Jamison's assessment is supported by that of Mitchell and Vogelsang (1997, pp. 20-22), who note that the impact of technological advances on the American telecommunications market was to reduce barriers to entry, thus expanding the 'range of competition' by increasing the number of suppliers of various telecommunications services:

> The thrust of the principal technological changes that have occurred since the divestiture of AT&T has been to reduce the compartmentalization of formerly separate telecommunications markets. No single firm competes across the board in every market... rather, advances in technology along many fronts have brought competition from many different sources (Mitchell and Vogelsang 1997, p. 21).

Such convergence in markets and products radically alters the role of older telecommunications providers such as AT&T and BT, remark Chan-Olmsted and Jamison (p. 4), by changing the nature of competition from being based in a single geographical area and competing for voice services, to companies now having to compete on the basis of their network coverage and the range and quality of services they can provide over those networks. 'Large multinational customers often want a single network to provide them with end-to-end telecommunications across multiple countries', (Kramer & NiShuilleabhain 1997; Antonelli 1997; Jamison 1998, cited in Chan-Olmsted and Jamison 2001, pp. 14-15) the result being that to stay competitive, many telecommunications companies have either expanded their own network infrastructure into the foreign target markets of their multinational customers, or bought and/or formed partnerships with network operators already existing in these countries. While building new infrastructure in foreign markets allows a company autonomy over its operations, it is time-consuming and also means assuming the risk that comes with effectively 'starting from scratch' – i.e. heavy capital investment, fostering local customer confidence, building familiarity with the political and regulatory environment, etc. (Chan-Olmsted and Jamison 2001, pp. 10-11). In order to mitigate risk and facilitate quicker entry into other markets, many telecommunications companies form 'strategic alliances' with one another for mutual benefit and advantage over other rivals, ranging in degree from simple cooperation between their network systems to complete mergers and takeovers. Forming this kind of 'seamless network' for their customers in connecting any market on earth with any other given market allows a telecommunications company better quality control over its services and the ability to build larger economies of scale, increasing profitability and allowing the room to stay competitive through price reductions (Chan-Olmsted and Jamison 2001, p. 15).

These same sort of market forces likely helped shape the MTC-Vodafone joint venture into the Bahraini market as the Kingdom's second mobile carrier in 2002. Vodafone had itself begun as a joint venture between the UK's Racal Electronics and the US's Millicom in 1983, when it was issued one of only two cellular licenses in the UK. Vodafone's massive successes in the British market allowed it to expand outside the UK and by the mid-1990s the company was operating in Australia, Greece, Hong Kong, Malta, Scandinavia, Fiji, Germany, South Africa, and Uganda (*Vodafone Group Plc* 2006, p 1-2). Kuwait's Mobile Telecommunications Company (MTC) was also formed in 1983, and grew steadily to be one of the leading mobile providers in the Middle East and Sub-Saharan Africa, today garnering a customer base of close to 10 million. In the autumn of 2002 MTC and Vodafone formed a Partner Network Agreement, creating MTC Vodafone Kuwait, which soon after acquired a telecommunications provider in Jordan, then was issued a license to be the second mobile provider in the Kingdom of Bahrain (*Vodafone Group Plc* 2006, p 1-2). As MTC-Vodafone grew its services in Bahrain, customers began to have access to the international services and roaming networks of the parent companies, and prices for mobile services decreased.

The wisdom of the 'strategic alliance' approach for telecommunications providers to acquire 'seamless' end-to-end international coverage is called into question however by Peter Curwen and Jason Whalley in their book *Telecommunications Strategy: Cases, Theory and Applications*, where these authors note the failure of a number of the major global alliances which were formed through the late 1990s and early 2000s:

> For example, the Global One alliance, involving European and US partners recently collapsed amid acrimony, with the three partners going their separate ways. In addition, the Unisource alliance of European telcos was broken up and its constituent parts sold off, simultaneously severing its transatlantic link with AT&T. Finally, the Concert alliance lost its US-based constituent MCI to a takeover by WorldCom, and, reformed as a joint venture between AT&T and BT, was itself later disbanded. Not surprisingly, financial market analysts have become very wary of joint ventures essentially created to widen geographic spread where there are no substantive cross-shareholdings involved, and they are unlikely to play a significant role in the foreseeable future (Curwen & Whalley 2004, p. 12).

Curwen and Whalley noted that while the 'organic growth' of a company is generally the preferred method of expansion, this type of corporate business strategy became regarded as antiquated during the late 1990s period of rapid change in the telecommunications industry. The almost blinding speed of technological advancements in the industry also made over-reliance on in-house research and development for new products and services disadvantageous for a company's competitive prospects, as by the time one company had realized a technological breakthrough through its own R&D division, industry competitors may well have already developed that technology and progressed on to the next level of innovation. In such an industry environment, Curwen and Whalley (2004, p. 13) asserted that the avenue most likely to lead telecommunications companies to a successful expansion with limited risks is, instead of forming alliances with other companies, to launch a takeover bid using the equity of the first company to buy out the target company, as Vodafone did in acquiring Mannesmann in 2000.

While this chapter has thus far focused mainly on the progress of telecommunications in the developed world, the movement towards telecommunications liberalisation and trans-national networks through mergers and alliances of multinational companies has also manifested itself it the developing world. As Bahrain is itself a developing nation, it would now be useful to examine the progress of telecommunications in the developing world.

Telecommunications in the developing world

While it is commonly asserted in the developed world that governments have undertaken the privatisation of major service providers in an effort to boost efficiency and have cheaper and better services made available, in developing countries these ideals have often taken a backseat to the much more immediate need to fortify a nation's ailing finances with solid foreign currency reserves (Ramamurti 1996, p. 39). As well, major privatizations are a way for developing economies to tell major investors around the world 'we're open for business'.

Ramamurti, in examining the experiences of developing countries in Latin American with regards to privatisation and liberalisation of major state-owned enterprises – specifically in the realms of telecommunications and transportation – arrived to the conclusion that there were many commonalities between them. Among these was that, in the near-term after a SOE privatisation is complete, there is often a reinforcement of regulatory authority – at least in semblance – as, when a state's function is no longer confused between both owning and being the watchdog over a corporation, 'regulatory reform have more credibility and teeth' (Ramamurti 1996, p. 39). However, this does not necessarily imply that competition begins to flourish. While there is evidence to suggest that privatisation encouraged positive economic development (Wellenius et al. 1992; Kikeri et al. 1992), many nations faced the conflicting interests of both capitalising on the sale of their SOTE to balance government budgets and satisfying the demand for better customer services (Wallsten 2005, p. 5). These interests often conflicted because, to maximize government revenue from the sale, the buyer was offered an exclusivity period within which they could maintain a monopoly, substantially raising the sale price of the SOTE; however, with a guaranteed monopoly, the new owner faced no competition and thus had little incentive to lower prices or make expensive infrastructure investments to improve services. This trade-off meant that improvements in services were often stalled (Wallsten 2005, p. 5). The less dependant a government is on filling its coffers quickly, the stronger its bargaining position in negotiating with potential purchasers, with the result tending to be that the new owner's exclusivity period was relatively shorter and/or with greater limitations, thus tilling the ground more fertile for competition to sprout sooner rather than later (Ramamurti 1996, p. 39).

Over the long haul however, the regulatory regime negotiated when the former SOE's ownership passed to the private sector begins to look more and more archaic and inapplicable as new technological advancements, fiscal realities and any number of new circumstances come to affect the market environment.

> Transaction costs associated with regulation will increase, relations between firms and governments will become strained and the risk of regulatory capture will increase. Countries in which firms and governments enjoy high mutual trust, and in which regulators have both the expertise and the discretion necessary to reasonably adapt rules to uncertainly will continue to gain from privatisation (Ramamurti 1996, p. 39).

Frequently however, Ramamurti found it to be the case that developing countries did not have these facilities necessary to make the most of privatisation. Despite this, and what the short-and-mid-term problems may be, privatisation does seem to make it more probable than not that somewhere on the horizon a country will arrive at some form of competitive market and leave behind its previously monopoly-dominated sector. If a nation's coffers no longer fill directly from the profits of a company (i.e. because the state no longer *owns* said company) then at some point the government will likely develop the wherewithal to nudge the incumbent out of the pampered security of exclusivity and towards a path through the market gauntlet. The incumbent operator, firms eyeing up a possible run at market entry and other stakeholder all weigh with more credibility a state's rhetoric vís-a-vis instituting a competitive playing field if privatisation has already taken place, rather than if it has not (Ramamurti 1996, p. 39).

On paper at least, a good deal of the transforms in the regulatory regime – including imposing minimums for increased service access, performance goals and cost controls – that come about with privatisation could also have been implemented with the corporation under state ownership. The reality is, however, that the state's 'carrots' and 'sticks' to enforce its will 'seem to have less credibility than similar promises and threats between the government and a private firm' (Ramamurti 1996, p. 40).

> The real significance of privatising monopolistic firms... is to use the disciplinary forces of competition and regulation to improve a firm's

> performance. That, in turn, is possible because privatization reduces the scope for opportunistic behavior by governments. Most of the problems of the state-owned enterprise stem not from the enterprise but from the state; the discipline that privatisation imposes on the state is probably more important than the discipline it imposes on the firm and its managers (Ramamurti 1996, p. 40).

Looking at developing countries world-wide, the state-owned 'natural monopoly' model for telecommunications adopted by many was generally seen to failing by 1981, at which time Africa and Latin America averaged only 0.8 and 5.5 phones per hundred people respectively, while in the US that number was 83.7 (Saunders et. al., cited in Wallsten 2005, p. 3). As the Thatcher Government spurred the world wide flourish of public sector privatisations, developing nations also joined in, though their circumstances and motivations were slightly different. In regards to telecommunications, with few exceptions SOTEs were performing horribly: long delays in service and unreliable connections for customers, combined with the haemorrhaging effects of inefficient business practices and new infrastructure burdens on government finances, created internal demand for reforms, while at the same time international lending institutions made public sector reforms among the conditions for badly needed loans (Wallsten 2005, p. 3). As a result by 1999 over fifty per cent of Asian and Latin American nations and one-third of African countries had divested of their SOTEs (Megginson & Netter 2001, p. 5). However countries such as Bangladesh, Cambodia, Thailand and Vietnam showed little to no movement towards privatisation, while in China and India the SOTE was preserved, though allowing space for competition in fixed-line networks (Pennings et. al. 2005, p. 12).

With this in mind, it is informative to examine the experience of Jamaica, which has followed a path involving both typical characteristics of telecommunications privatisation and liberalisation in developing countries, as outlined above, as well as some rather unique routes to realizing successes from the country's reform program.

The Jamaican case study

Jamaica's deteriorating financial situation through the 1980s and into the early 1990s forced it to sell off the remaining shares in its partially privatised SOTE, Telecommunications of Jamaica (TOJ)[2], to cut expenditures and raise revenue. This represented a serious policy revision for the Jamaican state which, although it seemed committed to at least partial privatisation of TOJ, had also stated publicly in 1988 that it had no intention of holding any less than 40 per cent of the company; 'it is widely held that… the need for foreign exchange to pass an IMF test led the government to sell the remaining blocs of shares' (Telecommunications of Jamaica 1988)..In seeking to maximize the sale price of TOJ, the government gave the buyer, C&W, exclusive rights to operate the telecommunications network on the Island for 25 years, with the company able to renew its exclusivity at the end of this period for a further 25 years (Lodge and Stirton 2002, pp. 9-10).

It should be noted, however, that when negotiations to privatise telecommunications in Jamaica were first initiated in 1985, the motivation was not solely fiscal concerns, as 'it seems clear that the Seaga administration [1980-89] first began negotiations with C&W because of its desire to obtain access to the technology, capital and expertise required to modernise the nation's telecommunications infrastructure', (Ramamurti 1996, p. 57). Impetus came from the fact that, after direct international dialing in and out of Jamaica was established in 1977-78, the surge in demand surpassed the capacity of JAMINTEL's infrastructure to handle, while at the same time JTC was swamped by a wave of new demand to be connected to the phone network from businesses and homes (Ambrose et al. as cited in Lodge and Stirton 2002, p. 9).

Privatisation did seem to achieve some of the objectives the government sought, as capital infusion into the Jamaican telecommunications network swelled post-privatisation: there was average of US$16 million per year invested into domestic and long-distance infrastructure over the four years previous to privatisation, while the average for each of the four years post-privatisation jumped to US$72 million. A centrepiece of this expansion was the digitalisation of the network, with the TOJ chairman publicly claiming in 1992 that, "Jamaica is one of the few countries in the world to have a fully digital network"' (Telecommunications of Jamaica 1992, p. 5). As well, the expansion rate of the Jamaican networked jumped dramatically: from and average of 3,000 new lines added per year through the 1970s and 1980s, to 26,000 new

[2] TOJ, a merger of the former domestic carrier, Jamaica Telephone Company (JTC), and the long-distance company, JAMINTEL, had been created in 1987 as part of the agreement between Cable & Wireless and the government in preparation for privatisation

lines in 1991, 36,000 lines in 1992 and 41,000 in 1993. As well, in monetary terms, the sale of TOJ brought the government US$156 million, which, in examining the company's capital assets and revenue forecast, was a relatively fair market price (Spiller & Sampson 1992, p. 41).

Cross-subsidisation of domestic network expansion by international long-distance charges was a significant – far from being solely a matter of social responsibility for TOJ to provide underprivileged Jamaicans with basic phone service, that fact was it was extremely profitable to bring phone services to rural areas.

> Jamaicans are one of the world's most footloose people; it is estimated that as many Jamaicans live overseas as in Jamaica, with over half concentrated in nearby North America. Subsidization allows expansion of the telephone network to the poorest Jamaicans in rural sections of the island, who are likely to have relatives overseas whose telephone calls lead to payments from international communications companies to the TOJ. These payments more than compensate for low domestic user charges. The TOJ could profit from each rural phone installed even if the user never made a telephone call and monthly user charges were very low (Ramamurti 1996, p. 66).

Problems began to arise for C&W, however, in enforcing TOJ's exclusivity clause, as the agreement was vague in regards to its application to things such as customer premises equipment (CPE), data transmissions, fibre-optic transmissions and certain value added services (Lodge and Stirton 2002, p. 10). Under pressure from C&W to close these loop-holes, a bill was introduced in 1993 granting TOJ exclusivity '...in all areas of telecommunications traffic in, out and through Jamaica' (Lodge and Stirton 2002, p. 10). However the resultant hostility this proposal provoked within Jamaica society and business community forced the government to effectively shelve the plan for some four years until after the next election in 1997, and even then it was never enacted.

Under pressure from Jamaica's competition and consumer-protection regulator, the Fair Trading Commission (FTC), which was established in 1993, C&W agreed, in 1994 to allow ISP's to interconnect with its networks. In 1998, the government issued five VSAT licenses to ISPs, a number of which then began to offer VoIP long-distance call-back services of their own, effectively cutting into C&W's exclusivity over long-distance services; C&W launched legal battles to try and re-establish its long-distance dominance, but did not succeed:

> Continuing legal uncertainty, new actors, international constraints and commitments and technological change increasingly threatened C&W's exclusive status and encouraged the operator to renegotiate arrangements with the government by the late 1990s (Lodge and Stirton 2002, p. 11).

The Jamaican path to telecommunications reforms is described by Lodge and Stirton (2002, p. 13) as a 'surprising example' in the developing world, where '...a small state, dependent on external private investment for its telecommunications service, manages to overcome the resistance of the incumbent monopolist and to establish a programme of liberalisation, in a manner that broadly attracted support and strengthened the authority of the regulator'. Stirton and Lodge attribute Jamaica's relative success to a number of favourable factors, including: the American FCC's decision in 1997 to unilaterally cut by more than half the rates American telecom companies paid for termination of international calls, which dramatically reduced the profitability of Cable & Wireless' international division and hindered its ability to cross-subsidise its less profitable domestic operations in Jamaica; technological advancements which allowed domestic competitors to lighten their dependence on Cable & Wireless' infrastructure networks; the establishment in 1993 of Jamaica's FTC, which aggressively sought to enforce competition and consumer-protection, and Jamaica's accession to the WTO's Agreement of Telecommunications – all of which weakened Cable & Wireless' monopoly and encouraged the company to agree to accommodate the government's Telecommunications Act of 2000, a detailed piece of legislation laying out the blue-print for a three-phased, three-year plan to liberalise the Jamaican telecommunications market (Lodge and Stirton 2002, pp. 11-13).

Other examples from the developing world

Unlike Jamaica however, in other developing world cases, such as Mexico and Sri Lanka, it became apparent that without strong regulation to ensure fair competition following on from privatisation and liberalisation, the new owners of a privatised SOTE would invariably leverage their dominant market position to benefit themselves and hamper and exclude rivals. In Mexico the government began divesting of Telmex in 1990 and opening the markets to competition in 1996. However Telmex created problems for new companies trying to access its networks, allowing it to maintain a dominant market position while consumer prices soared and services suffered. Even after the WTO attempted to intervene through the national regulator, Telmex maintained market supremacy by minimizing competitor market share (*Telecom deregulation and Post PTCL Privatisation* n.d.). In Sri Lanka, Japan's NTT bought a 38.5 per cent stake when the SOTE was divested in 1997, then raised line leasing rates for competitors by 200 per cent, obstructed network infrastructure sharing and complicated interconnections – all of which hobbled rival market share and allow NTT to raise customers' local telephone rates by 250 per cent (*Telecom deregulation and Post PTCL Privatisation* n.d.).

Ramamurti, in studying the experiences of Argentina, Mexico, Venezuela and Jamaica regarding the privatisation of their SOTEs and attempts to liberalise the market, found the following to be the case:

> In every country, the privatized firms seem to have adopted textbook tactics to make life difficult for companies wishing to offer new telecommunications services that were open to competition, such as cellular telephony and value added services. These providers had to connect their facilities with the monopolist's network, but the terms and conditions had to be mutually negotiated. The privatized firms haggled over the number of connection points, access charges, marginal investment required to facilitate interconnection, billing procedures and so on. Eventually, regulators were available to settle the issues, but meanwhile delays were to the monopolists' advantage (Ramamurti 1996, p. 32).

Taylor and Williams (1995, p. 111) described the opposing forces classically at play within a telecommunications sector under reform: policy-makers, in seeking development of the industry, will support the growth of competition which increases business uncertainties for existing companies, while the strategic focus of the companies is to minimize the uncertainties they face. 'Almost inevitably, a regulatory policy that focuses on licenses, equal access and interconnection, will involve a response by firms, particularly the incumbents(s), in areas through which they might regain relative certainties' (Taylor & Williams 1995, p. 111).

Comparing Singapore and Bahrain

Perhaps the most successful example of telecommunications reform policies in the developing world has been Singapore. In the context of this thesis Singapore is especially relevant given many of the characteristics and similarities the country shares with the Kingdom of Bahrain, among them being:

- *Geographic size* – Singapore and Bahrain are both among the smaller nations in the world, at 692 sq km and 707 sq km respectively.
- *Strategic location* – Singapore is at the entrance to the Strait of Malacca, which has helped it become one of the most important shipping centres in Asia, while Bahrain is in the middle-south portion of the Arabian Gulf, which has historically placed it at the crossroads of trade and shipping through the Middle East.
- *Future growth prospects* – economic survival for both countries depends on overcoming resource limitations and a small domestic market.
- *High per capita GDP* – while both countries have a high gross domestic product relative to their population, Singapore is ranked highly for its competitiveness and the freedom of its economy, whereas Bahrain's competitiveness is lagging and the economy is relatively less free.
- *Labour force* – both countries are characterised by a small, comparatively well-disciplined indigenous labour force, a large pool of mostly unskilled foreign workers, and a demand for skilled local professionals which outstrips supply.
- *Foreign business incentives* – foreign companies are actively pursued to set up businesses locally, with both countries offering inducements including in a favourable tax climate (Bahrain has no taxes), free mobility of capital, profits and current accounts, and in general neither country restricts or discourages foreign investment to protect local industry.
- *Centres for finance* – Singapore is an international financial and commercial centre, while Bahrain has historically been the banking and investment hub of the region.
- *Regional Competition* – Singapore has effectively been in direct competition with Hong Kong since the late 1980s in regard to which state can attract more multinational companies use them as a regional communications hub. This has motivated Singapore to aggressively pursue liberalisation of its telecommunications market and other business-friendly initiatives in the interest of becoming more competitive. Bahrain is in a similar regional rivalry with other Arabian Gulf states which are attempting to attract multinational companies to establish regional centres within their borders,

adding incentive to Bahrain's telecommunications liberalisation drive and other pro-business policies (Sanchez and Hwa 2003, p. 19).

The US ambassador to Bahrain, William Monroe, who previously served as the US ambassador to Singapore, stated that Bahrain, like Singapore, has the potential to 'eclipse its larger neighbours as a destination for international trade', and noted that 'Singapore is a very, very successful economy and it's a model for Bahrain' (*Gulf Daily News*, April 4 2007, p. 1). In light of the similarities between the two nations, an examination of the telecommunications liberalisation process undertaken in Singapore may yield helpful advice which can be applied to the situation of Bahrain.

The Singapore model

The authoritative state in Singapore shapes economic and societal development, often through direct intervention, and thus telecommunications reforms and policies have been at the impetus of the ruling regime. In the run-up to the 1980s, the state invested heavily in infrastructure to meet public and business demands for better services and shorter delays in getting a telephone connected to the network (Singh 1998, pp. 9-10). According to JP Singh in his 1998 *Evaluating Telecommunication Privatisation and Liberalisation in India and the Far East* (pp. 9-10):

> The two groups at the micro level which matter to the state in terms of telecommunications include the Singapore society and international business groups. The latter are often the only actors emphasized in examination of Singapore's telecommunications but it is important to remember that Singapore's waiting list for telephones of two years in 1972 (which included society at large) was brought down to less than two weeks in 1979. By 1980, Singapore had the highest teledensity in the developing world (while now its penetration rates are comparable to those of any in the developed world).

Telecommunications became an integral part of the agenda to attract multinational businesses to relocate to Singapore during the 1980s. The 1986 National Information Technology Plan aimed at developing the country into an 'information society' and with forceful government policies Singapore had achieved 100 per cent Integrated Service Digital Networks (ISDN) before 1990, 50,000 mobile service subscribers by 1991, data networks for both public and private institutions and a number of private networks operating in key sectors by at the dawning of the 1990s (Singh 1998, p. 9). In 1992, Singapore established a regulatory body for telecommunications which later evolved into what is now the Info-Communications Development Authority of Singapore (IDA). The legislated mandate of the IDA outlines three main focal points of regulator's role: to encourage and assist the establishment and expansion of a world-class ICT market on the island; to issue licences and oversee the development of market dynamics in the interests of realizing a competitive telecommunications market in Singapore, and 'to promote an information society in which ICT is readily available and accessible to the people' (Budde 2008).

In 1993 Singapore began the initial privatisation of its SOTE, SingTel, with 11 per cent going up for sale (with private stake rising again to 25 per cent in 2002).

> When SingTel was corporatised in 1992, it was licensed to provide telecom services in Singapore until 2007. In 1996, the government decided to embark on a policy of liberalisation of the telecommunications sector and the end of SingTel's monopoly was brought back to 2002. SingTel was compensated for the change of plan. Further liberalisation was unavoidable, especially since new and increasingly difficult to regulate technologies like the Internet had begun to encroach on the realm of basic service and render SingTel's exclusive licences less and less meaningful. Not surprisingly, in preparation for competition, SingTel planned to invest $2.5 billion in local infrastructure over a three year period and planned on creating a number of strategic alliances to strengthen its position as an international player (Budde 2008).

In 2000 the government decided to begin sweeping liberalisation reforms of its telecommunications market. Yeo Cheow Tong, Singapore's Minister for Communications and Information Technology from 1999 – 2001, stated this agenda was adopted from necessity: in order for the city-state to achieve the status of regional ICT hub, there needed to be a competitive market established to encourage an efficient, state-of-the-art telecommunications environment, and 'The earlier introduction of full market competition will strengthen our competitiveness and help position Singapore as the choice location in the region for key infocomm players' (IDA Singapore 2000). Hailed as the "big bang" of the telecommunications industry in Singapore, operating licences were granted to 37 major telecommunications corporations and some 20 ISPs, effectively opening the market in all aspects of service provision (*Telecommunications Infrastructure Regulation and Liberalization* n.d.). There was also the removal of all restrictions regarding foreign ownership in the city-state's telecommunications market, with StarHub becoming a market player in April 2000; in June of that year Singapore

Cable Vision (SCV) announced it had finished installing a two-way Hybrid Fibre Coax (HFC) network, connecting the cable TV company to 99% of all homes in Singapore.

Also in 2000, the mobile sector saw a phenomenal surge of one million new subscribers and as of the beginning of 2003, Teledensity in Singapore had reached the third highest in Asia at near 80%, behind Hong Kong (83%) and Taiwan (106%). There were nine mobile subscriptions for every 10 Singaporeans by December 2004. In early 2005, in order to spur competition, the IDA said mobile phone companies would be able to differentiate their customers' call charges depending on whether calls were completed within the company's network or terminated in a competitor's network, (though this plan was initially subject to a degree of pricing limitations).

By 2006 teledensity passed 100% as it became common for people to have up to three different mobile phones for different uses. Between 2006 and 2007 mobile subscriptions surged again by just under one million. To promote competition further in the domestic market, at the end of 2007 the IDA publicized plans to restructure Mobile Number Portability (MNP) to facilitate greater ease in customer migration. Previously, subscribers could switch service providers and keep their old numbers, but 'in essence all they received was a call-forwarding service whereby calls to the old number were routed to the new one, meaning that some recipients could see an unrecognizable new number and choose to ignore the call' (Budde 2008). Under the improved MNP regime however, consumers effectively own their number and can take it with them when they move to a new service provider.

As of February 2008, in a population of some 4.4 million Singaporeans, there were 5,825,500 mobile subscribers – equaling a mobile penetration rate of 127% – with annual market growth pegged at 20.8%. Of all mobile subscribers in February 2008, some 1,836,000 were consumers of 3G services, with the 3G market having swollen by 150% in 2007. [As of February 2008, 98% of all homes also had fixed-line connection, with 20% having two or more fixed-line telephone numbers].

Beginning in 2005 the government in Singapore took a special interest in Broadband internet access and wiring the island into an ever-more technologically advanced communications web. The IDA handed out half a dozen new Wireless Broadband

Access (WBA) spectrum licences in 2005, and in 2006 put forward a 'request for concepts' to begin preparations for setting up an island-wide web of broadband infrastructure as part of the government's grand plan for a Next Generation National Infocomm Infrastructure (Next Gen NII). As well during the summer of 2006, the government unveiled its super-strategy for ICT development over the next decade, called 'Intelligent Nation 2015 (iN2015), which emphasized the role advanced telecommunications plays as 'a strategic enabler for social and economic growth' (Budde 2008). Though in the beginning of 2006 the government said it would award some S$620 million (US$413 million) in tenders in the ICT sector, by year's end it had actually awarded closer to S$850 million (US$567 million); while at the beginning of 2007 Singapore announced some S$730 million (US$487 million) in tenders would be issued that year.

Currently in construction is Singapore's Next Generation Network (NGN) which, coming online in 2012, is engineered to be a super-highway for data, able to transmit at a minimum of one gigabyte per second, and as of the fall of 2007, there were already 5,000 publicly accessible wireless 'hotspots' around the island. In regards to broadband, as of February 2008 subscriptions had reach 3,501,100 (including wireless broadband users), meaning a penetration rate of 79.5 % (Budde 2008).

Given the above developments, the value of the telecommunications sector to Singapore has jumped dramatically since liberalisation was undertaken. The ICT market on the island expanded 5% in 2002, with revenues of US$18.6 billion, or roughly 8% of national GDP; it is forecasted that the ICT sector in Singapore will make up 10% of national GDP by 2012. In 2006 the IDA recorded a whooping 20% growth in Singapore's telecommunications market, hitting the S$45.4 billion (US$29.5 billion) mark in total value.

In the beginning however, there were doubts as to whether the liberalisation process would yield the results the authorities in Singapore were hoping for. The following excerpts of an article by Tony Sitathan that appeared in the Asia Times Online Oct 30, 2003, under the headline 'Singapore opens up its telecoms' helps to illustrate the telecommunications strategy the Singapore Government was following and some of the challenges it faced and, to some degree, still faces:

> 'Liberalization has pushed domestic players in Singapore to be more innovative and to look outwards', said Lee Boon Yang, [the minister of information, communications and the arts.] 'We have no doubt that economically a vibrant and competitive telecommunications sector contributes to the competitiveness of the nation as a whole'. He added that competition has compelled incumbent telecommunication operators to become more efficient and to offer products and services that are more innovative and responsive to the end user... So far, however, liberalization exercise has not yielded immediate results. The infrastructure roll-out has been slow, with operators opting for the easier alternative of buying rather than building infrastructure from scratch. Given that condition, SingTel is expected to remain dominant in infrastructure... Michael Lim, an associate consultant with a foreign-based risk analysis company, said that IDA is currently studying the Telecom Competition Code and that change is expected soon. 'From the beginning SingTel has a dominant position as an exclusive monopoly holder for its fixed line services', Lim said. 'This was due very much to its telecom infrastructure development in Singapore. Now however we are seeing its rivals calling for greater and inexpensive access to SingTel's network. The bigger question is can the smaller rivals afford or want to build the nuts and bolts in the telecom infrastructure or choose instead to run their services over the existing network provided by SingTel'.

Budde (2008) noted, however that 'deregulation of the market was seen as a threat by SingTel and StarHub, which had invested billions into their telecom networks, because the new entrants were in a position to offer newer and cheaper infrastructure'. Thus, due to its decision to fast-track liberalisation, the Singapore Government also made significant compensation payments to these two companies.

In several aspects of the market, competition grew exceptionally quickly with liberalisation, with November 2003 a recognizable turning point. Prior to this the IDA had enforce restrictions on SingTel's actions in the wholesale market for international and overseas calling, deeming that due to the company's dominant market position, the regulator needed ensure interconnection and other services were provided in a timely manner and without price gouging. However, in November 2003 the IDA announced that SingTel had only 30 per cent market share of overseas customers – with five other companies of note having succeeded in carving out market share for themselves. The IDA thus released SingTel from the regulator's shackles, deeming that free market mechanisms were now active enough uphold healthy competition in the sector.

The cost of long-distance calling has dropped noticeably as competition has risen, as much as 85 per cent relative to the days before liberalisation. [e.g. pre-liberalisation rates for calls to the US were in the rage of US$0.95 per minute and over the course of liberalisation decreased to as little as US$0.09]. 'Lower cost and the liberalisation of the telecom market also contributed towards the island's development as a hub for data centers, content aggregators, digital media industries, Internet networking companies and e-commerce transactions' (Budde 2008).

As the modernisation chase still continues to this day, Singapore is more and more confronted with dilemma of pursing the most advanced telecommunications networks in the world to maintain its status as the financial hub of the region, yet given authoritative nature of governance in Singapore, the government also seeks to control the information being conveyed over these networks to its citizens (Singh 1998, p. 10). There are also pressures for even more liberalisation efforts to stay competitive and attract large-scale infrastructure investments to continually improve services for the more than 650 multinational companies that operate in Singapore, with these companies and the increased economic activity resulting from increased liberalisation being a means for the government to create jobs for its citizens (Sitathan 2003).

Lessons for Bahrain from the Singapore experience

Batelco was fully owned by the state until 1981 when the Bahrain Government divested of part of its shares [see figure 3:1 below]. Like Singapore, Bahrain has come to view the telecommunications sector as a key element in carving out a competitive advantage for the Kingdom over regional rivals in attracting international banking and financial institutions, and as such has endeavoured to adopt a pro-active strategy regarding telecommunications development.

[Batelco, Bahrain's monopoly fixed line service provider and one of two providers for mobile service in the Kingdom, has shares held by the Bahrain government (75 per cent, after Cable & Wireless sold its remaining 20 per cent share to three different Government entities in 2006 for US$506 million), the Pension Fund Commission (21 per cent) and other private Bahraini investors (four per cent). MTC-Vodafone (re-branded 'Zain' in 2007), with 60 per cent of its shares owned by Kuwait's MTC and 40 per cent by Bahraini investors, entered the mobile market in Bahrain at the end of 2003 when it launched its GSM and 3G services.

Figure 3:1 Bahraini telecom market ownership structure (Dec 2006)

Operator	**Fixed**	**Cellular**	
	Batelco	Batelco	Zain
%			
Government	75.0%	75.0%	0.0%
Public Sector	21.0%	21.0%	0.0%
Local Private Sector	4.0%	4.0%	40.0%
Foreign	0.0%	0.0%	60.0%

As will be discussed in more detail in later chapters, a liberalisation blue-print was drawn up in 2002 and by 2004 the telecommunications market was officially opened up for competition, though the results have been limited as Zain was the only competitor granted a licence by the Telecommunications Regulatory Authority (TRA) to offer GSM services. As Singapore confronts the conflicting interests of both expanding and enhancing its telecommunications services, while at the same time controlling the information those services convey to its population, the same dilemma is arising in Bahrain, though the difference may be that Bahrain's concerns relate more to preserving cultural and value systems more than ensuring the authority of the state. This issue will be discussed in detail in Chapter 7.

In regards to job creation, as in Singapore, Bahrain is similarly interested in telecommunications facilitating new opportunities for its citizens, as the Gulf State is currently grappling with 14 per cent unemployment. The goals Bahrain has laid out as part of its larger growth strategy include accelerating Bahrain's economic growth to an average of six per cent per year to double GDP within the next 12 years. To accomplish this Bahrain is seeking to privatise it electricity, water and healthcare projects, and make Bahrain a regional hub for healthcare, business and financial services and develop an international communication centre to facilitate e-commerce. The liberalising of telecommunications is seen as an essential component in accomplishing these objectives.

In the excerpts from *Asia Times Online* article above, Singapore's Information Minister, Lee Boon Yang, attributes the injection of competition into the marketplace as the spur which drove '...incumbent telecommunication operators to become more efficient and to offer products and services that are more innovative and responsive to the end user'. This type of dynamic telecommunications environment would add dramatically to the competitive advantage which Bahrain seeks to build, and as such the Kingdom is attempting to develop a competitive telecommunications market. But as is also noted in the *Asia Times Online* article, the '...liberalization exercise of Singapore has not yielded immediate results. The infrastructure roll-out has been slow, with operators opting for the easier alternative of buying rather than building infrastructure from scratch. Given that condition, SingTel is expected to remain dominant in infrastructure. This could well happen in Bahrain, where a second operator might opt to purchase from Batelco's existing infrastructure monopoly rather than building their own, leaving Batelco the dominant player in infrastructure. In this regard Bahrain faces the same uncertainty emerging from Batelco's dominant position as Singapore did with SingTel. Once the TRA opens up the market for fixed line services, can smaller rivals afford – or be persuaded – to invest in the 'nuts and bolts' of new telecommunications infrastructure? Or, will they request to run their services over the existing Batelco network, which would necessitate Batelco offering them an affordable rate? Perhaps more importantly, with a population of just 700,000, would any operator come forward to compete in Bahrain? These are issues that will require further examination later in this thesis.

However, having so far in this chapter looked at the progress of telecommunications in the developed and developing world generally, with a greater focus on Singapore and Bahrain in the section just above, it is worthwhile now to review the telecommunications situation within Bahrain's regional neighbours.

Telecommunications in the GCC

An exceptional characteristic of the telecommunications sector across Arab countries in recent years has been the phenomenal growth in mobile use, with subscriber rates jumping an incredible seventy per cent through 2005 and the UAE and Bahrain attaining mobile penetration rates comparable to Europe's (*Madar Research reports 70 percent growth in Arab mobile phone subscription in 2005* 2006). In the Gulf Cooperation Council[3] (GCC) in particular this has been credited to the sweeping telecommunications liberalisation reforms which began taking hold six years ago to meet WTO benchmarks for accession – Bahrain is currently furthest along in liberalisation efforts, the UAE, Saudi Arabia and Kuwait are showing progress, Oman currently has two mobile operators and Qatar is scheduled to liberalise its telecommunications in 2007 (*GCC Investment Strategy and Sectors Outlook for 2007*).

[3] The Gulf Cooperation Council (GCC) consists of Saudi Arabia, Kuwait, Bahrain, Qatar, the United Arab Emirates (UAE) and Oman.

Figure 3:2 Telephone services penetration in GCC countries in 2005

	Mobile penetration (%)	Fixed-line penetration (%)
Bahrain	105	27
Kuwait	90	22
Oman	56	12
Qatar	93	28
Saudi Arabia	60	18
UAE	102	28

(Source: Global Research as cited in *GCC Investment Strategy and Sectors Outlook for 2007*)

Figure 3:3 Middle East Internet usage and population statistics

MIDDLE EAST	Population (2007 Est.)	Usage, in Dec/2000	Internet Usage, Latest Data	% Population (Penetration)	(%) of M.E.	Use Growth (2000-2007)
Bahrain	738,874	40,000	**152,700**	20.7 %	0.8 %	281.8 %
Iran	70,431,905	250,000	**7,500,000**	10.6 %	38.7 %	2,900.0 %
Iraq	27,162,627	12,500	**36,000**	0.1 %	0.2 %	188.0 %
Israel	7,237,384	1,270,000	**3,700,000**	51.1 %	19.1 %	191.3 %
Jordan	5,375,307	127,300	**629,500**	11.7 %	3.2 %	394.5 %
Kuwait	2,730,603	150,000	**700,000**	25.6 %	3.6 %	366.7 %
Lebanon	4,556,561	300,000	**700,000**	15.4 %	3.6 %	133.3 %
Oman	2,452,234	90,000	**245,000**	10.0 %	1.3 %	172.2 %
Palestine (West Bk.)	3,070,228	35,000	**243,000**	7.9 %	1.3 %	594.3 %
Qatar	824,355	30,000	**219,000**	26.6 %	1.1 %	630.0 %
Saudi Arabia	24,069,943	200,000	**2,540,000**	10.6 %	13.1 %	1,170.0 %
Syria	19,514,386	30,000	**1,100,000**	5.6 %	5.7 %	3,566.7 %
United Arab Emirates	3,981,978	735,000	**1,397,200**	35.1 %	7.2 %	90.1 %
Yemen	21,306,342	15,000	**220,000**	1.0 %	1.1 %	1,366.7 %
TOTAL Middle East	193,452,727	3,284,800	**19,382,400**	10.0 %	100.0 %	490.1

(Source:www.internetworldstats.com)

Concurrent with the astonishing growth in mobile penetration rates in the GCC has been the absolute stagnation in fixed-line penetration rates, [as shown in figure 3:2 on the following page]. The Jordan-based Arab Advisors Group (2005) attributes the stagnation in fixed-line penetration directly to a drop in demand brought about by the advent of mobile services, noting that while there may be potential for fixed-line expansion in Saudi Arabia and Oman, which are currently below average in penetration rates, growth in other GCC States is 'now stabilised at levels generally in line with population growth rates'.

The GCC population is roughly 34-million, with Saudi Arabia by far the largest at some 24-million, and Bahrain and Qatar the smallest with less than 1-million each. In terms of wealth relative to their populations, Qatar ranks as one of the most prosperous states in the world with a US$29,111 per-capita income, followed by the UAE and Kuwait (*Completion levels in Arab cellular markets & privatization levels in Arab cellular and fixed markets* 2005). While the population base in GCC countries is not large relative to other world markets, the profitability, and thus the attraction for foreign telecommunications companies, is due to the high Average Revenue Per User (ARPU).

> With booming economies due to skyrocketing oil prices and a small population, the GCC countries have the highest mobile spend per capita. The UAE and Qatar are neck to neck with the first having a mobile spend per capita of US$557 and the second with US$541. Kuwait, Saudi Arabia, Bahrain and Oman have a mobile spend per capita ranging between US$185 to US$492 (*GCC Investment Strategy and Sectors Outlook for 2007*).

Large profits in their home markets are also allowing some of the GGC's own telecommunications companies to pursue aggressive expansions into markets beyond their national borders. Emirates Telecommunications (Etisalat) in the UAE is probably the most significant in this regard: having obtain significant stakes in Pakistan Telecommunication and Atlantique Telecom in West Africa, Etisalat also has licences to operate mobile networks in Saudi Arabia and Egypt and ended 2006 with operations in 12 different countries and a subscriber base of some 10-million customers (al-Ateeqi and Stockmeier 2007).

In regard to Internet usage, the number of people logging on to the Net in the GCC, and the wider Middle East in general, is increasing almost by the day. For many of the more dictatorial regimes in the region the increasingly free-flowing nature of information this entails is not always regarded as compatible with respect for the authority of the state, as when the Saudi authorities announce in 1998 that they were deliberately jamming internet access for the public until a means was found to block 'undesirable' information from reaching their population (Dahan 2000). As Figure 3:3 above shows however, most countries throughout the region have experienced at least a several hundred per cent increase in Internet usage since 2000, and in some case there has been a several thousand per cent increase, an indication that trying to halt the relentless growth of internet access is tantamount to fighting the tide and countries must instead find ways to adapt to it as a new reality.

The way forward

As stated above, the momentum for telecommunications liberalisation reforms in GCC countries was built behind the goal of meeting the free-market ownership standards set by the WTO, though this is not the complete explanation. High oil prices for much of the 1970s and early 1980s led to rapid economic growth in GCC countries, facilitating massive state investments in infrastructure, industrial developments and public services, but the economies were also characterised by heavy state patronage and overwhelming reliance on a single commodity – this led to an underdeveloped private sector and left government revenues severely exposed to price fluctuations in world oil markets (Lopez-Claros 2005, p. xii). As oil prices fell from the mid-1980s on into the 1990s, governments in the GCC found themselves in varying degrees of fiscal crisis and ensuing political turmoil. While oil prices are now relatively high again and expected to maintain their present level for some time, much of the current telecommunications liberalisation reforms in the GCC should be seen within the framework of a larger agenda governments have to diversify their economies away from such massive dependence on oil – a non-renewable resource subject to price fluctuations and, in Bahrain in particular, of increasingly finite supply.

Bahrain was among the first of the GCC countries to recognize the implications of its oil dependence and, as will be discussed further in the next chapter, initial attempts to diversify the economy began in the 1970. Thus, telecommunications liberalisation can be seen as both (1) a single sector under reform as part of a larger general restructuring of markets, and (2) as a way to facilitate the liberalisation reforms and competitiveness of other sectors. Augusto Lopez-Claros examines a wide range of literature on the topic in the 2005 *Arab World Competitiveness Report* and (citing Sulaf Zakharia, pp. xii-xiii) notes that Bahrain's 'assertive stance' regarding the economy…

> …employing a rigorous, fast-track approach to reform implementation, has particular significance for the rest of the region. Bahrain began by implementing

> a process of political reform, through which it rapidly transformed itself from a sheikdom to a constitutional monarchy. Its approach to economic development has been equally assertive, and this small country has already implemented fundamental labour market reform, fully liberalised its telecommunications market in a record 18 months, realized a privatisation program which is still in full swing, and continued to open its market through multilateral and bilateral trade agreements...policies matter a great deal for economic outcomes, and Bahrain's example is an encouraging message for the region.

Conclusion

Technological advancements in many ways helped break the conception of telecommunications as natural monopoly, which, outside the US, had almost universally been state-owned and operated. The potential for private participation and competition arrived with new technology that made telecommunications a cost-feasible and profit-able industry; this, hand-in-hand with the rise of privatisation and liberalisation ideology globally, led governments to divest of their SOTEs and liberalise their telecommunications markets to let flourish the new technologies in their economies. Among the most crucial aspects determining the success of telecommunications reforms is their ability to secure interconnection between new market entrants and incumbent monopolists, and at fair prices. In cases where a coherent strategy and well implemented regulations for telecommunications liberalisation were applied, customers have benefited from expanded services and lower prices while the larger nation has benefited from the injection of technological advancements, increasing overall economic and social growth. In cases where there was weak regulation and poor planning, incumbent corporations in newly liberalised markets moved to crush competition using their dominant position and further their own profit-margins at general expense. Liberalisation and technological advancement seem to reciprocally reinforce each other, both fundamentally altering the role of telecommunications companies through converging markets and services. Notable in this regard is the fact that, in both Singapore and Jamaica, the emergence of new and difficult-to-regulate technologies made the exclusivity agreements held by their respective incumbent telecommunications operators increasingly obsolete, thus eroding their monopoly power. The telecommunications industry is now gaining a truly global status as multinational corporations compete and cooperate in multiple markets, products and services simultaneously.

The successes of Singapore, as a developing nation which through strong, coherent and insightful telecommunications policies has garnered tremendous benefits for its economy and future prospects, is an example which the Kingdom of Bahrain should look to emulate as it seeks the modernising benefits of a dynamic telecommunications market to stake out competitive advantage in attracting foreign business and investments to the Kingdom. To better understand the context in which telecommunications is developing in Bahrain, it is necessary to examine the historical, political and economic background of the Kingdom, and this is the subject matter of the next chapter.

* * *

Chapter 4:
The economic, political and historical background of Bahrain

Introduction

A brief history of Bahrain

Located 20 miles off the east coast of Saudi Arabia, Bahrain, a 36 island archipelago, lies near the centre of the Arabian Gulf. The three main islands of Bahrain – the capital Manama, Sitra, and Muharraq – are joined by causeways, and make up about ninety-five per cent of the 707 square kilometer land area. The islands first became known as Bahrain in the early Islamic era, when the name was used for the entire region stretching from Basra, Iraq in the north to Oman in the south. It is one of the most densely populated Middle Eastern countries, with eighty-nine per cent of the population living in urban areas. Bahrain's abundance of fresh water, good fishing, and the lucrative pearl trade made it a valuable stopping point in the Gulf well before the discovery of oil, with the majority of the population earning a livelihood from pearls, fishing, agriculture and trade – these first two were large employers of labour while trade, though it employed much fewer people, provided the major source of revenue to the Kingdom.

About the year 640 A.D., the Prophet Mohammed sent a letter to the ruler of Bahrain inviting him to adopt Islam, leading many of the island's inhabitants to become Muslim and after a series of Islamic rulers, Bahrain came under Portuguese rule. It was a staunchly Shiite Muslim community and during these years it appears to have been well-governed and prosperous, being an important port on the trade routes between Iraq and India. The Portuguese were in the Gulf for a little over a century, and by the early 1500's, the Portuguese saw Bahrain as a key point from which to protect their trade routes between India, Africa and Europe. The Portuguese were however unable to protect the islands, being driven from Bahrain in 1602 by the Bahrainis themselves. After the expulsion of the Portuguese, the Bahrainis appealed to the Persians for protection and so came under their control in 1603. This was followed by a long period of turmoil, with Bahrain changing hands between the warring Persians and Arabs, until it was finally conquered in 1783 by Sheikh Ahmed bin Mohammed al-Khalifa. Better known as Ahmed bin Mohamed Al Fateh, 'the conqueror', he was to usher in the beginning of a new and important era, though his rule was fraught with encroachments and onslaughts from different forces: Persian, Masghatian (Sultanate of Oman), Ottoman Empire and finally the British; each attempted on several occasions to annex Bahrain to their dominion and during the eighteenth century Bahrain finally came under British rule and protection.

In 1820 Sheikh Ahmed's sons Abdulla and Salman, then co-rulers of Bahrain, signed the General Treaty with the British East India Company, beginning a connection to Great Britain that lasted until Bahrain's independence in 1971. When Sheikh Salman died in 1825, a struggle for succession began. This internal strife continued with rival factions attempting to gain control of the government and assassinations were rife for more than forty years. During this turbulent period the 'Treaty of Perpetual Peace and Friendship' was signed with the British to end maritime aggression and build better trade relations. As a binding treaty of protection, it was concluded in 1861 and further revised in 1892 and 1951. This treaty was similar to those entered into by the British Government with the other Arabian Gulf principalities. It specified that the ruler could not dispose of any of his territory except to the United Kingdom and could not enter into relationships with any foreign government other than the United Kingdom without British consent. In return the British promised to protect Bahrain from all aggression by sea and to lend support in case of land attack. The treaty was seen by the rival internal factions as a means to secure their own power by enlisting British aid against the other factions in the continuing struggle for control of the Bahraini Government. The struggle eventually reached a head in 1869 when the exasperated British simply removed and exiled the primary rivals and proclaimed the twenty-one year old Sheikh Isa bin Ali al-Khalifa the ruler of Bahrain. Sheikh Isa acted quickly and decisively to stabilize the government and, with the support of the British fleet, held off invasions by the Turks and the Persians, both of whom claimed Bahrain as their own. Sheikh Isa guided his nation into the twentieth century, ruling until 1923 when his son, Sheikh Hamad, joined him as co-ruler.

The United Kingdom and the Ottoman Empire negotiated an agreement in 1913 asserting the autonomy of Bahrain, though the island continued to be a British protectorate. Iran began to reassert its claim over Bahrain soon afterwards, and due to Sheikh Isa bin Ali al-Khalifa's apparent willingness to acquiesce to Iran he was deposed by the English in 1923. The result was widespread condemnation throughout the population and further anxiety in London that control over Bahrain was slipping away.

The veteran colonial officer Sir Charles Belgrave was then dispatched from England in 1926 to quell the problem as an advisor to Bahrain's Emir, though Belgrave's heavy-handed subjugation of Bahrainis engendered considerable animosity and lead to his ultimate expulsion in 1957 (Mojtahedzadeh 1995, p. 1-7).

Oil reserves, initially found on the island in 1902, only became an economic factor in the 1930s when major extraction and production facilities were built. Government revenues were heavily reliant upon the import and export duties and fees garnered from the growing merchant class and increased international trade passing through the Bahrain. By the midpoint of the century Bahrain's economy was quickly gathering pace as nations around the Gulf began to reap the rewards of the expanding oil industry. Cognisant of Bahrain's resource limitations, the government began efforts to diversify its economy as early as 1967, seeking to attract foreign private sector investment and pushing broad infrastructure, public service and education programs.

London relocated its regional naval headquarters to Bahrain from Aden, Yemen, in 1967, but when the United Nations reported in 1970 that the inhabitants of Bahrain desired independence, Britain withdrew from the Arabian Gulf area the next year and Bahrain became independent. In 1973 a constitution was adopted and an elected national assembly established, but in 1975 the Emir suspended the constitution and dissolved the national assembly, following claims by his prime minister that the National Assembly was impeding the work of the government.

Bahrain and the other Gulf states of Oman, UAE, Qatar, Saudi Arabia and Kuwait formed the GCC in 1981 to expedite the free movement of capital, goods and labour throughout the region[1]. The GCC objectives are:

> To effect coordination, integration and inter-connection between member states in all fields, strengthening ties between their people, formulating similar regulation in various fields such as economy, finance, trade, customs, tourism, legislation, administration, as well as fostering scientific and technical progress in industry, mining, agriculture, water and animal resources, establishing scientific research centers, setting up joint ventures, and encouraging co-operation of the private sector (*The EU and the GCC 2006*, p. 1).

[1] GCC states are also members of the Arab League.

In the late 1980s a causeway was built connecting Bahrain and Saudi Arabia. In the 1980s and 1990s relations with Qatar were strained by a dispute over the Hawar Islands and the large natural-gas resources of the Dome field, located in the shallow sea between both countries. When the Iran-Iraq War ended in 1988, attempts were made to improve relations with Iran. Persistent irritants to Iran were the poverty among Bahrain's Shiite majority and the small Shiite representation in Bahrain's cabinet. During the 1991 Gulf War, coalition forces were allowed extensive use of Bahraini territory. In 1993 a consultative council (Shura) was appointed to replace the long-dissolved national assembly, but during the mid-to-late 1990s unrest among Bahrain's Shiites led to opposition protests and violence, with the restoration of an elected parliament one of their main demands. In 1996 more than 50 people were arrested for involvement in what was said to be an Iranian-backed coup attempt.

Sheikh Isa bin Salman al-Khalifa, who had ruled since 1961, died in 1999 and was succeeded by his son, Sheikh Hamad bin Isa al-Khalifa. The new ruler moved gradually towards increased democracy for Bahrain and in 2000 called for the establishment of a national committee to write a new national charter. The charter, which established a constitutional monarchy, was approved in Feb., 2001; the same month a general amnesty for political prisoners and exiles was declared. Bahrain was proclaimed a Kingdom in 2002 and the Shura was dissolved prior to the assembly elections. Because King Hamad had established an appointed upper house in the national parliament, which had not been part of the charter approved in 2001, a number of groups including the largest Shiite associations, called for an electoral boycott which lead to a fifty-three per cent turnout in the October vote. However the election marked the first time women in an Arab Gulf monarchy could vote or run for national office.

The ruling family is Sunni, as are most of the important merchant families, the officer corps in the army and senior civil servants. The Sunni elite have long mistrusted the Shiite community, but this situation improved in 1999 when King Hamad came into power and the government moved to allay these feelings, including lifting the ban on Shiites serving in the army and security forces, and amending the strict state security laws which had curbed many civil freedoms for almost 20 years. Another significant move was the formation of the first human rights forum. The government hopes that such reforms will reduce tensions in the short term and that in the long term, political reform and greater economic prosperity will contribute to a more cohesive society.

Social and religious composition of Bahrain

The demographics of the Bahraini-born population in the Kingdom are roughly two-thirds Shiite Muslim and one-third Sunni Muslim, with a marginal number of other minority groups. Despite the size of the Shiite population, they are still relatively marginalised in the social-economic and political spheres. The political reform programmes of the government has removed many of the underlying causes which sparked unrest in the 1990s, but persistent unemployment and a substantial population of foreign labourers continues to agitate tensions in the Shiite community as many Shiites regard the foreigners as occupying positions ordinary Bahrainis could fill (Dun & Bradstreet 2004, p. 6-7). General unemployment is around fifteen per cent, unemployment among youth is closer to twenty-five per cent, while some sixty per cent of the total labour-force is made up of expatriates, many of whom work in the Kingdom illegally.

Despite the fact that Bahrain is a small country, there are deep social divisions between Bahrainis and migrant workers, and between Sunni and Shiite. While an estimated fourty-five per cent of the population are non-Bahraini (mainly other Arabs, Southeast Asian nationalities and Westerners), these migrant workers have few rights in Bahrain and despite their numbers have little to no influence over the government. They are silently contributing to the country's growth and development and this scenario is likely to continue, whether or not the majority of the local population is in agreement. Though the government has enacted a 'Bahrainisation' agenda to engender more employment among the indigenous population, it has been largely ineffective. Crown Prince Sheikh Salman bin Hamad al-Khalifa has identified a major inadequacy of the effort to be its lack of emphasis on work-force relevant skills training and education, and has stated that the government is endeavouring to revamp its approach to Bahrainisation.

WTO membership, economic liberalisation and, of particular interest to this thesis, telecommunications liberalisation are among the various economic stimulants the Bahrain Government is pursing to create jobs and improve living standards for its population, thus quelling potential for social unrest. US actions in the region, principally the Iraq war and the Israeli-Palestinian conflict, have provoked vehement anti-American sentiment in many parts of Arab society due to the US' perceived hypocritical policies and selective application of principles. This includes Bahrain, which is the base for the US Navy's 5th fleet, and thus the government must weigh its reliance on the US – mainly for territorial integrity and defense, though also in trade – against the resentment in its population which this reliance rouses. With the onset of the recent Iraq war, anti-Americanism has been expressed with increasing openness, as religious leaders have called for an end to alcohol sales and other influences seen as US in origin and injurious to the lives of good Muslims.

An analogous comparison to the Shiites of Bahrain could be the Catholics of Northern Ireland, ruled by the United Kingdom. The Catholic minority of Northern Ireland are the underprivileged while the Protestants, the majority, own most of the businesses and thereby control the economy. The difference is that relative to the Catholic minority in Ireland, the Shiite majority in Bahrain is probably better entrenched economically. Among the Shiites there are many successful businessmen and their contribution to the economic growth is substantial. However in some ways the Shiite's unorganized revolt against the Sunni rulers in the 1990s could be compared to continuous Irish Catholic protest activities. In Northern Ireland, the Catholic minority and the Protestant majority are deeply suspicious of the other (Sussman 2000, pp. 1-5), while the relationship between the minority Sunnis and majority Shiites is much the same.

The Shiite population does not have any major role in the Bahrain Government's Cabinet, though their political ideology is to increase their population and thereby increase their political sway in the country. Moreover, the Shiites constantly demand government aid for the community by way of various concessions and subsidies that make their living easier. While the government continues to provide them with relief measures, it exerts a heavy burden on the government budgets. The Shiite community is also closely knit, and the wealthy segment of the community contributes five per cent of their income to a fund that is used for the welfare of the poor segment of the Shiite community.

The political system and its development

The Kingdom of Bahrain is a constitutional hereditary monarchy under the rule of the al-Khalifa family. The King is the chief executive and head of state; the crown prince, Sheikh Salman bin Hamad al-Khalifa, is the King's eldest son. The prime minister is his uncle, Sheikh Khalifa bin Salman Al Khalifa, and the head of government. These posts are always filled by members of the al-Khalifa family. The judiciary system is relatively independent of the government and is based on diverse legal sources, including Sunni and Shiite Islamic law. The cabinet is formally chosen by the prime minister but the King plays an important role in its make up, which balances various tribal and political factions. The present 19-member cabinet was appointed in early 2005. The cabinet consists of two women, Sunni and Shiite members and the rest are royal family members, who form the majority. The al-Khalifa family maintains control of the key ministries, such as foreign affairs, finance, interior and defense.

The 2001 national charter, or constitution, established a bicameral parliamentary system (the National Assembly or *al-majlis al-watani*), with an elected Chamber of Deputies (*majlis al-nawab*), which can promote legislation, and an appointed Consultative Council (*majlis al-shura*), which can promote and veto legislation. Both houses comprise of 40 members. In the event of a dispute between the two, all 80 meet, with the speaker of the upper house having the deciding vote. This effectively gives power to the Consultative Council. The Chamber of Deputies elected Khalifa al-Dahrani, a Sunni Islamist, as its speaker, while a liberal Shiite, Abdel Hadi Marhoun, and a Sunni Islamist, Adel al-Muwda, were elected as first and second deputies. The appointed chamber has a Shiite, Faisal al-Musawi, as its chairman and contains six women and a Jewish member.

Although political parties are banned, a number of political societies have gained legal status. These societies have been formed along religious lines, divided according to Sunni or Shiite belief, and ideological groups. Parliament is dominated by conservative Sunni Islamists, which tend to support the regime. However, parliament has already indicated that it will attempt block any reform that threatens the conservative values of the country – thus telecom liberalisation moves could meet with some resistance from the conservative Sunnis with a possible view that too much liberalisation might lead to erosion of Islamic values. Nevertheless, the lower house has also proved willing to take a stance on alleged government corruption. Tensions between the executive and the lower house are unlikely to cause the breakdown of the political system however, given the power imbalance in favour of the executive, though tensions may fuel the dissatisfaction in society. The political societies that boycotted the election remain part of the political system, although they are becoming more isolated. These societies represent the majority of the Shiite population, as well as unrepresented leftist trends. During 1999, soon after the demise of the Emir, King Hamad set up a Shura council (an advisory body having representatives from all walks of life) as well as the Parliament. The Shiites opposed setting up of two such bodies and wanted the 1973 charter to be followed, which had only one entity, namely the national assembly. As a sign of their protest, they boycotted the parliamentary election.

General overview of Bahrain economy

Bahrain's economic policy is characterised by prudent fiscal expenditure and improved budget balances along with an effective system of resource allocation for health, education and infrastructure projects. The Kingdom's GDP grew steadily in recent years, increasing 13.5 per cent to BD4.140-billion (US$11.17-billion) in 2004 from BD3.647-billion (US$9.85-billion) in 2003 (refer to Figure 4:1, 'Summary of Main Economic Indicators' on following page). This helped pushed the Kingdom's per-capita income to US$20,800 in 2005 (*Bahrain per capita income hits highest level* 2006) – though Bahraini 'middle class' incomes are between US$6360-7968 annually and account for forty per cent of the population (*All past is prologue* 2006 p. 35). The non-oil sector showed a high rate of growth, a sign that the diversification drive is bringing results, as the Kingdom's FDI increased by an astronomical 2,100 per cent between 2003 and 2006, from US$137 million to US$2.93 billion (*Foreign Direct Investments on the Middle East* 2006 p. 1). The government has focused its efforts on the entry of new private firms, particularly in information and communications technology, education and training services, tourism, financial services, business services, healthcare services and related industries – all of which would benefit substantially from a more competitive and liberalised telecommunications environment in the Kingdom. Recognition of Bahrain's efforts came when it was named the 'freest economy in the Middle East' in the 2006 Index of Economic Freedom published by the Heritage Foundation/Wall Street Journal, with the Kingdom ranking the 25th freest of all world economies (*About EDB* 2006, p. 1).

Figure 4:1

Summary of Main Economic Indicators

	2003	2004	2005-Q1	2005-Q2
Population and Employment				
Total Population	689,418	707,160		
Total Employment	249,493	285,390	292,550	303,134
Domestic Output				
GDP at Current Prices (BD Millions)	3,646.9	4,140.5		
GDP per Capita (BD)	5,289.9	5,855.2		
Crude Oil Production (US Barrels Thousands)	87,481	76,337	17,001	16,971
Public Finance and Domestic Public Debt				
Revenues (BD Millions)	1,145.5	1,300.4		
Expenditures (BD Millions)	1,080.4	1,104.6		
Surplus/Deficit (BD Millions)	13.6	60.0		
Domestic Public Debt (BD Millions)	591.5	585.5	589.0	609.6
As % of GDP	16.2	14.1	14.2	14.7
Prices				
Consumer Price Index (CPI)	102.0			
Nominal Effective Exchange Rate	92.7	86.9		
External Sector				
Trade Balance (BD Millions)	366.4	388.8		
Current Account Balance (BD Millions)	75.5	156.1		
As % of GDP	2.1	3.8		
Overall Balance of Payments (BD Millions)	16.4	59.4		
As % of GDP	0.4	1.4		
Money and Banking				
M2 Growth (%)	6.4	4.1	5.6	4.4
Consolidated Balance Sheet of the Banking System (USD Billions)	100.9	118.9	119.2	122.1
Total Deposits as % of GDP	88.5	87.1	86.6	90.7
Total Domestic Credit as % of GDP	49.3	53.9	55.9	57.3
Bahrain Stock Exchange				
Bahrain Stock Exchange Index (Points)	2,346.3	3,054.2	-	-
Bahrain All Share Index (Points)	1,336.8	1,773.7	2,078.1	2,147.9
Dow Jones Bahrain Index (Points)	110.7	149.41	174.19	180.11
Stock Market Capitalisation (BD Billions)	3.6	5.1	6.0	6.3

(Source: Bahrain Monetary Agency, Economic Indicators June 2005)

The Economic Development Board

The Crown Prince, an outspoken proponent of privatization, took over the chairmanship of the Economic Development Board (EDB), a 'one-stop-shop' for potential investors, and in 2005 the EDB was entrusted with the task of giving shape to the King's vision of labour, economic, and education reform in the pursuit of opening up the economy. The EDB is a public agency with the general responsibility for formulating and overseeing the economic development strategy of Bahrain, aiming to create an attractive environment for investment – which includes establishing a state-of-the-art telecommunications network. The EDB markets Bahrain internationally, and offers investor-facilitation services, acting as the first point of contact and examining objectives of investors, providing them with information regarding the relevant procedures for setting up business, and helping them form a network of contacts in Bahrain. The EDB is also re-orienting how the success of the Kingdom's economic policies are measured, moving away from an emphasis on dollar increases in foreign direct investment and towards a focus on job creation numbers and changes in average wages, reflecting an ethos that economic development in Bahrain should benefit a wide cross-section of the population (*Innovation: The Cost of Entry* 2006, p. 46). Sheikh Mohammed bin Essa al-Khalifa, Chief Executive of the EDB, stated that:

> The key focus is productivity. In comparison with its neighbours, Bahrain has very little resources, so we cannot rely on resource exploitation to increase our relative wealth, nor can we compete on cost. When we looked around for role models, we found various countries that started development from similar position. The main similarities were with countries like Singapore and Ireland. The key to their development was increasing productivity. We want to make Bahrain a highly productive economy, and thereby increase the relative wealth of Bahrain (*Innovation: The Cost of Entry* 2006, p. 46).

Open economy

Despite a relatively strong economic base, government revenues remain highly dependent on oil, though the financial system is doing well with the banking system in Bahrain being a source of macroeconomic stability with very little contingent liability to the government. On the back of a consistent track record in macroeconomic stabilisation and structural reforms, the Kingdom has been regularly upgraded by international rating agencies. In 2003, Bahrain's long-term foreign currency ratings were raised well above investment grade. Regular rating upgrades have boded well for access to the international capital markets.

A number of factors have contributed to the openness of the Bahrain economy, including that the Kingdom was among the founding members of the WTO in 1995 –

though as a developing country, Bahrain was granted '...a period of adjustment and exceptions under the GATT before being completely integrated into the WTO', (*Scarce transparency in public services* n.d.). In 2003 the US and Bahrain signed the Trade and Investment Framework Agreement (TIFA), followed by a Free Trade Agreement (FTA) in 2004, allowing for the free flow of commerce between the two countries. Among the attributes of Bahrain's economy are, as noted by the US State Department (*Investment Climate Statement – Bahrain* 2005, p. 1-12): the favorable foreign ownership laws; the general lack of government 'red tape' and the ability for investors to repatriate all of their profits and capital; foreign currency is easily obtainable and there are no exchange controls; the Bahraini Dinar, which is currently pegged to the US dollar, and unlikely to suffer major devaluation; money transfers and conversions are not limited in any way by legislation and there is no 'parallel exchange rate or black market'. The US State Department describes the Kingdom's fiscal approach as:

> Consistent with the Government of Bahrain's liberal approach to foreign investment, government policies facilitate the free flow of financial resources. Foreigners and Bahrainis alike have ready access to credit on market terms. Generally, credit terms are variable but often are limited to 10 years for loans under $50 million. For major infrastructure investments, banks will often offer to assume a part of the risk, and Bahrain's onshore and offshore banks have shown extensive cooperation in syndicating loans for larger risks. Generally, Bahrain's banks are described as eager for solid investment opportunities. A sound system provides yet another comfort factor for potential investors. The banking activities undergo examination and supervision by the Bahrain Monetary Agency (BMA), which has a solid international reputation (*Doing Business in Bahrain: A Country Commercial Guide for U.S. Companies* 2005, p. 87).

Though Bahrain is a relatively a small market for many of the mammoth corporations of developed countries, it offers the facilities that enable organizations to use it for their regional operations that extend even to the Asian Subcontinent – in this context the importance of telecommunications liberalisation and its impact on the economy again become apparent. Robust government spending, prompted by exceptionally strong oil revenue, is stimulating private consumption and helps to bolster business confidence – in 2006 government expenditure was forecast to rise by US$4.1-billion, or 10.8 per cent, over 2005 (*Bahrain: Political developments to dominate* 2006, p. 2). The 2007-08 budget estimates an increase in government spending of 19.5 per cent over the previous budget, meaning an extra US$4.9-billion in both budget years, with the emphasis being placed on social development to calm tensions in the Bahraini population: education spending will rise to fifteen per cent of the total budget, from thirteen per cent in the previous budget, and spending on new housing development will rise by forty per cent, with 'recurring expenditure' rising by twenty-five per cent (*Bahrain: Political developments to dominate* 2006 p. 2).

Energy and industry

Oil and gas amounted to 11.5 per cent of economic activity in 2005, dropping nearly two per cent from 2004, though including refining and processing, the percentage rises to twenty, and oil and gas make up 25.8 per cent of GDP, up more than two per cent on 2004 *(More Promising Future* 2006, p. 109). Relative to other GCC countries, Bahrain's oil production is relatively small compared to its oil refining industry. The state-owned Bahrain Petroleum Company (Bapco) processes all the oil produced in Bahrain at its 250,000 barrel-a-day refinery, as well as large amount of crude it purchases from Saudi Arabia. Bapco is also involved in drilling, production and distribution of petroleum products and natural gas, and its asset include a 14 million-barrel storage facility, marketing terminal and marine terminal (*More Promising Future* 2006, p. 109)

Crude oil has been pumping from on-shore reserves in the Kingdom at a relatively constant 37,000 bpd since the 1970s, with only minimal decreases. Though precise measurements of the Kingdom's remaining reserves are not made public, general estimates place the number around 90-billion cubic metres, which is roughly 20 years supply at current rates of extraction. Sustaining some level of nation reserves in crucial for Bahrain as they can be used as collateral in major financing deals, as happened with the recent BD1.01-billion (US$2.68-billion) project to expand to the Kingdom's refining capacity (*More Promising Future* 2006, pp. 109-113).

The Government of Bahrain has also been involved in a major joint venture with Saudi Arabia and Kuwait since 1985 called the Gulf Petrochemical Industries Company (GPIC), producing ammonia and methanol for export (*Feed me, See more* 2006, p. 135). Another major collective project with Saudi Arabi and German based Breton Investments – though seventy-seven per cent Bahraini owned – is Aluminum Bahrain (Alba), which operates the largest aluminum smelter in the world and was set to have an output of some 830,000 tons by the end of 2006 (*Helter Smelter* 2006, p. 132). Two related companies are the Bahrain Aluminum Extrusion Company and Gulf Aluminum Rolling Mill, while other major industrial players in Bahrain are the Arab Iron and Steel Company, with an iron ore palletizing plant that outputs 4-million tons per year, and the Arab Ship Repair Yard.

The development of tertiary sectors in the Bahraini economy

Banking and financial services

A highlight of the diversification successes in Bahrain has been the banking and financial sectors. The BMA, founded in 1973, has been the major player in developing the industry in the Kingdom, having helped attract the more than 360 banks and other financial institutions currently operating in Bahrain (*Global Economic Research - Bahrain, Economic and Strategic Outlook* 2004, p.25). Total assets held by banks in Bahrain are estimated at 'nearly ten times the size of Bahrain's economy' and the industry accounts for at least twenty-five per cent of national income and is the leading private employer of Bahrainis (*Leading from the front* 2006, p. 59). A measure of the success in the banking sector can be seen in the gains between the third quarter of 2006 over the third quarter of 2005: the unified budget of commercial banks in Bahrain increased 28.4 per cent to BD7.6-billion (US$20.1-billion); offshore banks saw their unified budget increase 24.6 per cent to reach BD138.1-billion (US$366-billion), while investment banks unified budget topped BD410.4-billion (US$1.09-trillion), an increase of 50.7 per cent over 2005's third quarter (*Bahrain's banking sector in progress* 2006, pp. 1-2). Bahrain is also home to 34 of the world's 78 Islamic investment funds, with the Central Bank of Bahrain (CBB) planning the establishment of the International Islamic Financial Market, which would include the membership of Saudi Arabia, Sudan, Brunei, Malaysia, Pakistan and Indonesia (*Bahrain's Banking sector in progress* 2006, p. 1-2).

The financial sector is one of the successes of the Bahrainisation programme, with Bahraini nationals counting for nearly ninety per cent of all employees, both male and female, in full commercial banks and in excess of seventy-five per cent of all employees in international banks (*Global Economic Research - Bahrain, Economic and Strategic Outlook* 2004, p. 2). These banking and financial communities also contribute indirectly to the national economy in terms of expansion of both trade and services, especially in the form of real estate, transportation, telecommunications, tourism and the creation of job opportunities outside the financial sector, and a competitive telecommunications industry is necessary to facilitate Bahrain's continued successes in the banking and financial sectors.

Insurance

The insurance market in Bahrain is one of the largest in the region and is growing steadily. Divided into a well-developed onshore market and a vast offshore market, the insurance sector in 2004 was comprised of some 100 operating companies and 60 associated firms, with gross written premiums of BD452-million (US$1.2-billion) in that year (*Time to get Serious* 2006, p. 103). According to BMA figures (sited in *Bahrain insurance sector posts healthy growth in 2005* 2006, p.1) gross premiums generated in the domestic market for 2005 amounted to BD94.9-million (US$251-million), an increase of 5.4 per cent over the 2004 figure of BD90.1-million (US$238.4-million). In 2005 the domestic market was comprised of 19 insurance companies carrying out direct insurance business in Bahrain – 11 locally incorporated firms having roughly seventy-five per cent of the market share and eight branches of foreign firms (*Bahrain insurance sector posts healthy growth in 2005* 2006, p. 1). The offshore market, comprised of more than 70 companies, collected more than BD301-million (US$800-million) in premiums in 2004 – including the Arab Insurance Group, one of the biggest regional reinsurance companies which alone underwrote BD49-million (US$130-million) in premiums in 2004 (*Time to get Serious* 2006, p. 103).

According to Mr. Abdul Rahman Al Baker, executive director of financial institutions supervision at the Central Bank of Bahrain (*Bahrain insurance sector posts healthy growth in 2005* 2006, p. 1):

> The climate for insurance services continues to improve in Bahrain and the region. Robust economic growth coupled with renewed government investment in large infrastructure projects and strong private sector investment in real estate and other economic sectors are contributing to the expansion of the insurance sector. In addition, increasing public awareness and acceptance about the need for insurance is also contributing to the growing demand for insurance products, both conventional and Islamic.

Although not as successful as the banking in sector in regards to Bahrainisation, some sixty-three per cent of the insurance industry workforce are Bahraini nationals, with the total number of employees being 1003 people in 2005, a nine per cent increase over 2004 (*Bahrain insurance sector posts healthy growth in 2005* 2006, p. 1).

Tourism and the Formula 1

Bahrain's Formula 1 track hosted its first Grand Prix championship in 2004 and is anticipated to dramatically increase tourism in the Kingdom, complementing the expansion of the financial sector and raising Bahrain's profile as an international travel destination. The 5.4 km, $150-million track is also hoped to foster the growth of motor sports generally, as the track can be used for any auto or motorcycle racing events, as well as vehicle testing. Also included on the grounds are facilities for hosting any number of other events, from conferences to concerts. Fawaz bin Mohammed al-Khalifa, chairman of the Bahrain International Circuit, notes that 'Formula 1 is number three in popularity in the world sports calendar, following the Summer Olympics and the World Cup finals in football', (*Grand Prix of Bahrain, Bahrain International Circuit* 2005, p. 2).

Tourist numbers in Bahrain range from 3.5-million to 4-million tourists per year, with tourist attractions including the 18-hole PGA Golf Course, scuba diving and snorkeling locations, and ancient forts and museums. The land-link to Saudi Arabia across the King Fahad Causeway has also helped facilitate the tourism from other GCC states. In recent years the Kingdom has set out to establish itself as a major tourist and leisure lifestyle destination. The target market for the numerous luxury residential complexes springing up around the island is expatriates who, looking to base themselves in the region, are attracted to Bahrain because of its liberal economics, cultural tolerance and extremely safe environment. Many affluent EU and GCC citizens have bought plots on man-made luxury-living resort islands, and Bahrain has eased restrictions to allow GCC expatriates to permanently relocate. As an example, Durrat al-Bahrain, a US$1.2-billion luxury residential facility, sold all of its villas on the first day of sale, and is now going about creating another seven islands with 1,600 more plots, as well as another 18-hole golf course and a marina with a 350 yacht capacity (*Boomtown* 2005, p. 132).

Economic and fiscal policies

Similar to other members of the GCC, Bahrain's economic performance is closely related to the volume of oil revenues contributing to both the economy and the revenues of the government. Although the importance of oil revenues to the economy has been in decline since the 1970s, government revenue tends to rise and fall with fluctuations in the global price of oil, which has been relatively high since 2000. The revenues from oil accrue to the government, which then injects them into the economy through its expenditure programmes. Along with the considerable degree of state-ownership in Bahrain, the state is also the largest employer and key economic investor.

Fiscal Policy

The Bahraini Dinar is freely convertible and has been pegged against the U.S. dollar since 1980 at one dollar equals 0.377 BD, while the BMA first offered government bond in 1977, followed by treasury bills in 1986. The government restricts itself in borrowing from foreign lenders, having so far been able to use domestic banks to fund its entire public debt, which stood at US$1.58-billion in 2004 (Dun & Bradstreet 2004, p. 19). Although the Government of Bahrain has a controlling interest in many of the Kingdom's major industrial establishments, its overall approach to economic policy can best be described as laissez faire.

In principle, there is no tax or duty on imports of raw materials or semi-manufactured goods for manufacture, on imports required for development projects, on transshipments or on goods for re-export. Except for certain basic foodstuffs and petroleum products, private companies set the prices of goods and undertake the importation and distribution of foreign commodities and manufactured products. Because most manufactured products sold in Bahrain are imported, prices depend on competition, the source of supply, shipping costs, and agent markups. Agency commission has been abolished and, as a result, local merchants have been unable to maintain excessive margins, forcing more competitive pricing. The government makes major purchasing decisions (above US$27,000) through the tendering process. For major projects, the ministry concerned extends invitations to select pre-qualified firms. Smaller contracts are sometimes handled by departments within ministries, and are not necessarily subject to prequalification.

Bahrain is essentially tax-free. There is no individual income tax, nor does the country have any Value-Added Tax, property tax, production tax, or withholding tax. The only exception would be for companies engaged in petroleum extraction and refining.

Bahrain collects customs duties and a few indirect and excise taxes, which include a tax on gasoline, a ten per cent levy on rents paid by residential tenants, a 12.5 per cent tax on office rents, and a fifteen per cent tax on hotel room rates. Firms with fifty-plus employees must pay a training levy at a rate of three per cent of the payroll for expatriate employees and one per cent for Bahrainis. The government charges a fee for the issuance of expatriate work permits, an attempt by the Government of Bahrain to encourage employment of Bahraini citizens.

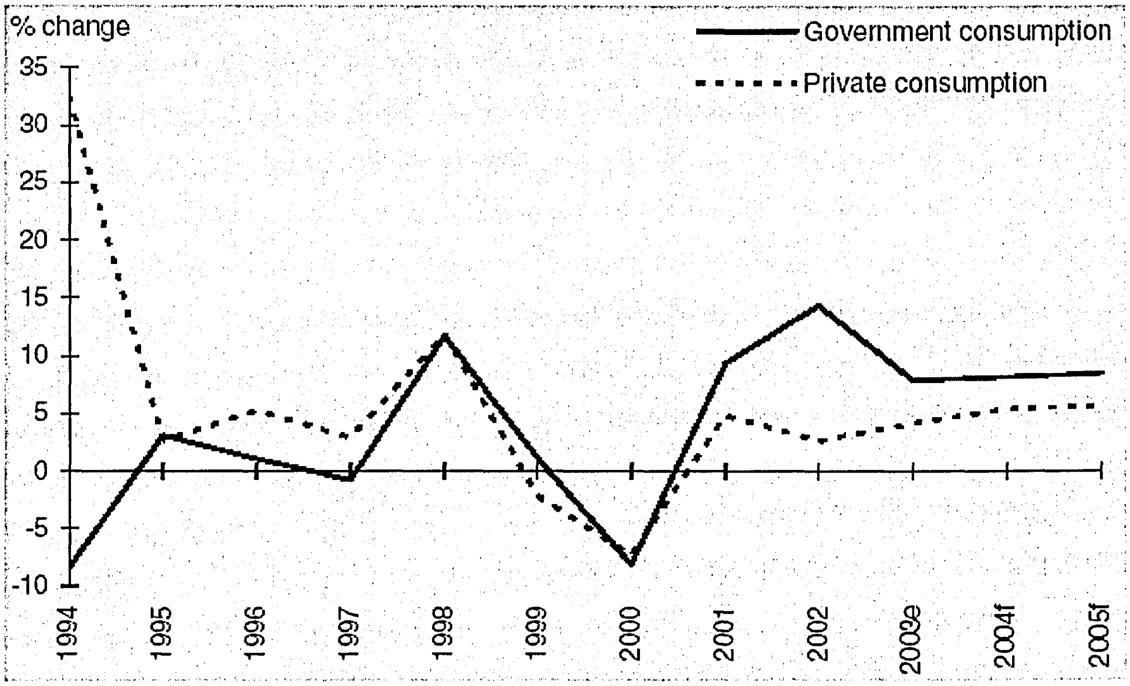
Private consumption and government spending

Private sector consumption to a great extent relies on government expenditure policies. The government is the main employer in the economy, but even in the private sector, many companies rely on government contracts for the bulk of their business. Therefore, confidence in the private sector is dependent on government spending patterns. Traditionally, private consumption has followed the trend of oil revenues, however this direct link was broken in the late 1990s when the government used increased oil revenues to reduce indebtedness and rebuild foreign exchange reserves. Since 2001 the government has reversed its economic policy and is again using expenditure to boost the economy, resulting in an increase in private consumption by 4.9 per cent in 2001, six per cent in 2004 and 5.9 per cent in 2005 (*Need for Growth* 2005, p. 29). As noted by the 2005 study by the OBG entitled *Need for Growth*:

> Disposable income is high and increases in income are recycled into consumption owing to the low tax environment: the only taxes that most Bahrainis encounter are the indirect tax on petrol sales and the ten per cent municipal tax on rents. The government is unlikely to introduce new personal taxes in the short to medium term or to increase existing taxes.

Figure 4:2

Private Consumption



Sources: International Monetary Fund, *International Financial Statistics*; D&B

The government, which is the main investor in the economy, is actively promoting a number of large-scale projects that it hopes will promote both economic growth and economic diversification including the US$660-million al-Hidd super port project; an expansion of the airport at a cost of US$300-million; a US$2.35-billion expansion of the aluminium smelter; the US$1.3-billion Bahrain Financial Harbour project and US$600-million expansion of the oil refinery at Sitra island. These projects should have a positive effect on investment by private companies, which are expected to upgrade facilities to take advantage of new economic opportunities. However, the impact of these improvements will not be felt in the short term. In addition, the size of the projects means that international, rather than local, construction companies will be the principal beneficiaries.

The government's proficiency in recycling oil revenues has a major impact on real GDP growth and largely determines the rate of economic growth. Thus, government consumption is the most important factor affecting the increase of real GDP. Government consumption accounts for around twenty per cent of GDP – high public sector wages and the provision of a generous welfare system prevent the government from reducing recurrent expenditure in the short term – and coupled with capital expenditure, the share would increase to around thirty per cent of GDP.

Besides oil-related revenue, which has increased substantially with the rise in oil prices in recent years, the other major sources of government finances are other publicly owned industries (listed above), and financial assistance from governments such as Kuwait and Saudi Arabia which often contribute to major infrastructure developments in Bahrain. In writing up the budget, the government normally estimates conservatively on oil prices and aims for a six per cent deficit, which, contingent on further government spending, often results in a smaller deficit (Dun & Bradstreet 2004, p. 23). Bahrain has also been running a net trade surplus since 1993, which contributes some 2.3 points to real GDP growth, with the Kingdom 'expected to continue to run a trade surplus in the medium term', (Dun & Bradstreet 2004, p. 23).

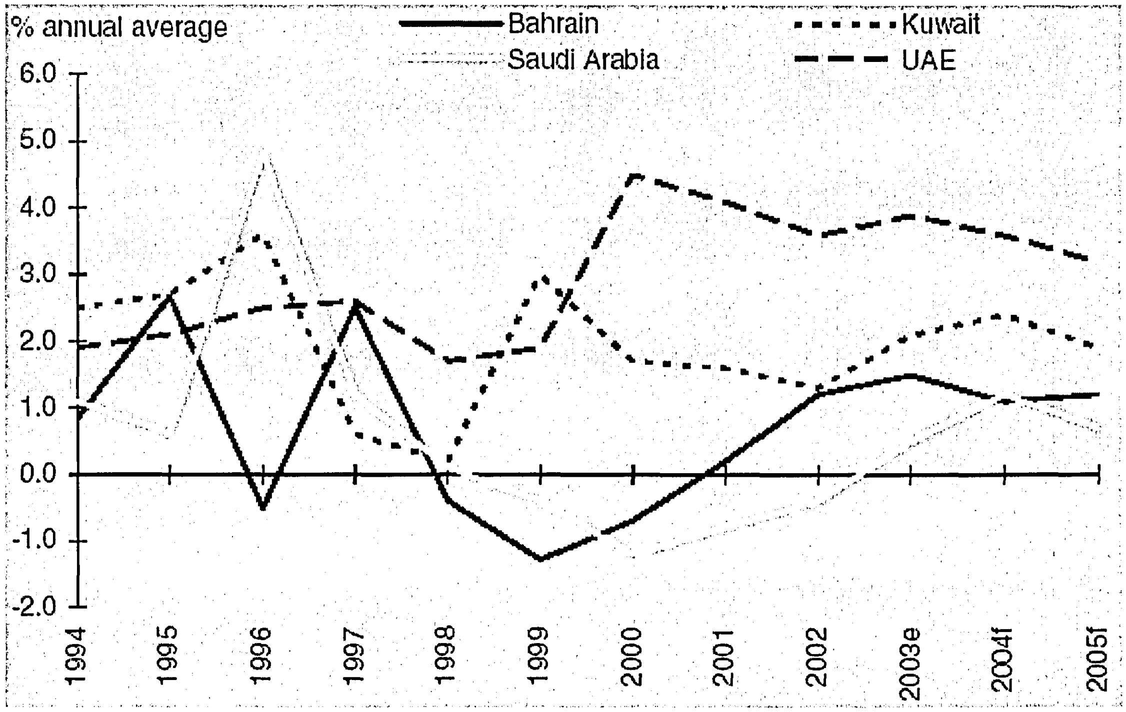
Inflation

With an average annual inflation of 0.5 per cent in the period 1994 to 2003, Bahrain has maintained a low inflationary environment for the past two decades. Two factors that have played major roles in maintaining low inflation are the government's monetary policy and its dominant economic position. This has helped Bahrain to move on with its economic liberalisation efforts. However, Bahrain has to import most of its needs and is therefore vulnerable to inflationary pressures from key markets. The government's policy of maintaining a fixed exchange rate against the US dollar, affects cost of imports from other countries.

It can be seen from figure 4:3 (below) that years 1998 to 2000 were deflationary, with positive low inflation returning in 2001. Strong domestic demand took inflation to 2.1 per cent in 2005, and while the low inflationary environment is expect to hold in the near term, it was expected to rise again to 2.7 per cent in 2006 riding continued strong domestic demand (*Bahrain Inflation Rate* 2006, p. 1). In the medium term, the removal of subsidies and price liberalisation necessitated by membership in the World Trade Organisation (WTO) and economic liberalisation is likely to threaten the low rates of inflation experienced in recent years.

Figure 4:3

Annual Inflation



Sources: International Monetary Fund, *International Financial Statistics*; D&B

Economic outlook

The EDB's economic strategy envisions doubling 2005's GDP by 2015, with GDP growth of six to nine per cent each year from 2005-2015, concurrent with a five per cent growth in employment for each of those years – no small feat, to be sure. Given its resources and those of the other GCC nations, Bahrain has not benefited as substantially from recent high oil prices as many of its neighbours, and while Bahrain is liberalising its economy quickly and investing heavily in new infrastructure to attract FDI and new businesses to the Kingdom, many of its neighbours are pursing much the same path, only with much greater financial resources. As a 2006 McKinsey Consultants report entitled *Reforming Bahrain's Labour Market: The Case for Change* notes, 'Dubai is making great strides in many of the sectors that Bahrain could once think of as its own, including transport, trade, logistics and even finance'.

The government's 2002 'privatisation decree' allowed for the divesting of 'tourist and communications sectors, transport, electricity and water, the ports and airport service, the oil and gas sector, and the postal service', (*All past is prologue* 2006, p. 33,) all in the interest of stimulating growth, investments and jobs, though full privatisation has so far only occurred in public transportation and a few other services. The McKinsey Consultants report also stated rather ominously that Bahrain will have 100,000 new jobseekers over the next ten years, effectively doubling the number of workers in the Kingdom, and that major growth in the private sector is required for there to be employment for all the new work-force entrants, as the public sector is near capacity:

> The Bahrain public sector will not be able to absorb the large number of job seekers in the future because Bahrainisation within the public sector already exceeds ninety-four per cent as per 2002 statistics. As a percentage of total labour force, Bahrain has twenty-five per cent in the public sector, which is higher than Canada (twenty per cent), US (fifteen per cent), Germany (fifteen per cent), UK (fifteen per cent), Japan (six per cent), and Korea (four per cent) (*Reforming Bahrain's Labour Market: The Case for Change* 2004, p. 4).

The government places strong emphasis on its Bahrainisation programme as a solution to the challenges posed by a growing labour force. The programme obliges companies that employ more than ten people to increase the proportion of Bahraini employees by five per cent a year, until at least fifty per cent of the staff is Bahraini. The dependence on expatriate labour will continue as long as the Bahraini education system fails to deliver adequately skilled workers and Bahrainis remain reluctant to take on low skilled jobs (*Reforming Bahrain's Labour Market: The Case for Change* 2004, p. 6). Bahrainisation also pushes up wage costs, reducing profits and deterring potential investment. In addition, the World Bank has criticized the programme. It argues that, rather than setting quotas, such as in the banking sector, policies should be based on training and education to ensure local skills are available to meet the requirements of the market.

Human development

With a well-developed oil economy, Bahrain has experienced a sizable influx of foreign workers, with the economy also contributing to a high degree of social and cultural development. For example, the people of Bahrain enjoy the benefits of sophisticated social programs, including a free health care system and education. Bahrain has traditionally boasted an advanced educational system which, setup in 1919, also opened its doors to educate women two years later. Schooling and related costs are entirely paid for by the government, and primary and secondary school attendance rates are high. Bahrain also encourages institutions of higher learning, drawing on expatriate talent and the increasing pool of Bahrainis returning from abroad with advanced degrees. Additionally, Bahrain University has been established for standard undergraduate and graduate study, and the College of Health Sciences – operating under the direction of the Ministry of Health – trains physicians, nurses, pharmacists and paramedics. The national literacy rate for the total population is 89.1 per cent with the rate of functional literacy for males at 91.9 per cent and eighty-five per cent for females. On the United Nations Development Program's Human Development Index (HDI), which rates nations based on their relative life expectancy, education and standard of living, Bahrain ranked high at 39th in the world, with the only Arab country to place higher being Kuwait, at 33rd.

Investment overview

Bahrain's role as a regional finance center developed because of its international standards facilities, strong regulatory environment and low taxes. International investors want the security that an effective regulatory framework creates and Bahrain's commercial law and dispute resolution mechanisms are effective and efficient, while the GCC's Commercial Arbitration Centre is also a recognized legal body for finance issues. In addition, Bahrain is the most open economy in the region and has a long history of interaction with more developed financial markets, corruption is mild compared to the Kingdom's neighbours and property rights are well established and adhered to, though 'bureaucratic inefficiencies do arise and investors can find inconsistencies in the interpretation and application of pertinent regulations' (Dun & Bradstreet 2004, p. 48).

The government is keen to encourage foreign investment to finance economic diversification and, in turn, achieve sustainable economic growth. The commercial company law introduced in January 2002 has increased the scope for foreign ownership so that non-Bahrainis are also now able to own land in restricted areas and a new foreign investment law is in the process of being promulgated. However, a long history of vested interests and concentration of wealth and power inhibit full liberalisation (Dun & Bradstreet 2004, p. 48). Efforts to maximise the employment of Bahrainis may also obstruct the progress of investment projects. In addition, the small size of the Bahraini economy limits the scope for investment projects, while the financial sector is served by a large number of small institutions, which cannot compete on the global stage (Dun & Bradstreet 2004, p. 48). A reform strategy prepared by the EDB of Bahrain includes plans to speed up the privatisation process, improve flexibility in the labour market, reduce bureaucratic bottlenecks and increase the capital of the Bahrain Development Bank (BDB) six fold.

The EDB prepared these ambitious economic reform plans in conjunction with consulting firm McKinsey. According to the EDB website, McKinsey's Middle East managing director says Bahrain could increase its GDP to US$26.5-billion – more than double 2004 estimate – by 2015. Other ten-year targets include upping per capita income to BD12,000 (US$31,800) from an estimated BD5,108 (US$13,585) in 2004, and creating 150,000 new jobs. Yet although the reform strategy has the backing of the crown prince, resistance from other political and bureaucratic interests may well slow its implementation and cause some of the plans to be dropped altogether. Proposals published by the EDB and McKinsey include establishing an independent, professionally managed company to oversee the privatisation of the state's minority stakes in many companies. The report also suggests fast-tracking high priority investment projects, and changing the requirements for investments to be approved so that companies would automatically gain approval unless their sector was blacklisted, rather than having to wait to be added to a white list. However, there could be political resistance as not all members of the ruling family share the Crown Prince's enthusiasm for market methods and some members of the elite may wish to protect their own economic interests, including their patronage networks (Dun & Bradstreet 2004, p. 8).

Foreign investment has been primarily encouraged in sectors that are export-oriented and do not compete directly with local producers. Regulations allow 100 per cent foreign ownership of new industrial ventures or service companies with their regional headquarters located in Bahrain. The government also allows the establishment of representative offices or branches of foreign companies without local sponsors. Foreign firms receive the same investment incentives available to Bahraini companies, including personal and corporate tax exemption, no restriction on capital and profit repatriation, and duty-free access to GCC member states for products manufactured in Bahrain. Manufacturing investments receive incentives such as electricity rebates, 100 per cent rebate of customs duties for the first five years for all industries, export credit facilities, and tariff protection – subject to the approval of the National Committee and Tariff Protection (*Gulf Daily News*, 17 Nov. 2005). As Sheikh Mohammed bin Essa al-Khalifa, CEO of the EDB noted:

Our greatest challenge is creating awareness and packaging our offer correctly. Bahrain has a very good value proposition, but not enough people know about it...having identified which economic clusters Bahrain can compete in effectively, we target investors and companies with bespoken value propositions' (*Innovation: the cost of entry* 2006, p. 47).

Infrastructure to support the present economy

The Bahrain Government has substantially stepped up its efforts to develop infrastructure as a step towards diversifying its economic base, as is noted by a report from Global Investment House, *Global Economic Research – Bahrain, Economic and Strategic Outlook* (2004, p. 12), and shown in Figure 4:4 (below). The entire GCC region is witnessing a real estate and construction boom and Bahrain is part of this, with several billion dollars worth of projects in progress or on the horizon. There are also plans being developed to upgrade the Bahrain's entire road network and construct a causeway connecting the Kingdom to Qatar, as well as building four new towns with 250,000 new homes (*Bahrain boosts infrastructure spending* 2004, p. 1).

Figure 4:4, Identified projects in Bahrain over US$ 500 million – 2004

(Estimated Cost in US$ millions)

Project	Estimated Cost	Purpose
Alba Fifth Potline	1,700	Additional 300,000 tones per year capacity
Bapco Petrochemical Plan	1,500	Naptha based cracker
Bahrain Financial Harbour	1,300	Commercial Development
Durrat Al Bahrain	1,200	Tourism Island Resort
Amwaj Islands	1,000	Tourism Island Resort
Khalifa bin Salman Container Port	1,000	Construction of new port
Bapco LSDP Unit	685	40,000 b/d LSDP unit
Al-Areen Desert Resort	600	Tourism Spa resort and hotels
Al-Ezzal Power Plant	600	Power plant w/ capacity of 370/470 MW 2006
Lulu Tourism Resort	530	Tourism Artificial island
Desalination Plant	500	Ministry of Water 60 million gallons/day
Equestrian Centre and Resort	500	Tourism racetrack and golf course

Key: Alba- Aluminium Bahrain (Aluminium Extrusion Company); Bapco – Bahrain Petroleum Company (Down stream petroleum processing company); Durrat Al Bahrain – Luxury residential villas; Amwaj– Ownership villas.

(Source: Ministries of Finance; Economic Development Board; MEED)

Bahrain Financial Harbour (BFH)

The US$1.3-billion Bahrain Financial Harbour is expected to be the flagship of the Kingdom's future economy, built with the goal of elevating Bahrain to the world financial stage on par with New York, London, Hong Kong and Tokyo. Just over half completed in 2006, and expected to be finished in 2009, the BFH is slated to be a 'centre for financial excellence' – i.e. key infrastructure for the finance industry, directly providing employment for 2,500 people. Covering an area of approximately 58,000 sq.m., the BFH includes the 50 storey Dual Towers, the Harbour House and the Financial Mall.

Power sector

Bahrain has been witnessing occasional power shortages in summer and plans to overhaul and upgrade its power infrastructure as part of its strategy to provide the optimal environment for attracting foreign investment (*A model success* 2006, p. 118). To achieve this objective, the government has awarded a contract to foreign firms to draw up a master plan of Bahrain's power and water requirements from 2006-20. In early 2006 a US$378-million deal was announced to sell the Kingdom's al-Hidd water and power generation plant to an international consortium consisting of companies from the UK, Belgium and Japan. The companies have agreed to expand and develop the plant which currently provides 1000 MWs of power and 113-million litres of desalinated water (*A model success* 2006, p. 119). In 2004 the government also award a contract to foreign companies to build the al-Ezzel 1000 MW power plant, which should completed by later in 2007. AMEinfo, the online publication covering Middle East finance and economy, in a March 7, 2004 article *Bahrain Boosts Infrastructure Spending*, characterises Bahrain's infrastructure developments in the following way:

> The challenge ahead is the ability of the government to fund its various infrastructure projects. Funding such a huge investment is likely to translate into increased indebtedness, putting some pressure on Bahrain's creditworthiness and at the same time successful implementation of these schemes would help the economy grow at a faster rate in the long-term. The success of the above growth plans will be largely dependant upon the effectiveness of communication network which would facilitate e-business, wireless network, and other state of the art telecommunications facilities – all of which is best facilitated by a fully liberalised telecom sector.

Telecommunications

Among the most profound occurrences in the Bahraini economy in recent years has been the liberalisation of the telecommunication sector. Government's aims in liberalising the telecommunications industry in Bahrain fall into four broad categories:

(1) stimulating economic activity generally, (2) creating a free market environment for telecommunications to attract private investment in the industry, (3) turning Bahrain into the communication hub of the region to boost Bahrain's attractiveness as an international centre for business and investment, and (4) offering premium quality telecommunications at the most competitive price while ensuring subscriber's needs are met (*No Regrets, No Turning Back 2006*, p. 170). Technically Bahrain's telecommunications went from a monopoly service to a liberalised market in two years under the watch of the Telecommunications Regulatory Authority (TRA), though positive results in the mobile sector have not been matched thus far in fixed-line service or Internet access. A 2006 study by the Oxford Business Groups notes that Bahrain's market for internet service provision is small yet 'fiercely competitive' and that while licenses have been granted for many new operators to enter the market, most have not. As an example the study notes that while seventeen licenses have been granted for new ISPs, only four are so far operational, and what may transpire in Bahrain could mimic what occurred in Saudi Arabia with 'a rush of mergers and acquisitions that will lead to a smaller number of stronger companies. Saudi Arabia had forty ISPs but this has now been trimmed down to twelve strong players' (*Dial tones at the ready* 2006, p. 168).

The government wants Bahrain to establish itself as a leading participant of the emerging global economy. In order to get there, Bahrain must create an 'information society' in the Kingdom with a competitive advantage over regional rivals, and electronic access to government services will become increasingly important to citizens. The government had planned to have the majority of public services available online by the end of 2005, though to date the state of government e-services would best be described as 'in progress'. The United Nations Economic and Social Commission for Western Asia (ESCWA) noted that the Kingdom has adequate telecommunications services for its present needs, though major upgrades in service and infrastructure will be necessary for Bahrain to become the 'information society' it seeks to be (*Profile of the Information society in the Kingdom of Bahrain* 2003, p. 20).

E-government

The Bahrain e-government strategy is made up of five key projects: a National Dataset project, a Security Strategy Implementation project, a Hardware and Software upgrade Project, a Government Data Network Project as well as an Applications Transformation

Project. Alongside these, a National Smart Card and Public Key Infrastructure (PKI) project will result in a single card for citizens and expatriates which will give access to government services and support an 'e-purse' payment mechanism. Batelco has signed an agreement with Bahrain's Central Informatics Organization, which manages information technology for the government for providing communications technology for the e-government project. The proposed system will integrate Bahrain's back end systems, including national databases, immigration registration systems, customer relations management systems and other services. For these systems to function properly, it is imperative that these projects have access to an advanced telecommunications infrastructure.

Privatisation and liberalisation

Zakaria Hijres, the former CEO of the EDB, was of the opinion that the vehicle of sustainable economic development ought to be the private sector, and that the role of government in Bahrain ought to be that of a 'facilitator and regulator, rather than service provider and investor', (*Treading the Board* 2005, p. 55). At the same time Mr. Hijres also advocated a cautious approach be taken to privatisation so as not to exacerbate the unemployment woes of the Kingdom. Overstaffing in government organizations suggests that there would be significant redundancies after privatisation. Additionally, with an increasing number of people no longer dependent on the government for employment, there is concern within the ruling family that loyalty to the state and the ruling family may erode. This would damage the paternalistic social contract on which the state is based, under which the ruling family provides an appropriate standard of living in return for the right to govern (*Developing Representation* 2005, p. 13). The move towards a limited form of democracy is a signal that this long-established contract is being eroded, and theoretically allows the government to implement economic policies that in the short term could upset the social contract. Due to these factors, the privatisation process adopted by Bahrain must ensure that job opportunities created instead of resulting in more unemployment, while at the same time the potential risk for increased unemployment appears to be one of the prime reasons for the government's reluctance to engage in large-scale privatisation. Privatization of public transportation is case in point. The public transport was contracted out to a private company to run with no sale of assets or transfer of shares from public to private. This way, employee retrenchment was avoided, thus not adding to the current unemployment levels.

In terms of supply, the degree of privatisation and liberalisation are important. From the demand side, well-organized large user groups are clear winners from restructuring leading to economic growth. Liberalisation leads to healthy competition and demise of monopoly operators. An understanding of the socio-political set up and the level of economic growth is needed to appreciate the how the societal preferences are given attention to by the country's ruling authorities. The liberalisation moves should result in improved economy in order to enhance the competitiveness of domestic firms in world markets, promote economic growth and achieve sustainable development for Bahrain. However the process of liberalisation in Bahrain, and of specific interest to this thesis telecommunications liberalisation, takes place within the context of an Islamic nation with deep social and cultural divides, and a ruling family interested in growing the economy while both ensuring its own authority and preserving traditional values – in this regard to these factors and examination of the business viability of telecommunications liberalisation in Bahrain is warranted, and is thus the subject of the next chapter.

* * *

Chapter 5: Liberalisation in an Islamic cultural context, regulation of information and business viability

Introduction

An understanding of the relationship between Islam and market capitalism is necessary to understand the general context in which liberalisation is carried out in the Muslim world, and an examination of the cultural and socio-political mechanisms unique to the Kingdom that relate to the liberalisation process will also be enlightening, and this chapter will endeavor to examine these. Included in this discussion will be the measures in place to ensure national security and compatibility between telecommunications liberalisation with other economic and social objectives, and given this, what role is the telecommunications regulatory authority playing to shape the liberalised environment.

Islam and free market capitalism

Bahrain being an Islamic Kingdom, it is meaningful to understand the relationship between Islam and free market capitalism because liberalisation accelerates free market capitalism. Is Islam fundamentally opposed to market capitalism? Despite modern-day misconceptions of Islam, the answer is quite the opposite. The Prophet Mohammed had actually been a merchant tradesman up until the age of forty when the angel Gabriel came to him and he began his religious journey. Even during the later half of Mohammed's life it was common for him to comment or act in ways supportive of free markets, as when he professed that price controls were forbidden – 'prices were in God's hands and he wished to meet God without having to answer for some injustice that he might commit in this respect' (Bartlett 2001). Many of God's revelations to Mohammed, as recorded in the Holy Qur'an, also seem to support the idea of fiscal responsibility and open commerce, such as in 'O you who believe! Squander not your wealth among yourselves in vanity, except it be a trade by mutual consent… And whoso does that through aggression and injustice, We shall cast him into Fire' (An-Nisaa' 4:29). This has given rise to the view among many academics and researchers that Islam's religious base is 'fundamentally pro-capitalist' (Bartlett 2001).

However with the first of the roughly 500 years of Christian Crusades and invasions into Muslim countries that began in 1095, there also began a shift towards introversion and religious fundamentalism which led to a steady decline in the scientific and economic accomplishments that had until then characterised the Islamic world. In some ways the effects are still evident today in the opposition some segments of Islamic society express towards Western cultural practices. However, this type of resistance to capitalism should be seen as '...less based on Islam's affinity for socialism, than on its fear of modernity' (Bartlett 2001).

Islam, oil and the private sector

The discovery and exploitation of oil and gas resources have spurred the most profound changes in the social and economic makeup of the Muslim World since the European Crusades, with more than sixty-five per cent of the world's know oil reserves and more than half of its natural gas being located within Muslim countries – with the largest part of that being located in the GCC countries and Iran (BP Amoco Statistical Review of World Energy 2000 as cited in Karim 2001, pp. 1-2). In his 2001 paper *Oil, Islam and International Petroleum Industry Legal, Economic, Political and Cultural Issues*, Muhammad Karim examined how the oil boom through the later half of the 20th century resulted in massive demographic shifts in Arabian Gulf countries as new economic opportunities drew rural populations into the cities and increased prosperity lead to the population of the region doubling between 1970 and 1992 – in Saudi Arabia the population tripled over the same time frame. This rapid population growth also led to the new demographic reality where today some seventy-eight per cent of the population in GCC countries is less than thirty-four years old. As Karim notes, this situation poses substantial challenges for the ruling regimes in the region:

> The exceptionally high number of youth means that the government has to spend much more in education and then the graduates are to be absorbed in the job market. Less than fifty per cent of Saudis graduating from Universities every year are able to find jobs... In an area where local participation in job market is among the lowest in the world, it is bound to increase discontent among the masses (Karim 2001, p. 4).

Karim argues it is the contrast between the vast amount of oil wealth controlled by the ruling regimes in the region and the 'unfulfilled expectations of the masses' to gain benefit from this wealth that results in the general population becoming '...more conscious and critical of prevailing authoritarianism, unpopular and corrupt leaders, and lack of socio-economic justice and equality...' (Karim 2001, p. 3). The ensuing 'ideological void' is then filled by Islam in light of it teachings regarding social and economic equality and fairness – the very thing denied to most people in the region – 'thus the mosque became the centre of this new movement in the lack of any democratic and representative institutions' (Karim 2001, p. 4).

The current geo-political makeup and power structures of the GCC region, and the Middle East more broadly, owe their foundations to the arrangements created post WWI and WWII as the former colonial powers of France and Britain relinquished their control, while the US has wielded heavily influence in the region since. Political stability in such a resources rich and strategically significant region was seen as a paramount concern and thus monarchies were installed to govern and given substantial backing by Western interests, thus resulting in the current pro-Western leanings of the governing regimes in GCC states (Karim 2001, p. 5). The oppressive and sometimes brutal measures employed by some Middle Eastern regimes to quash political dissent and unrest have met with little to no criticism from Western governments whose interests, for all intents and purposes, lay in propping up the ruling regimes to ensure the security of the oil supply upon which their Western economies depend.

> Thus in a broad sense oil is seen as a negative influence on the society and a tool by virtue of which the unpopular and repressive regimes are holding on to power… The presence of American forces in the Middle East region since the Gulf war is being regarded as a western move to militarily protect its oil interests and hence is a source of much opposition to the regimes in Saudi Arabia and Kuwait. Thus in a popular Islamic culture, oil is viewed as a negative and corrupting force which has invited western penetration and hegemony (Karim 2001, p. 5).

The vast oil wealth has also changed the relationship between governments in the region and their private sectors. Beginning with Iran in 1953, governments around the Middle East began nationalising their oil industries by creating powerful SOEs that poured huge amounts of wealth directing into government coffers, which at the same time lead to the marginalisation of the economic importance of the private sector (Karim 2001, p. 6). As national treasuries expanded, the state became the biggest player in the economy, leading the private sector to become dependant upon public sector spending for its growth and survival and effectively hobbling prospects for progressive private sector development.

Bahrain and cultural change

While Bahrain as a Muslim country is not opposed to economic development along capitalist lines, few citizens of the state, let alone the ruling Royal Family, would wish to see the country depart from its religious faith or adopt fully Western secular lifestyles. The growth of telecommunications that is necessary to establish the infrastructure for developing a successful modern economy, if unregulated, would inevitably expose the Kingdom to the risk of cultural change towards a more globalised, or as some would fear more Americanised culture. Braithwaite and Drahos raise salient issues regarding nations' ability to maintain their 'cultural sovereignty' in face of the ever-more freely flowing content the global expansion of telecommunications networks entails:

> The US is the world's major supplier of cultural information. While theorists of culture elevate difference, an extraordinary number of people are at any given moment glued to episodes of *Baywatch* and *The X Files*, to mention only two US cultural flagships. US cultural models are seen and imitated in many places. The success of US culture abroad means that US concerns about culture are not, unlike those of other countries, preservationist concerns… Developing countries have long complained hat the emerging communications order will erode their sovereignty. Some Western states, notably France, have articulated a similar fear (Braithwaite & Drahos 2000, p. 357).

However, Bahrain has always been a relatively tolerant and liberal society in comparison to its regional neighbours (Al Najjar 2002, p. 25). As King Hamad remarked in November 2003, 'Bahrain must develop an open society which can cope with a world of rapid change. Human security, the rights of women and children and the right to freedom of expression are among the issues which government bodies must continually follow up' (Bahrain Economic Issues 2003, p. 2).

The role of women in Bahrain emphasises the progress the Kingdom has made in regards to social equality and openness, where, as stated in Chapter 4, women in Bahrain were the first in GCC to be able to both vote and run for office in the 2002 election. While none garnered enough ballots to win a seat, King Hamad attempted to alleviate this by appointing six women to the Shura Council – also where Bahrain's Jewish and Christian minorities' leaders sit. Dr. Nada Haffadh became the first female cabinet minister in 2004 when she was appointed to the Ministry of Health portfolio, and Haya bint Rashid al-Khalifa became the first Arab woman president of the UN

General Assembly in 2006 when Bahrain was elected to head the world body (*First Arab Women President of UN General Assembly Shaikha Haya of Bahrain* 2006).

Social stability and the increasing need for economic growth

The course towards a more open environment in Bahrain, both socially and economically, is imperative, as show by Laurence Louër in his 2004 paper 'Bahrain's Fragile Political Reforms' for the Arab Reform Bulletin at the Carnegie Endowment for International Peace. Louër notes that while King Hamad's reforms since taking the throne in 1999 have improved political freedoms dramatically in Bahrain, '...in a country where 70 percent of the population is Shiite but the key political positions remain controlled by Sunnis, especially by the royal family, the reforms have done little to address Bahrain's underlying socio-political problems'. Louër notes the initial optimism following the 2001 constitutional plebiscite disappeared when King Hamad appointed the Consultative Council to restrain the power of the elected chamber, and as this led to the Shiite election boycott and a subsequent massive overrepresentation of Sunnis in the new parliament, 'rather than diminishing the sectarian character of Bahraini politics and easing the gap between Shiite demographic and political power, the elections have exacerbated them'. However sectarian representation moved slightly more towards resembling the demographic makeup of the wider population in the most recent election on November 25th, 2006, where only a partial boycott by Shiite groups lead to the election of 16 Shiites to the 40-seat lower house of parliament (*Bahrain Parliamentary Election* 2006).

The elections have also exposed rifts inside the Shiite community, where many of the older leaders have pragmatically recognized that some form of cooperation with the ruling family is the only viable political option for progress, while the younger generation is showing more militancy, ideologically demanding full political and economic rights and representation while regarding 'cooperation as capitulation' (Louër 2004).

> Caught between the contradictory demands of their militants and the regime, the Shiite movement's leaders have chosen to stand openly by the former while discreetly assuring the latter of their readiness to compromise. In adopting this balancing act, they have sought to prevent a more radical leadership from emerging (Louër 2004).

Adding to the tension, Louër notes that while the growth in the population is generally outstripping the number of jobs available in the economy, the situation is exacerbated in the Shiite community which make up the underclass. In this respect attracting foreign investment to stimulate job growth in the economy is less of a choice and more of a necessity to maintain social stability, and hence the importance of a successful telecommunications liberalisation process in helping to foster that economic and employment growth in Bahrain.

Regulation of the news media in Bahrain

In Chapter 3 it was discussed how advancements in telecommunications technology have brought about a convergence in the industries of 'telephone, mass media (print, broadcast and cable), consumer electronics and computing', resulting in the evolvement of a type of unified 'multimedia information industry', with many of the means for the communication and transmission of information now increasingly substitutable for each other (Chan-Olmsted and Jamison 2001, pp. 4-5). What is often of interest to government authorities is not simply the means of transferring information, but also the actual information which is being conveyed and telecommunications liberalisation is likely to bring about much more readily available resources for sending and receiving information. In this regard, it is important to review the state of media regulation in Bahrain, as the regulations governing the press and the means the press uses to 'get the story out there' will undoubtedly have consequences for the telecommunications industry, especially with regards to the Internet.

Legal framework

The 2002 Constitution has three articles specifically relate to media and freedom of speech (*Internet Filtering in Bahrain* 2005, p.15):

> *Article 23*
>
> Freedom of opinion and scientific research is guaranteed. Everyone has the right to express his opinion and publish it by word of mouth, in writing or otherwise under the rules and conditions laid down by law, provided that the fundamental beliefs of Islamic doctrine are not infringed, the unity of the people is not prejudiced, and discord or sectarianism is not aroused.

Article 24

With due regard for the provisions of the preceding Article, the freedom of the press, printing and publishing is guaranteed under the rules and conditions laid down by law.

Article 26

The freedom of postal, telegraphic, telephonic and electronic communications is safeguarded and its confidentiality is guaranteed. Communications shall not be censored or their confidentiality breached except in exigencies specified by law and in accordance with procedures and under guarantees prescribed by law.

The Ministry of Information and Broadcasting controls licensing for media outlets, with newspaper licenses requiring the endorsement of both the Minister of Information and the larger cabinet. The Press, Print and Publications Law No. 47 of 2002 requires minimum capital investments in order for a publication to begin operations, with daily newspapers needing BD1-million (US$2.65-million) paid-up capital, BD250,000 (US$662,000) for non-dailies, and BD50,000 (US$132,000) for 'specialty' newspapers (*Internet Filtering In Bahrain* 2005, p. 4).

In regard to telecommunications more generally, the 2002 Telecommunications Law stipulates fines and/or jail sentence for an individual who 'uses telecommunications equipment or the telecommunications network intending to send any message in the knowledge that the contents of the message are false, misleading, offensive to public policy or morals, endanger the safety of third parties or prejudice the efficiency of any service', (Legislative Decree No. 48 Promulgating the Telecommunications Law 2002). Telecommunications companies themselves must 'provide all technical resources, including telecommunications equipment, systems and programs relating to the telecommunications network... to allow security organs to have access to the network for fulfilling the requirements of national security', (*Internet Filtering in Bahrain* 2005).

Soon after the 2002 elections, government enacted law allowing authorities to fine media organizations, jail persons associated with them and even close them down completely if found to have infringed on state security, promoted immoral behaviour, 'slighted the Islamic faith, the unity of the people, the person of the king, or created divisions or religious differences', (*Assessment of Shiites in* Bahrain 2004). A reporter convicted of 'blaspheming the king, denigrating the state religion, propagating national disunity and sectarianism, or calling to overthrow the political regime, could be jailed for a minimum of six months' (*Internet Filtering in Bahrain* 2005).

In short, the news services in Bahrain are the subject of concerted government scrutiny. As the Prime Minister emphatically stated in July, 2003, 'Freedom must be within the boundaries of protecting the country's interests' (*Internet Filtering in Bahrain* 2005). The authorities in Bahrain also monitor television broadcasts and a number of foreign media agencies have been censured, such as the Doha-based Al-Jazeera which has had reporters banned from Bahrain, though the state does allow many international networks, such as the BBC, CNN, FOX, and other major Arab-Language networks to show their programming without censorship.

Internet regulation

The Ministry of Information and Broadcasting requires all ISPs and websites to be registered with the ministry before becoming active on the internet, though relative to the Internet censoring in most nations, Bahrain's practices are fairly reserved. Even in countries widely revered for their freedom of speech and expression, such as Canada and Germany, there is a well established precedent that material deemed excessively offensive be blocked. The organisation Internet Censorship Explorer, in a March 28, 2005 article entitled *Free speech or hate speech* cites a Canadian Press story where 'six sites that fomented hatred against Jews or advocated terrorism or suicide-bombing have been pulled by the host in Kelowna, B.C... The Criminal Code of Canada contains sections pertaining to hate propoganda as does the Canada Human Rights Act.' The European Digital Rights (EDR) group, in a March 10, 2005 article *Search engines voluntarily block harmful content in Germany* states the following:

> All the major search engines in Germany have voluntarily agreed to filter out harmful content for their German audience. Google, Lycos Europe, MSN Germany, AOL Germany, Yahoo, T-Online and t-info have founded a self-regulatory organisation that will voluntarily block a list of URLs considered to be harmful for the youth. The list is provided by a governmental media classification organisation, 'Bundesprüfstelle für jugendgefährdende Medien' (BPJM)...The BPJM gives the following definition of harmful content: 'Objects are considered harmful or dangerous to minors if they tend to endanger their process of developing a socially responsible and self-reliant personality. In

> general, this applies to objects that contain indecent, extremely violent, crime-inducing, anti-Semitic or otherwise racist material'.

The EDR article then notes that the search engines will not make public the sites which are being blocked, making access to the information they contained severely restricted for the German population. This would indicate that in Germany, as in Bahrain, there exists an apparent conflict between what is available on the internet, and what a country's government would feel is prudent for its citizens to be able to access. This would seem to show that irrespective of the political background, countries do need certain regulatory measures to protect the societal and cultural values of the country.

The Open Net Initiative (ONI) in its study Internet filtering in Bahrain in 2004-2005 tested some 6,000 website and found only eight were inaccessible – three were pornographic and the rest were of a political and religious nature, though slight alterations to the URL in the web browser usually allowed for similar, if not identical material to be viewed. This led the ONI to conclude that 'the level of blocking is extremely low, indicating that the effort is likely symbolic in nature and does not present a serious challenge for its citizens in finding internet content' (*Internet filtering in Bahrain in 2004-2005* 2005, p. 3).

This is not to say the Bahraini authorities do not have the ability to impose harsher censorship measures. Existing legislation would allow for far stricter controls, and because there is a single primary in ISP and IXP, executing a more authoritarian grip on information flows would be relatively easy. The sporadic arrest and interrogation of Bahraini bloggers or website editors in the last several years also shows that government is not above flexing its authority over web content. Thus it would seem that though government is willing to be relatively *laissez-faire* in regards to the free-flow of information on internet, there are limits, and the Bahraini government has developed both the legal and technical mechanisms necessary to enforce these limits to protect the sovereignty and national identity of the country. Maintaining this upkeep of societal values in a liberalised telecommunications environment is, and will continue to be, of significant importance. While the liberalisation process launched by the government picks up momentum, it is contingent upon the government to ensure that the social stability, as well as the Islamic character and culture of the Kingdom are continually upheld, as is required by the Constitution.

Given the above stated involvement of government in regulating information, a brief overview of the telecommunications regulators ability to act independently is now warranted, as well as an examination of subsequent business viability.

The telecommunications regulator and business viability

The TRA enacted its Final Access Regulation in May 2005, outlining 'when and how licensees, such as new internet service providers, can use the telecoms network and facilities of other operators to provide services to consumers and at what cost' (*Telecommunications Regulatory Authority responds to the need to resolve access issues as soon as possible by issuing a Draft Regulation on Access* 2005). The gist of the regulation is to require an operator with dominance over market access to make it known publicly and within a reasonable time limit the costs and conditions under which other service providers could use its networks to enter the market. The TRA then has the authority to judge whether the costs and conditions are reasonable, and if not, to mandate that they be changed (*Telecommunications Regulatory Authority responds to the need to resolve access issues as soon as possible by issuing a Draft Regulation on Access* 2005). One might expect that as Batelco currently holds a monopoly over fixed-line service and a 'virtual monopoly' over Internet provision, it might meet the criteria of having dominance over the market, however, the TRA has so far not been forthcoming with such a designation.

This has led to delays in the entry of new players into the market, stymied competition and stagnated developments in services and pricing, all the while massive growth in tertiary sectors of the economy in Bahrain, as noted in the last chapter, is increasingly demanding that these sorts of development in the telecommunications sector happen. Bahrain is enticing new financial institutions to set up their regional bases in the Kingdom and existing ones to enlarge, among the attractions being its convenient location, its renown for well structured and effective institutions, the investor friendly policies and relatively inexpensive operating environment (*IMF Country Report* 2006, p. 25). In its 2006 Country Report on Bahrain, the IMF notes (p. 25) '...other financial centers have tried to catch up. Such a process is inevitable. It need not be a threat, provided that Bahrain continues to offer an environment attractive to institutions that have an interest in operating and being seen to operate in a well-regulated and supervised jurisdiction'. Part of this 'continued attraction' is a telecommunications environment of exceptional quality and efficiency, which likely requires the TRA's effectiveness to rise considerably, and this will be examined in detail in further chapters.

Conclusion

In this Chapter it has been shown there is no intrinsic conflict between Islam and capitalism. The potential for cultural conflict arises with the idea that American values and culture will infiltrate on the coat tails of liberalisation and destroy the Islamic foundations of the Kingdom of Bahrain. However, the internal forces pushing for the liberalisation of telecommunications and the economy generally are considerable: there are fewer and fewer jobs available to the growing population and this problem is disproportionately severe in the Shiite community, who encompass some seventy per cent of the population and already harbour a deep sense of disenfranchisement against the Sunni elite. For the future social and political stability of the Kingdom, the economy must be liberalised to let the private sector develop and with it jobs for all Bahrainis. The economy is already expanding rapidly in the tertiary sector, and this sector is also demanding the liberalisation of telecommunications to allow further growth and to maintain the competitive advantage of the Bahraini marketplace. Regionally countries are becoming more competitive and trying to pull ahead of each other, and Bahrain cannot afford to let the monopolistic practices of Batelco weigh down the Kingdom's future economic prospects. A liberalised telecommunications environment, with an active and effective regulator to ensure competition, will fertilize economic growth through improved services, pricing and innovation – but what about values of the Kingdom? Is Bahrain not in danger of Americanization and losing its cherished Islamic character in this rush to grow?

As has been shown in this chapter, the government has the ways and means, through legislation and technical capacity, to protect that which is held as sacred and prohibit that which is offensive. This allows the government to strike a balance between allowing room for the new technologies to penetrate deeper into the social and business spheres, while at the same time ensuring the identity of Bahrain is not lost. As has been noted in this and the previous chapter, Bahrain is already a relatively open society and has been historically. Telecommunications liberalisation can, if approached properly, help herald the evolutionary progression of the Bahraini economy and society, and while government is allowing leeway for these new developments to be explored, such as with the internet, it retains the ability intervene if ever aspects of progress stray into the undesirable waters. A more thorough examination of the telecommunications situation in Bahrain, its regulation and the views of policy makers and industry players in the liberalisation process is now warranted, though first the methods used to compile this information must be scrutinized, and this will be done in the next chapter.

*   *   *

Chapter 6:
Methodology

Introduction

This chapter focuses on the various methodologies used in this study to collect data and information related to the telecommunications liberalisation process in Bahrain and to justify the predominantly positivistic approach taken within this thesis. Generally speaking, this author has acquired subjective material from interviews and surveys regarding telecommunications in Bahrain and its wider socio-economic externalities, then triangulated this material to produce an effective argument that is able to be justified through a number of reinforcing sources of evidence. It can, however, be argued that the issues outlined in the preceding objectives do not necessarily have definite and unchallengeable solutions. For example, the advantages of liberalisation over monopolisation by Batelco for the Bahraini economy or society will clearly differ depending on the values and needs of who is asked for their opinion. A change creating more efficient and cheaper Internet services for a particular consumer may represent a serious competitive threat to an employee of the previously nationalised business. Similarly, opening up the telecommunication services of Bahrain to foreign suppliers can promise some consumers greater access to Western culture while to others it may represent a dangerous slide away from the traditional Muslim practices which characterise the national identity of the state. Within this context the study will have to look at success of privatisation generally and liberalisation specifically, from several the stakeholders' point of view – such as the government, consumers, employees, and operators.

Thus the epistemological basis of the study cannot be an entirely rational one that maintains there is a single observable and verifiable answer to the questions posed by the study. Nevertheless, this does not mean there are no plausible answers to the questions raised in this study, nor that the ideas put forward reflect wholly the personalised and specific perspective of the author, as the following sections explain. A completely phenomenological perspective is not likely to produce a particularly heuristic basis for the study. In an ideal world the methodology could be based on a critical realist framework as suggested by Bhaskar (cited in Dobson 1999, p. 268) which holds that while rational answers may exist to social problems, uncovering these solutions is not always, or even normally, possible. At best, the author identifies the correspondences between a set of values and observed events relating to a problem which then may suggest the likelihood that a certain assertion is closer to the unobservable truth than any of the other apparent options.

It is meaningful to note Goldthorpe's contention (cited in Mahoney 2003, p. 14) that 'some process existing in time and space, even if not perhaps directly observable, that actually generates the causal effect of *X* on *Y* and, in so doing, produces the statistical relationship that is empirically in evidence'. Due to practical limitations, it is not possible to account for each and every mechanism of liberalisation, but observable results such as increased economic activity, or greater rates of Internet access, ought to imply that there is a correspondence between liberalisation and the subsequent changes, amounting to empirical documentation. To look closer at the affective link between telecommunications liberalisation reform and the ensuing results Bennett defines '...causal mechanisms as ultimately unobservable physical, social, or psychological processes through which agents with causal capacities operate in specific context to transfer energy, information, or matter to other entities' (cited in Mahoney 2003, p. 14).

In light of these problems it is worthwhile at this point to outline a number of subjective approaches and review the extent to which they can be applied to the objectives of this thesis.

Subjective approaches to qualitative data analysis

Ethnographic approach

Case study data analysis has been used for analyzing the qualitative data collected by way of interviews, with Bahrain's liberalisation process being the case study in this context and an ethnographic approach being taken to the research. According to Robson (2002, p. 487), 'the ethnographic approach is typically exploratory. It is a method of recovery, well suited to the study of the unfamiliar, the new and the different'. Here the word 'ethnography' is appropriate in relation to any qualitative study aimed at producing an account which is extensive and thorough, and the word 'qualitative' is used to differentiate the study from 'quantitative', or statistically oriented investigation (Hoey n.d.). According to Hoey, quantitative and qualitative approaches frequently complement each other but are in essence distinct. As well, Hoey notes that interviews are a means to garner 'targeted' data though the use of unambiguous but open-ended questions, though there are many types of interviews and everyone has their own ethnographic approach. The concept is to grant the interviewee latitude in answering and not to restrict them to a template type of response – as Hoey remarks 'In most cases, an ethnographic interview looks and feels little different than a casual conversation'. As such, the ethnographic approach is appropriate for the purposes of this thesis, and has been adopted into the qualitative analysis of the case study. Other source materials relevant to telecommunications liberalisation, such as articles, media reports, governmental and NGO studies have also been used as a basis for the analysis.

Phenomenological approach

Phenomenological research focuses on the subjective experience of the phenomenon studied. At the heart of phenomenological research is the attempt to understand a particular phenomenon – in the case of this research, telecommunications liberalisation is the phenomenon. It also has an influence on the general development of qualitative methodology, provides the philosophical basis for interpretive research strategies and is also linked hermeneutics, which is 'the art or science of interpretation' (Hall 2002).

All social science research involves interpretations and insights gained from hermeneutics that are relevant to many aspects of the research process. Hermeneutics is now applied more widely to conversations, interactions between people in different settings, and even fashion (Robson 2002, pp. 196-197). In regards to this thesis, interpretation of the information gleaned from the interviews is of primary concern, and thus hermeneutic approaches were applied. Hermeneutic enquiry adopts a dialogue nature. Initial understandings of liberalisation are refined by interpretation of the interview findings. This then raises further questions, calling for a return to the text and revision of the interpretation. For example, the parliamentarians commented in interviews that despite the entry of the second telecom operator (MTC-Vodafone), effective monopoly still exists in the telecommunications scenario. The author of this thesis then returned to the experiences of other countries and did an objective review to conclude that a duopoly scenario – stated in Chapter 8 – need not necessarily be an undesirable situation.

Limits of the subjective approaches

The subjective approach is not without its weaknesses. Robson's, in his 2002 work entitled Real World Research (2002, pp. 170-173) notes that the primary failing comes in '...not considering alternative explanations or understandings of the phenomena you are studying'. For instance, there were a number of instances noted by the author of this thesis in the course of his research where telecommunications liberalisation was not always necessary for a nation's economy to thrive. As well, Robson notes how the veracity of the study can fall victim to 'reactivity, respondent biases and researcher biases' – in regards to this thesis, special attention has been given to minimize the impact of bias upon the study. As Robson explains, 'respondent bias' can cover the spectrum from misleading and/or incomplete answers on one end, to an interviewee offering exactly the answers he or she feels the interviewer wants to hear on the other. 'Researcher bias' involves the prejudices and assumptions the interviewer or researcher carries with them already, which could affect the direction of the study, including what sources are designated to be consulted, who is asked to be interviewed, the information asked of them, and which answers and results are emphasized (Robson 2002, p. 172).

'Phenomenological approaches to qualitative research stress the importance of reflexivity, i.e. an awareness of the ways in which the researcher as an individual with a particular social identity and background has an impact on the research process' (Robson 2002, p. 172). To mitigate these threats to the validity, in the course of this thesis study the author has implemented a number of the recommendations Robson (2002, p. 173) cites from Ahern (1999, pp. 408-10), to achieve 'reflexive bracketing,' i.e. 'using reflexivity to identify areas of potential bias'. For example, this author has ensured that he has 'reflected' on how the interview results were analyzed, how much each source was quoted relative to the other sources in this thesis and why.

Validity

Information that is gathered, if it is to be of use, must be a quantification of whatever it is that it claims to be a quantification of, and here is where the notion of validity comes into play: how far does the information gathered go in reflecting accurately what is actually taking place in the world and society. In this regard it is telling to look at how the number of unemployed has been determined over the course of the last couple decades (Livesy n.d., p. 4). While the numbers gathered by the census or other means are most likely reliable, what has changed is the boundaries of which social circumstances are a representative of meaning 'unemployed'; the definition of the term has been revised over and again by economists and bureaucrats to the point that when one speaks of the "unemployment rate" in 1985, and one speaks of the "unemployment rate" in 2005, these are effectively two different things, and one cannot validly compare 'apples with oranges'. As well, because statisticians do not actually add up every single person who is both pursuing employment and unable to find any in their calculations of 'unemployment', it is doubtful that the numbers they produce are a valid reflection of reality (Livesey n.d., p. 4).

The notions of reliability and validity are very much interwoven in sociological study:

> If data is reliable but not valid, then it may have limited use. We can make general statements about the world, but such statements may not actually apply to any one social group (such as the 'unemployed'). If data is valid, but not reliable, we may not be able to use it to make general statements about the world (for example, we may be able to understand something about one group of unemployed people that doesn't necessarily apply to all unemployed people) (Livesey n.d., p. 4).

Thus, when one examines that information that was gleaned from either primary or secondary sources, one should endeavour to ascertain the extent to which the data adheres to the structures of both being valid and reliable.

Triangulation

There is a diverse assortment of means available to researchers for the purposes of information collection for a study, and each has inherent in it various strengths and weaknesses; thus, it is prudent when a study is undertaken to utilize several avenues of data collection. In this way the process of collecting information for the study can be organized such that the strengths of one form of data collection compensate for where another form of data collection is lacking, and vice-versa (Livesey n.d., p. 5). Using different methods gives a 'fuller' or 'more complete' perspective of the subject of the study, allowing for observations that may not have been possible without the diversity of methods. Not only that, however, one can use the results of one method of data collection to check against the results of another method of data collection. If through different means, similar result were arrive at, then one can be more confident that the results one has achieved are in fact accurate. However, if through different means of data inquiry, different results were arrived at pertaining to the same object of study, then this would suggest to the researcher that he or she must 'go back to the drawing board' so-to-speak, and re-examine the results, research methods and so forth to determine the source of the discrepancy. This is called 'triangulation', a term derived from the surveyors' technique of double-checking they have measured the correct distance between two points by measuring off a third point, an equal distance away from one of the original points and at an angle of 60 degrees – if the remaining side of what should then form an equilateral triangle is the same length as the other two sides and at an angle of 60 degrees with both, then the original measurement has been confirmed; if, however, this is not the case, then the surveyors know they must re-examine their measurements (Livesey n.d., p. 5). 'Methodological triangulation' follows a similar concept of checking one methodology against another for corresponding results.

In this thesis the following approaches are used to analyze the data collection through interviews to double check the accuracy of the data collected.

Table 6:1 Approaches to data analysis

Approach	Helps in
Ethnographic	Qualitative analysis
Phenomenological	Understand a phenomenon
Hermeneutics	To interpret the findings

The positivistic characteristics of this author's method are expressed in the effort made to ensure the validity of results by tapping a variety of sources of information, thus strengthening the study's foundation, which Denzin would define as 'data triangulation' (Denzin 1988, pp. 174-175). To attain this and minimize the influence of bias inherent in any of the sources used, this author has utilized resources of a mixture of different natures – such as a diverse selection of written researches and relevant studies and person-to-person interviews with a wide range of concerned individuals. The mitigation of bias is essential for the credibility of the results. Though studying the relevant literature and theories may lead one to forecast results, interviewee answers and qualitative data can help determine to what degree these predicted results are actually realized.

Conceptual framework and justification

This work is a comparative analysis that uses theory and historical data to reach a better understanding of the liberalisation processes in the Kingdom of Bahrain. The research looks for possible causal connections that might offer theoretical insights that could be generalised to similar cases. In this research a previously proposed theory or statement is used as a template with which to compare the empirical results of the study. This

work uses the concept of the two tier approach for analysis proposed by Krairit (2001, p. 350). The first tier of analysis examines the adopted process with regards to international similarities, and the second tier is the comparison or variation of the adopted regulations against the implementation of the process in Bahrain. The first tier discusses international developments in telecommunications liberalisation and its effects as experienced by various developed and developing countries. These experiences act as a benchmark against which the Kingdom of Bahrain can assess the economic and social impact of its own liberalisation process. For instance, WTO membership and FTA agreements expect implementation of certain liberalisation measures. The second tier discusses the various problems related to implementation of the liberalisation policies in Bahrain, such as the TRA's independence to formulate and implement regulations being somewhat limited due to the presence of bureaucratic power which controls the entity. This has a direct impact on the extent to which it can enforce liberalisation regulations. The organisational structure of TRA permits political interference, which in turn weakens the effectiveness of the liberalisation.

The documentary data, while offering excellent detail, facts and analysis on the liberalisation process in Bahrain, cannot be used to accurately predict future trends. Thus, the documentary analysis results are reflected against the social and economic impact of telecommunications liberalisation to take a critical look at the development of the Bahraini telecommunications industry since its privatisation in 1980s.

Data collection procedures

This section describes how the data was collected for documentary research, interviews, and statistical data. The principal sources of data are; documentary evidence and interviews with policymakers, industry players and international organizations concerned with telecommunications. In the absence of adequate data on the liberalisation of monopolistic practices in the Gulf States, it was necessary to seek the views of individuals representative of the customers, government policy makers, the regulatory body and the media. Thus, the bulk of the information that was required to make this analysis meaningful has come from three main sources – documentary research, interviews, and field survey respectively.

Documentary research

Information on the political and economic history of Bahrain and its basic regulatory framework for telecommunications services was gathered and then processed and analyzed. A summary of the historical and documentary data for Bahrain was then used to prepare questions for the interview process. The data included statistical facts on all the three services – namely fixed telephone, cellular mobile telephone and Internet services – which were incorporated into the interview preparation. Next, the researcher gathered data on telecommunications regulations in Bahrain by referring to on-line data as well as locally available sources. Historical information and statistical data were gathered for the preliminary investigation conducted before the interview process, with the initial research data for this report being gathered mid 2003.

Primary sources used for the research include official communications, journals, newspaper articles, reports, commentaries etc., on privatisation and liberalisation in general and telecommunications privatisation and liberalisation specifically. Secondary sources included materials written some time after the privatisation and liberalisation process involving commentaries on the situation that has developed and events which have unfolded – for example, in media reports. Statistical sources used were census reports, numeric statements that support the privatisation and liberalisation case or otherwise. The material used includes published articles on privatisation and liberalisation – worldwide and in the Arab region – Middle East market overviews and analysis related to telecommunications, text books, and internet search results. A major portion of the articles were sourced form the Internet. Documentary research was carried out both before and after the interview process, and as new data and publications on telecommunications deregulations and liberalisation were constantly published, this researcher incorporated them throughout the analysis process.

Interviews

A research interview involves the researcher asking questions with the hope of receiving heuristic answers from the people who are being interviewed. It is of course, very widely used in social research and there are many different methods that can be used depending upon the subject and the epistemological standpoint of the interviewer. Robson (2002, pp. 270-272) discusses three types of interviews – structured, semi-structured and unstructured interviews: 'Data collection is not just a process of collection; it is also a process of creation – of using information in unique ways related to the purposes of the study' (Birley & Moreland 1998, p. 40). Accordingly, the author paid attention to the following while developing the data collection technique:

- The method must produce data that is relevant to the research questions on privatisation and liberalisation, and be able to provide answers or illumination on the topic.
- The technique must be convenient and relatively easy to use in the circumstances.
- Specific focus will be given to the issues of validity and reliability of the research techniques used.

As Denzin (2000, p. 663) quotes Schwandt:

> It has become increasingly common in qualitative studies to view the interview as a form of discourse between two or more speakers or as a linguistic event in the meanings of questions and responses is contextually grounded and jointly constructed by interviewer and respondent.

Considering the fact that the research is on privatisation and liberalisation, and also that the interviewees are knowledgeable (particularly the senior staff), it is imperative that the interviewees be given an opportunity to express their views and share their experiences in an informal environment rather than try to solicit information with all closed ended questions. It is equally important to gain the trust of the interviewees so that they would openly express their views – establishing a rapport with the interviewees is important because the goal of unstructured interviewing is to gain understanding.

Magnusson (2005, p. 11) cites Patton in noting how the informal, unstructured conversational interview allows for a great deal of latitude in exploring any given avenue to examine the subject at hand, though this is not normally the most speedy process and is mainly appropriate when there is a fair allotment of time with which to carry out the interview. The unstructured interview '...is used in an attempt to understand the complex behavior of members of society without imposing any a priori categorisation that may limit the field of inquiry' (Fontana & Frey, cited in Kerlin 1997, p. 10). In instances where the time allotment is not so generous and the interviewer wishes to question a number of different subjects regarding a particular topic, the unstructured interview would likely be unsuitable for the interviewer's needs and instead a 'semi-structured' format should be pursued.

Robson (2002, p. 278) uses the analogy of a 'shopping list' to describe the semi-structured interview, in regard to the fact that the interviewer has a number of specific areas that he or she wants to examine, but also has a good deal of leeway in regards to what order the questions will be asked, how to approach each area of interest and how long to spend discussing each. Both the informal and semi-structured interview methods could be considered 'qualitative research interviews' (King cited in Robson 2002, p 271). The benefit of the semi-structured approach is to lend the interview a type of framework and direction that does not drastically restrict the interviewee's options in responding to the questions.

For the purposes of this thesis the semi-structured method has been adopted. Interests regarding, and influences shaping, the telecommunications reform process in the Kingdom of Bahrain involve a wide variety of persons and organisations, each with their particular perspective on what issues are of significance. It would thus be appropriate that each interviewee be allowed a fair degree of leeway to convey their point of view on the different aspects of liberalisation and privatisation process.

The third interviewing approach identified in much of the literature concerns asking respondents a set of closed question. Such a technique is appropriate for surveys where responses are likely to be on simple issues on which respondent and interviewer are likely to be in common accord as to their meaning and where there are limited resources in time to conduct a lengthy interview. In respect to the interviews conducted with senior officials, as listed below, this technique would have secured very limited results and not allowed a much richer expression of ideas and values from the respondent.

However, data has been drawn from other studies on consumer attitudes to telecommunications provision in Bahrain that have been cited as evidence within this thesis.

Planning interviews

Robson (2002, p. 273) notes that time allotment is an important aspect of the interview process, as interviews of less than thirty minutes may not be long enough to garner pertinent information, yet interviews longer than an hour are likely to put a strain on the interviewees' schedule of other commitments. Colin's notes that the interviewer's 'closure skills' come into play and proper preparation key, with a schedule for all interviews drawn up and all arrangements confirmed as part of the interview planning.

Respondent selection

A list of potential interview candidates was drawn up, which included ministers and senior executives from the government, members of parliament as well as the private sector who had direct involvement in the privatisation and liberalisation process. Tables 6:1, 6:2, 6:3 and 6:4 list, respectively, the cabinet members, parliamentarians, representatives of government bodies and industry stake holders selected for the interviews, with the methodology of conducting the interview altered to suit the calibre of each interviewee.

Table 6:2 Cabinet members selected for interview

Name	*Organisation*	*Designation*	*Date of interview*
Sheikh Khalid bin Abdullah al Khalifah	Ministry of PM Court	Minister	Dec. 2004
Mr. Ali Saleh al-Saleh	Ministry of Municipalities & Agriculture	Minister	Feb. 2005
Dr. Mohammed A. Ghaffar	Ministry of Information	Minister	May 2005
Mr. Mohammed al-Mutawa	P.M. Court	Advisor and former Minister	Jan. 2005
Mr. Nabi al-Shoalah	Ministry of State	Former Minister	Feb. 2005

Table 6:3 Parliamentarians selected for interview

(To find, from their view points, the effects of privatisation on economic growth, the outcomes of telecommunications market liberalisation and their role in this regard.)

Name	*Organisation*	*Designation*	*Date of interview*
HE Khalifah al-Dhahrani	The Parliament	Chairman	Feb. 2005
Mr. Jassim A. Aal Mr. Othman Sharif Mr. Jassim al-Mawali	The Parliament	MPs – members of Finance Committee	Feb. 2005

Table 6:4 Representatives of government bodies selected for interview

(Concerning the policies and function of the TRA in telecommunications market liberalisation and ensuring competition in the face of Batelco's market dominance.)

Name	*Organisation*	*Designation*	*Date of interview*
Mr. Salman Seyadi	Legal affairs	Head	Aug. 2005
M. F. al-Ada	P.M Court	Advisor	Aug. 2005

Table 6:5 Industry stake holders selected for interview

(To understands how the TRA regard's it own role and it self-evaluation so far, how the regulations protect the new entrants and how the two mobile operators evaluate the TRA)

Name	*Organisation*	*Designation*	*Date of interview*
Dr. Marwan al Ahmadi	MTC-Vodafone	CEO	Dec. 2005
Saleh Tarradah	Batelco	GM info. systems	June 2005

Formulations of questions

The questions were formulated based on both the theories behind privatisation and liberalisation and their actual experience. The questions for the ministers were different from those of the other interviewees, in that their questions were oriented more towards policy matters, linkages of privatisation and liberalisation to employment, trade balances and visions for the future of the Kingdom, etc. The questions put to ministers were open-ended and asked within a semi-structured interview method aimed at finding answers to the policy matters related to privatisation in general and telecommunications privatisation and liberalisation in particular. The questions were aimed at seeking their views on privatisation as a tool for economic growth, the aim of liberalising the telecommunications market and its impact socially and economically and their strategy or vision for Bahrain.

The list below is the basic template of questions with which this author approached each interview. However, the actual questions each interviewee was asked were adapted to take into account specifics of their position, authority and area of expertise. As well, this list of questions is only a basic template in that during the progression of each interview, this author allowed leeway regarding the topics into which the conversation flowed. This author then adapted the questions that were asked dependant on what topics were discussed, often spontaneously. Therefore, the list below should not be regarded as the full and complete list of questions each interviewee was asked, but instead be seen as the guidelines and general parameters that were used in the interview process.

Template of questions for policy makers and industry stakeholders:

- What are the goals of privatisation and liberalisation, both generally and with regards to telecommunications specifically?
- What is the government's role in telecommunications privatisation and liberalisation?
- What is the TRA's role in telecommunications privatisation and liberalisation?
- What is the private sector's role in telecommunications privatisation and liberalisation?
- How do you perceive you own role in the telecommunications privatisation and liberalisation process?
- How do you perceive the results of the telecommunications privatisation and liberalisation process thus far?
- In what aspects could the process of telecommunications reform be improved?

Recording interview data

When collecting information it is essential to take a full account of the interviewees responses, and while Patton (2002, p. 380) notes that audio recordings of interviews should be made, there are a number of factors which should be considered in making such a determination. On the positive side, recording an interview allows the interviewer to give their full attention to the interviewees answers while also allowing the interviewer more opportunity to 'think on his feet', meaning he is more able to re-formulate questions to fit meaningfully with the dynamic that develops as the interview progresses and not be encumbered with having to take the time to write all the responses into notes. One problem is however, along with needing the interviewee's permission for the interview to be audio-recorded, the knowledge that the interview is being recorded can often lead the interviewee to give more stilted and reserved answers to questions, as opposed to what he or she actually thinks. Patton (2002, p. 380) notes that using a tape recording also does not remove the usefulness of taking notes, as writing down responses can often help the interviewer 'retain focus', as well as notes acting as a back-up in case there are unforeseen difficulties with the recording equipment.

This author has used the note taking method for obtaining data during the interviews due to the sensitivity of interviewee's political positions and to maintain a friendly atmosphere during the sessions. The notes of the interviews, made on index cards, showed the name and designation of the interviewees. These cards were then grouped into the sequence of the hierarchy of their job titles, which are then used in the analysis and writing up of the interview findings in Chapter 8.

Analysis of qualitative data

There are generally two approaches to analysing interviews: (1) to analyse data on a case by case basis, effectively writing a case study for each person interviewed; (2) use a cross-case analysis, grouping together answers from different people to common questions or analysing different perspectives on important issues. The latter method is used in this thesis. For the purpose of analysis, the researcher grouped the interview data collected into four segments based on the interviewee segment; these were: ministers, parliamentarians, senior government servants, and stakeholders.

The interviewees' views on the following aspects of telecommunications liberalisation were solicited and analyzed. Questions were asked regarding their views on the privatisation and liberalisation moves initiated by Bahrain and about the involvement of the private sector in the country's economic development program. They were also asked to comment on the role of an adequate regulatory framework to ensure transparency and competition among different players, which also touches upon the role of the government in the country's liberalisation programme. Other questions related to telecommunications included its potential to provide more job opportunities and ease the fiscal burden on the government. Interviewees were also asked whether in their view an oligopoly could come into practice. The analysis of the findings of the interview, carried out based on this segmentation, can be termed as qualitative analysis. One characterisation of 'qualitative data' is that it is an 'attractive nuisance' (Miles 1979, p. 590-601):

> Attractive because words are by far the most common form of qualitative data and are a speciality of humans and their organizations. Narratives, accounts and other collections of words are variously described as 'rich', 'full' and 'real' and contrasted with the thin abstractions of number...[though it is a nuisance in that] naïve researchers may be injured by unforeseen problems with qualitative data. This can occur during data collection stage...but the main difficulty is in their analysis (Robson 2002, pp. 455-456).

If the author had a substantial amount of qualitative data then some kind of software package would have had to be used to deal with it. However, in the case of this thesis, the data collected is not so substantial that it calls for a word processing package utilisation. The opinions expressed in the four segments stated above can be conceptualized with relative ease and retained by the reader to arrive at comprehensive conclusions.

Survey of consumers

Field survey is one of the preferred approaches to obtain detailed information regarding the effects of liberalising the telecommunications industry in a country. If the resources were available this study would have incorporated its own extensive consumer survey regarding telecommunications in Bahrain. Though this was not possible, it was possible to incorporate data that had been obtained from published sources. Two field surveys were used: one, to measure the economic effect of the liberalisation process on the telecommunications market; the other, to assess consumer behaviour and levels of satisfaction with the various telecommunication services and products. Detailed results are analyzed in chapter 8.

The first survey was carried out in 2003 by the Bahrain Centre for Studies and Research (BCSR) – a Government entity for research work – to measure the impact of telecommunications liberalisation by seeking the views of various segments of society. The outcome of this comprehensive survey was published by the BCSR in June 2004 and statistical data for this study was collected from this source. The total sample, consisting of more than 550 surveys, was tested to ensure proper statistical distribution across the age, social status and economic rank parameters. After the raw data were collected, they were processed using statistical software and put into descriptive summaries. The second survey incorporated in the research of this thesis was conducted by the Nielsen Company in 2007, under commission from the TRA, as a market research study aimed at obtaining detailed knowledge of the behaviour of the different customer groups in Bahrain – i.e. residential users and corporate/business users – with the results being published in July 2007. The sample size of the residential module was 1052 people, which included respondents from all across the Kingdom's socio-economic class spectrum – as will be detailed in Chapter 8. The sample size of the business survey was 159 interviews, which this author deemed to be rather small. Thus, while the results of the business survey will be discussed in Chapter 8, this is done in the context of the points of interest these results raise, rather than regarding them as a comprehensive representation of the general response of the business community to the telecommunications climate in Bahrain.

These surveys were used as additional information resources for this study. Given that these were detailed studies this author has not sought to replicate similar surveys and instead gave more time for in-depth interviews. The reasons behind choosing these surveys were their comprehensiveness, the wide range of consumers they covered, the fair distribution between the two major companies (Batelco and Zain), and their relevance to the thesis topic – i.e. the surveys helped to evaluate and measure the impact of liberalising the mobile phone market from the customer's point of view. The information content of these surveys was found to be quite useful for the purposes of this study, enabling this author to determine a number of the affects of liberalising the telecommunications market, as well as the behaviours and attitudes of consumers in this market.

Conclusion

The research aim is to analyze the economic and social advantages and disadvantages of liberalisation in the provision of telecommunications in the Kingdom of Bahrain. This chapter has presented the three methods used for the study namely, documentary research, interviews, and field surveys, and the conceptual framework within which the data collection and analysis was carried out. It has shown that the hypothesis is based on the problems presented in Chapter 1. In addition, the relevance of data collection and analysis to the hypothesis was explained, which highlights that the hypothesis and research plan are consistent with the goal of the thesis. While in secondary data bias was not significantly evident as diversified and authenticated literature was reviewed, primary data evidenced bias was likely present as correspondents were familiar only with the national and controlled telecommunications scenario in Bahrain. However careful design of the research plan by the researcher is an attempt to minimise or, to the furthest extent possible, eliminate bias.

* * *

Chapter 7:
Liberalisation policy and its application in the Bahrain telecommunications scenario

Introduction

The prevailing philosophy in telecommunications sectors around the world has expounded liberalisation and competition since the UK and US pushed their national service providers, BT and AT&T respectively, into the private sphere in the 1980s. Among the challenges for governments has been how to sow a field fertile for competition and infrastructure investments in their networks. Standing in their way have been the telecommunications monopolies which staunchly defend their market control and power. Success in breaking the grip of the monopolies has come in varying degrees, depending on the country, and liberalisation can be seen as a movement in progress and yet to be fully realized – as will become apparent regarding the example of Bahrain. The following chapter will be an examination of the policies and regulatory mechanisms enacted by the government of Bahrain in pursuit of telecommunication liberalisation, the current scenario regarding telecommunications service provision and the challenges the Kingdom faces in realizing its ambitions for a competitive telecommunications market.

The Telecommunications Law

The liberalisation process in Bahrain officially began when the Telecommunications Law was enacted on the 20th of January 2002, granting a licence for another mobile service provider to compete with Batelco's mobile service, offering a number of licences for ISPs and value-added services, and laying the foundations for the BIX. The stated intention of the law was to break Batelco's monopoly and inject competition across a full spectrum of services in the telecommunications market. The law also created the TRA as an independent regulator for competition, licensing and protection of consumer rights, separating telecommunications regulation from the Ministry of Transportation, which is the source of governments' telecommunications policies.

While it was not stated explicitly, provisions within the Telecommunications Law which removed barriers to foreign ownership and investment were included to ensure Bahrain met the WTO benchmarks laid out in the Basic Telecommunications

Agreement – as mentioned in Chapter 3 – regarding privatisation and competition in its telecommunications market (Shusterman et al. n.d., p. 3). The FTA between Bahrain and the US signed in September 2004, while liberalising trade generally, also calls for an open telecommunications and e-commerce market between the two countries to allow companies to invest freely. To ensure the Kingdom had a coherent strategy in place to accomplish its telecommunications liberalisation goals, the Telecommunications Law also called for the enactment of the National Telecommunications Plan to act as a blueprint for the future.

The National Telecommunications Plan

The Ministry of Transportation issued the 2003 National Telecommunications Plan exactly a year after the Telecommunications Law had been promulgated, with the stated aims of breaking Batelco's monopoly to liberalise the market and separating the roles of policy maker and market regulator between the Ministry of Transportation and the TRA respectively.

> Government policy is that it shall perform no role, take any action with regard to Batelco that would prejudice the desired separation of Government's duties of policy oversight for the telecommunications sector, and, its rights and obligations as a shareholder in Batelco. To these ends, whilst Government retains a shareholding in Batelco, it shall be represented on the Board of Batelco only by its Investment Management arm (*The National Telecom Plan* 2003, p.6).

While the plan's stated aim is to improve telecommunications services in Bahrain to foster the development of an 'e-society', turning the Kingdom into the 'information hub' of the region and encouraging high-tech investment, there is reason to doubt the plan's ability to fulfil these ambitions. For instance, the general manager of IT services at Batelco, Saleh Tarradah, stated that the national plan was an implementation plan with target dates and it did not incorporate any visionary aspects as to how the future telecommunications industry in the country is supposed to look, nor its impact on other sectors in the economy (interview 23rd October 2005). As will be discussed in Chapter 8, Mr. Tarradah's criticism of the plan is shared by a number of the individuals interviewed for this study, and this absence of a vision for telecommunications liberalisation could negatively impact not only on the success rate of the liberalisation moves, but the growth of the other segments of the economy for which telecommunication forms the basic infrastructure for its expansion, such as banking and IT.

Both the Telecommunications Law and Plan ensure, on paper at least, that the Kingdom leads other GCC countries in terms of telecommunications liberalisation. However there have been inexplicable delays in implementing a variety of aspects of the liberalisation agenda. Though competitors are now able to establish their own cable networks for fixed-line and internet services for Bahraini customers, none has yet, and recommendations to sell off Batelco's fixed-line division were never implemented, despite expressed interest from international investors for this and other aspects of Batelco's business. Technically, post-July 2004 there were no restrictions on companies obtaining a licence to offer any telecommunications service, apart from mobile services where competition was limited to one other company, yet Batelco still maintains dominance over almost all aspects of telecommunications provision except for the mobile sector and long-distance calling.

The Second National Telecommunications Plan

In February 2008 the Government of Bahrain announced the Second National Telecommunications Plan; based on a review of the results derived from the enactment of the 2002 Telecommunications Law and the first National Telecommunications Plan, this second national plan laid out a three-year prescription of how the telecommunications sector in the Kingdom is to develop. 'In particular it is an objective of the Plan to further assist the telecommunications sector to become a major force in the development of the national economy' (Second National Telecommunications Plan 2008, section 1).

Among the admissions of the government in the new plan is that 'the growth of competition is underway but has not yet reached full development' (Second National Telecommunications Plan 2008, section 4). The Plan notes that both the continued expansion of current telecommunications market players and the entry of new ones are necessary to further the Kingdom's objectives for general economic expansion, and thus the TRA must see to it that barriers to entry continue to be removed in order to foster an open market – one in which competition spurs greater access to services at lower prices.

> TRA must also continue to work towards elimination of opportunities and incentives for anti-competitive behaviour. TRA must continue to take measures to promote competition and ensure that wholesale products, including infrastructure sharing, are appropriately priced and regulated so as to encourage their proper and adequate provision... The Government requires TRA to support industry in the use of any technology in the provision of facilities allowing both service and infrastructure competition (Second National Telecommunications Plan 2008, section 4).

In recognizing the areas where competition has not developed, the government requires that the TRA to protect consumers from price gouging, while noting that wherever possible 'barriers that prevent customers from realising their right to choose' should be taken down. Interestingly, the government explicitly states it is against allowing Batelco to cross-subsidize costs between its different segments (i.e. fixed-line, mobile, long-distance, etc.) and that the TRA is required to enforce price regulations which reflect the actual cost of the service.

> Where traditionally integrated services (e.g., telephone line rental and call services delivered over that line) separate, these services should be adequately priced in accordance with the costs of these different services. The Government therefore supports implementation of regulatory measures and policies that maximise long-term consumer benefit, even where there may be some unavoidable short term costs. Therefore, the Government requires TRA to ensure that there is a full rebalancing of tariffs of fixed telephony (Second National Telecommunications Plan 2008, section 4).

While noting the likely price-hikes may harm low-income subscribers, the Government said this will be handled under general social welfare policy, and not be a consideration for telecommunications policy, which should be focused on generating a competitive market. Economic efficiency is held to be best pursued through market mechanisms, and to this end the TRA 'shall use both actual competition, and mechanisms that seek to replicate competitive outcomes, in designing the regulatory regime for telecommunications' (Second National Telecommunications Plan 2008, section 4).

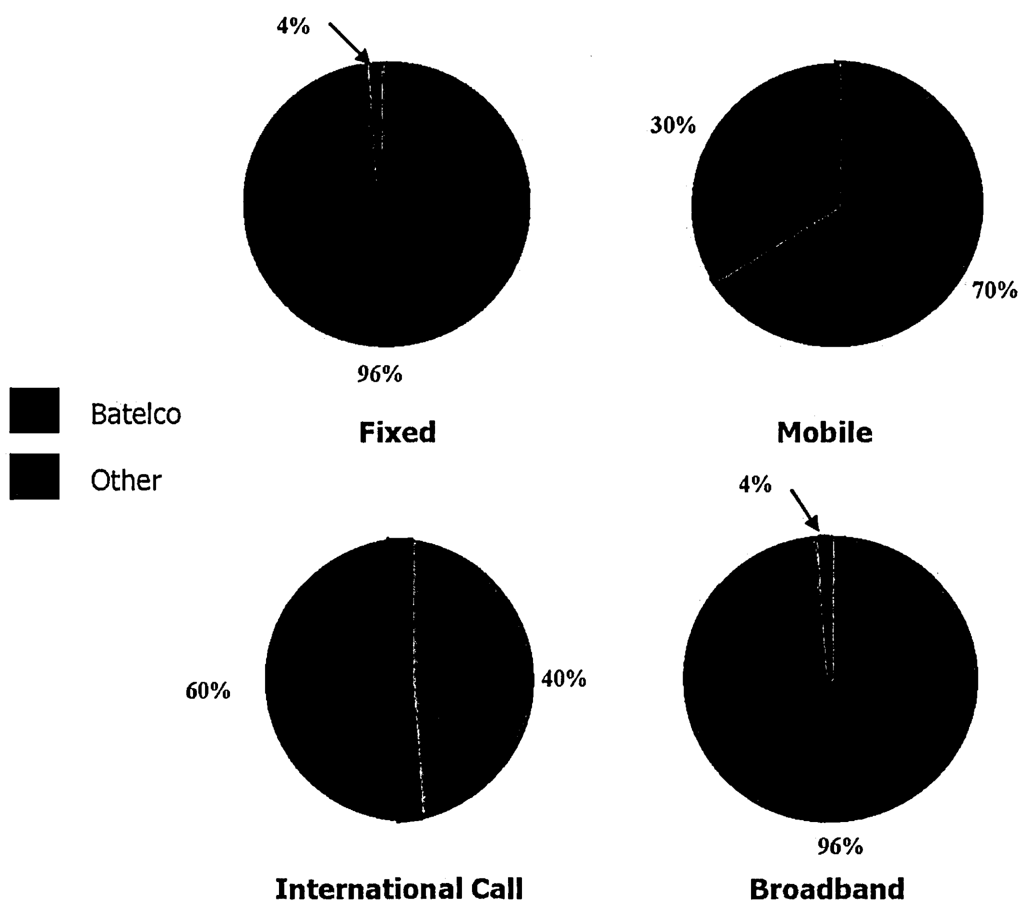
Among the most significant aspects of the new plan, however is the Government's commitment to divulge itself of most, if not all of its shares in Batelco within three years. The Government states that this separation of its interests from Batelco's will allow the company to focus its decision-making on market motivations, as opposed to Government issues, an put the Government in a position to treat the company as it would any other market player. 'Government ownership in Batelco is, and will continue to be, managed by a body clearly separated from policy and regulatory decisions and entrusted only with the financial management of its investments' (Second National Telecommunications Plan 2008, section 4).

A more detailed consideration of the current telecommunications landscape, including the various services and scenarios playing out in the fixed-line, mobile and Internet sectors would allow for a better understanding regarding the extent of competition in the telecommunications market and the future potential to promote competition.

Telecommunications services scenarios

General overview

Figure 7:1 Market share in Bahraini telecommunications, by sector – 2006



(Source: TRA, 'Telecommunications Sector Liberalisation' presentation to BBBF 2007)

As has been mentioned several times in the thesis thus far, Batelco remains the dominant player in the domestic telecommunications market despite the government's efforts to try and foster more competition in a liberalised market. As illustrated in Figure 7:1 above, only in the mobile sector has there been any notable reduction in Batelco's monopolistic power in telecommunications markets inside Bahrain. For long-distance and overseas calling however, there has been significant progress in diminishing Batelco's dominance, with the success of companies employing long-distance call-back cards and VoIP technology to cut Batelco's market share to less than half (40 per cent).

It should be noted that Batelco's continued dominance in fixed-line and broadband services in the Kingdom is unlikely to be the result of a lack of licences for other companies to offer services in these areas. As illustrated in Figure 7:2 below, there are seven companies the TRA licensed to be allowed to provide fixed-line service and 14 that have been issued licenses to be Internet service providers. However, in less than half of these cases have the companies actually attempted to offer their services (and thus an alternative to Batelco) to Bahraini customers; even those that have, as of year's end 2006, have had a minuscule impact upon Batelco's market share (which, as shown in Figure 7:1, still stands at 96 per cent in both fixed-line and broadband segments).

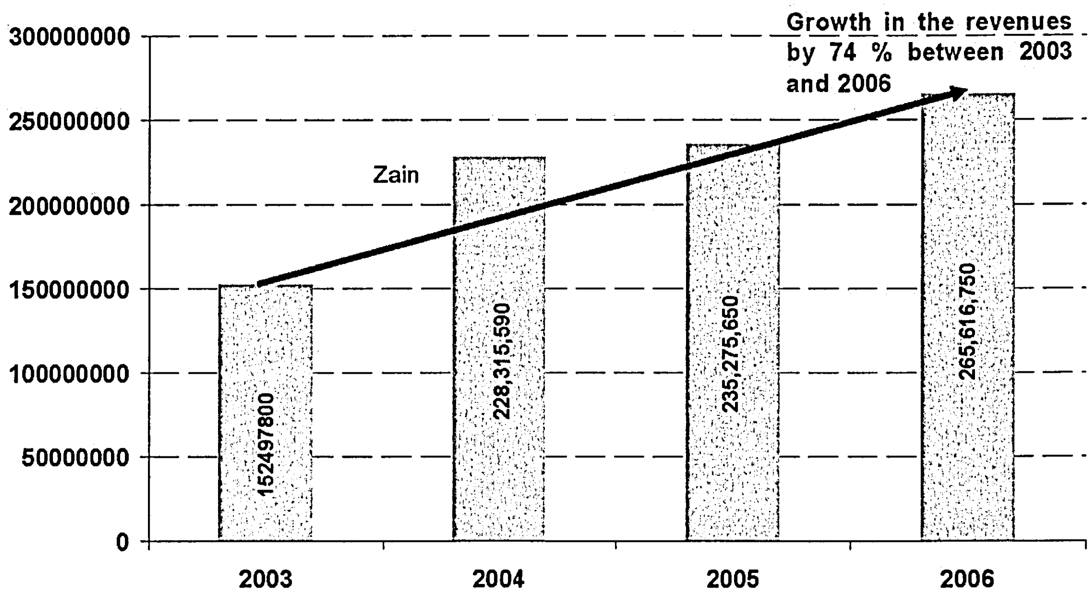
Figure 7:2 Service licences issues and services offered – 2006

Retail Services									
Licensee		Fixed Access	Fixed Calls	Mobile	ISP	Inter Service	VAS	Paging	NFWS
y = currently offering services									
2Connect	1					y			
Neutel Telecom	2	y	y		y	y			
ANIS	3					y			
Batelco	4	y	y	y	y	y		y	
Business Communication Networks	5					y			
Etisalcom W.L.L	6		y			y			
Fakhro	7					y			
Kalaam Telecom	8				y	y			
Light Speed	9		y		y	y			
Mena Broadband services WLL	10					y			
MTC - Vodafone Bahrain	11			y	y	y			
North Star	12					y			
Orbit	13				y	y			
Swiftel International	14					y			
TeleGulf	15					y			
Viacloud WLL	16					y			
Total	16	7	7	2	14	16	16	1	2
Offering Services	16	2	4	2	6	16	10	1	0

(Source: TRA, 'Telecommunications Sector Liberalisation' presentation to BBBF 2007)

Despite the relative lack of competition in most areas of Bahrain's telecommunications market however, a very salient trend in the sector is its propensity for increasing revenue returns. Between 2003 and 2006, revenue from all segments of the market combined increased 74 per cent, from some BD152.5 million (US$412 million) in 2003 to some BD265.6 million (US$717 million) by year's end 2006 [please see Figure 7:3 below]

Figure 7:3 Growth of telecommunications market revenue 2003-06



(Source: TRA, 'Telecommunications Sector Liberalisation' presentation to BBBF 2007)

Fixed-line services

As of year's end 2006 there were seven companies licensed to provide fixed-line services in the Kingdom of Bahrain: 2Connect, Neutel Telecom, Batelco, Etisalcom W.L.L., Kalaam Telecom, Light Speed, and Mena Broadband Services W.L.L.. Of these, only Neutel Telecom and Batelco have actually engaged the opportunity to offer services actively in the market. Batelco, the former SOTE monopolist, commands almost complete market dominance (96 per cent market share), while Neutel Telecom, now in operation for close to two years, has scratched out a four per cent share of the market.

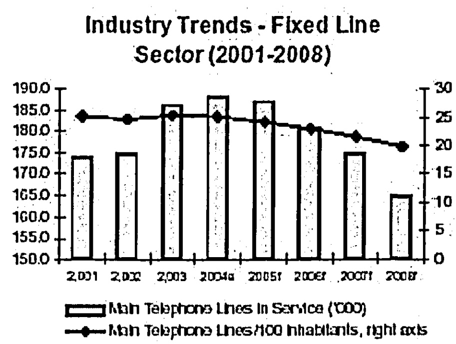
In cross-referencing (triangulating) between various sources of data, this author has come to the realize that there are conflicting accounts of the actual number of fixed-lines in the Kingdom, as well as incompatible reports regarding trends in the fixed-line market.

On the one hand, there is the perspective that Bahrain's fixed-lined subscriber base appears to be shrinking, with Business Monitor International (BMI) – in its *Bahrain Telecommunications Report Q2 2005* (p. 9) – forecasting a drop from 25.5 per cent penetration in 2005 to 20 per cent by 2010, [likely entailing Batelco's continued monopolistic dominance in the sector]. The TRA Development Review Panel Report (TRA-DRPR) of 2005 concurred with this assessment, and noted that Batelco's effective fixed line monopoly necessitates that adequate regulatory controls be in place to 'counter-weight' this market supremacy – 'Regulation should retreat as the tide of competition advances; But at the moment competition is only prospective' (Cave et al. 2005, p. 8). Batelco has stated, in a company financial report by published April 2007 by the National Bank of Kuwuit (NBK) (p. 19), that it considers the fixed-line segment 'a loss-making business since it is obliged to provide the service for 10 times less than the cost, due to social responsibility pressure'. In the same paper the company reported that, as of year's end 2006, revenue from the fixed-line sector had dropped to BD41 million (US$110.7 million), a decrease of 13 per cent over the same period in 2005. [Figure 7:4, below, illustrates this conception of the Kingdom's fixed-line market].

Figure 7:4 Scenario "A" for fixed-line trends (2001-2008)

	2001	2002	2003	2004e	2005f	2006f	2007f	2008f
Main Telephone Lines in Service ('000)	174	175	186	188	187	181	175	165
Main Telephone Lines/100 Inhabitants	25.2	24.6	25.5	25.1	24.3	22.9	21.6	19.9

With the country's fixed-line subscriber base flatlining, BMI believes that 2004 saw only a marginal increase in the Kingdom's subscriber base. (At the time of writing, no data were available for the year-end.) In the medium term, numbers will fall slightly as users migrate to alternative technologies, with the penetration rate falling from its current level of 25.5% to around 20% by the end of the decade.

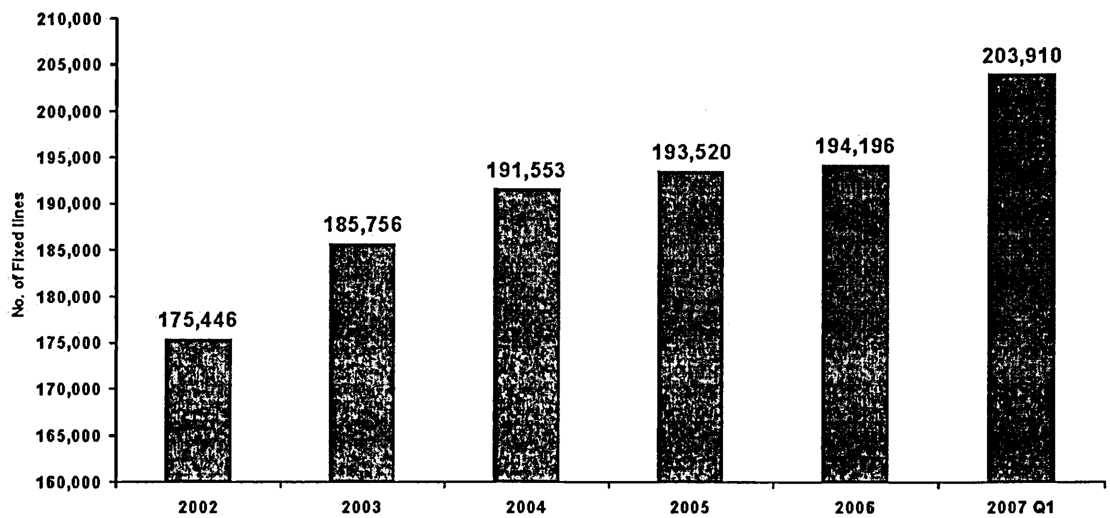


e/f - BMI forecasts/estimates; Sources: International Telecommunications Union (ITU), BMI research

(Source: Business Monitor International Ltd, Bahrain Telecommunications Report Q2 2005, p. 8*)*

The other conception of the Kingdom's fixed-line segment is that the number of subscribers is actually on the *increase.* The TRA put forward findings in a November 2007 presentation to the Bahrain British Business Forum [BBBF] that, between the years 2002 and the first quarter of 2007, the subscriber base in the Kingdom had grown from some 175,000 to some 204,000 [as shown in Figure 7:5 below], which equates to a growth of roughly 16 per cent over the course of five years. This is hardly stellar expansion, especially when compared to the much more rapid growth of other segments of the telecommunications industry, or the phenomenal growth of the Bahraini economy generally over the same period, but it nonetheless does point to a slowly and steadily expanding market – contrary to the assessments of BMI and the TRA-DRPR of 2005.

Figure 7:5 Scenario "B" for fixed-line trends (2002-2007 Q1)



(Source: TRA, 'Telecommunications Sector Liberalisation' presentation to BBBF 2007)

Thus far is has been possible to settle conclusively neither the reason for this discrepancy nor ascertain with complete certainty what is the actual trend in the fixed-line segment in Bahrain, as this author has not had access to the raw data used in preparing the above statistics, nor been briefed on the method through which the raw data was processed. Thus this author has weighed and considered several possibilities for these inconsistent findings regarding the state and trends of Bahrain's fixed-line subscriber base. It is possible that part of the reason for the discrepancy could be due to the fact that the assessments of BMI[1] and the TRA-DRPR are based on data from years up to, and including, 2004, and fixed-line estimates for the years post-2004 are forecasts, not based on data gathered in the field from actually counting the number of fixed-line subscribers. The TRA's presentation of findings in 2007 is based on data from years up to, and including, 2006 as well as the first quarter of 2007.

Both the data sets in question point to small but gradual rise in the number of fixed-lines in Bahrain until 2004 (though the exact number of lines differs slightly between data sets). In the years post-2004, the BMI and the TRA-DRPR *forecasted* steady decreases in the number of fixed lines, while the TRA's presentation of findings in 2007 reported that there was instead an *increase* in fixed-line subscriptions for the years 2005, 2006 and the first quarter of 2007. Perhaps the most straightforward way to regard this situation would be to deem that, in making their forecasts – i.e. claims regarding circumstances that had not yet come to pass – BMI and the TRA-DRPR were simply wrong, and that this was exposed by the TRA's presentation of findings in 2007, which reported what *actually did* come to pass.

However, consistent with this author's methodological approach to this study described in Chapter 6, to assess threats to the validity of this data concerning fixed-line subscriptions in Bahrain, Ahern's recommendation concerning reflexive bracketing was applied, meaning this author used reflexivity to identify potential areas where bias may have factored into the results. Through this process the author determined that a potential for bias existed in the TRA's presentation of findings in 2007, as, given that the TRA was created in 2002 as the regulator of telecommunications in Bahrain but had yet to show it had progressed significantly in affecting positive results in the fixed-line sector, it is possible there existed a degree of pressure to show some positive results (such as expansion of services rates). Though officially 'independent', the TRA does still receive its budget from the Government of Bahrain's coffers, thus it is conceivable that employees of the TRA would begin to worry that members of the Government would begin to question the TRA's budget allocations, given that, for more than four years, there had been scarce little positive results in the fixed-line segment.

[1] BMI lists the ITU as the source of the information upon which it based its findings.

By contrast, BMI – whose data came from the ITU – and the TRA-DRPR would be under considerably less pressure to have their results tainted one way or the other by bias in the interest of securing revenue, as neither is heavily dependant on, nor beholden to, the Government of Bahrain or any other stakeholders in the Bahraini telecommunications scenario on a long-term basis: BMI, as the name 'Business Monitor International' would suggest, is a private corporation that publishes information concerning various sectors of the economy and finance in a wide number of countries, while the TRA-DRPR was a project involving several industry experts being contracted on a fixed, short-term basis to analyse the telecommunications market in Bahrain. If anything, it would be in the self-interest of both BMI and the writers of the TRA-DRPR to report as accurately as possible the status of the telecommunications market in Bahrain, as their reputations, and thus future income based off contracts arrived at because of their good reputations, is on the line.

In the interest of minimizing the possibility of the impact of bias upon this study, this author undertook a triangulation of the results the different parties came to regarding fixed-line subscription rates – i.e. sought out another point of reference to gage these results by. It was found that Batelco's own market analysis, published in the 2007 financial report NBK (mentioned earlier in this chapter), had arrived at similar results as the TRA's presentation of findings in 2007, stating that:

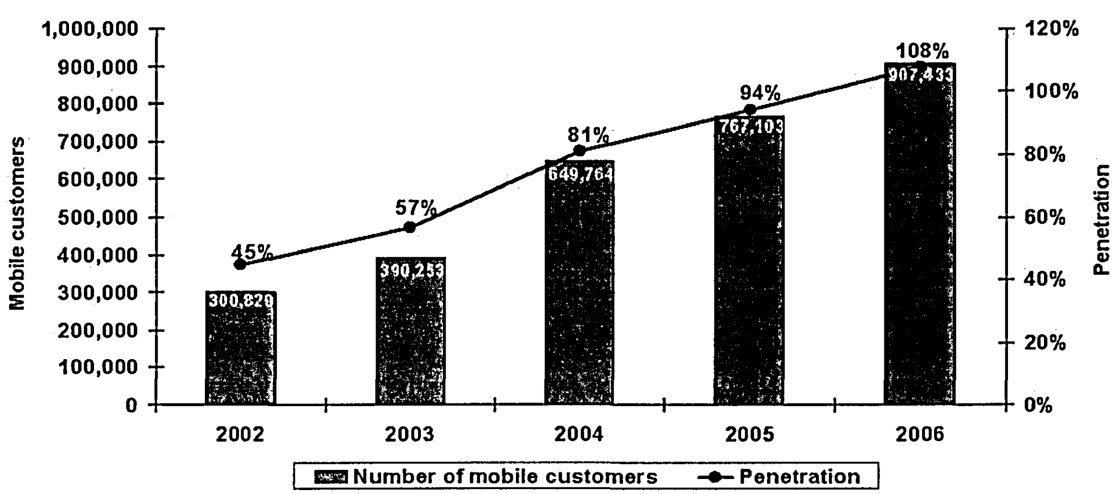
> The number of fixed-line subscribers reached 190,345 at the end of July 2006, which translates into a penetration rate of 25 per cent and a CAGR of 3 per cent from 2002 to 2005. This modest growth is expected to continue, especially since telecom users seem to prefer mobile services over fixed-line services throughout the world. However, increased competition coupled with an increased demand for data services and the implementation of a Next-Generation Network (NGN) could boost future growth rates (NBK 2007, p. 11).

Thus, while this author has thus made due note that further investigation may be needed in order to ensure the veracity of the status of fixed-line subscribers in the Kingdom, this author has decided to proceed with the rest of the thesis and data analysis under the assumption that there has in fact been small though steady growth in the number of fixed-lines in Bahrain. Aside from the reasons mentioned above involving the triangulation of results, there are also other factors: (1) though the possibility for bias has been noted above with the TRA, the regulator and Batelco are closer to, and much more involved in, the telecommunications industry in the Kingdom than were BMI or the TRA-DRPR, thus it is reasonable to assume that the former group's observations of the sector – which are also more recent – would have a higher likelihood of being accurate than the later group's. (2) As noted in Chapter 4, the economy in the Kingdom has been experiencing a surge in the last half decade or so, creating thousands of new business and residential construction projects in and around all of the island's urban centres, with most, if not all of these new projects, likely to have some form of connection to the fixed-line network. Though admittedly no more than anecdotal evidence, it is difficult for this author to fathom how there would be a drop in fixed-line connections – such would necessitate a major decrease in pre-existing fixed-line connections, and while there has been somewhat of a drop noticed in residential fixed-line use, as will be discussed more next chapter, it does not appear to be on the scale necessary to outweigh the new fixed-line connections coming on stream and cause an overall decrease in fixed-line usage.

Mobile services

Currently there are only two companies to be licensed to provide mobile services in the Kingdom of Bahrain: Zain (formerly called 'MTC-Vodafone' until September 2007) and Batelco. Both are active in the market, with Zain holding 30 per cent market share and Batelco the remaining 70 per cent.

Figure 7:6 Mobile subscriptions in Bahrain 2002-06



(Source: TRA, 'Telecommunications Sector Liberalisation' presentation to BBBF 2007)

MTC-Vodafone became the only competitor to Batelco in the mobile sector when it began operations at the end of 2003, launching both 2G and 3G services and a US$120-

million network infrastructure plan. The company initially aimed to capture up to 30 per cent market share within the first three years, and as of year's end 2006 had accomplished this goal. MTC-Vodafone doubled its subscriber base between December 2004 and December 2005, from 105,000 to 202,000, while EBIDTA over the same period went from a negative US$58-million to US$42-million and MTC-Vodafone began expansion of its network capacity to be able to carry some 400,000 customers (*Dial Tones at the ready* 2006, pp.166-167). While Bahrain is a small market for Zain, it is profitable and also represents a strategic 'piece of the puzzle' in becoming a major regional player in mobile telecommunications, as the company is also operating in Kuwait, Iraq, Jordan and Lebanon, totalling just over three million customers regionally (*MTC announces 2004 consolidated earnings* 2005). Future prospects for Zain in Bahrain look promising, as 83 per cent of their new subscribers in 2005 remarked that they prefer the new mobile service provider over Batelco, and there was a significant movement in high-end customers away from Batelco to Zain (*Bahrain Telecommunications Company Report* 2006 p. 28-31).

Between 2005 and 2006 the number of mobile subscriptions in the Kingdom surpassed the number of people living in the Kingdom, which, by year's end 2006, led to a penetration rate of 108 per cent, with 11 per cent of mobile users having at least two mobile numbers. One factor contributing to this is that Batelco does not allow for number transfers, thus while many people wanted to try out the new services offered by MTC-Vodafone, they also did not want to lose their old phone numbers and so bought the second subscription as well as keeping the first – another factor may be overly generous reporting of statistics by the mobile carriers, as well as the counting of lapsed subscriptions[2]. [The TRA announced in June 2008 that it intends to implement a Number Portability platform before 2011.] There was speculation of a third mobile operator being granted a licence, though a 2005 TRA Development Review Panel Report notes that market factors ought to determine whether there is space for another operator in the current duopoly scenario, as profitability, pricing and limited customer base could be significant hurdles to any new entrant (Cave et al. 2005, p. 8).

For Batelco's part, the company officially doubts a third mobile operator will enter the market: 'the weight we assign this scenario is minimal, as we do not believe that such a

[2] It should be noted that in 2005 some 25 nations worldwide recorded mobile penetration rates exceeding 100 per cent (*Measuring the Information Society* 2006, p. 31)

highly penetrated and small market will be attractive to a third operator, which would have to try to compete with two strong established operators', at the same time Batelco admits a third mobile operator would create even stiffer competition and impact ARPU levels (NBK 2007, p. 4 & p. 7).

After much public speculation regarding the possibility of a third mobile operator entering the market, as well as several years of the TRA issuing periodic press releases stating that the regulator was examining the subject, in July 2008 the TRA issued a press release headlined 'TRA Appoints a Consultancy Firm to Design and Manage a Competitive Process for the Award of the Third Mobile Operator Licence' (TRA 2008a). The TRA stated that the American company Telecommunications Management Group Inc. had been awarded the contract to 'design and manage' the process by which the third mobile operator was selected and given access to the Bahraini market. The press release stated that the aim was to have the third mobile operator selected by year's end 2008. In September there was the first round of tenders, with the second round of tenders being called in October. The final round of tenders is scheduled to be held in December 2008.

Given the years of speculation concerning the possibility of the TRA allowing a third mobile carrier to enter the market, it is prudent to be cautious about the outcome of the process currently underway. However, as this is the farthest the TRA has yet ventured down the path of having three operators in the mobile market, it is reasonable to assume that the concept may be gaining enough momentum to make it a reality in within the foreseeable future. The impact of a third mobile operator would likely be to spur the two existing operators to expand and upgrade services while pushing prices down further. This would also force Batelco and MTC-Vodafone to innovate to generate new revenue or operate with greater efficiency in order to maintain profit margins.

Internet services

As of year's end 2006 there were 14 companies licensed as internet service providers in the Kingdom of Bahrain: 2Connect, Neutel Telecom, ANIS, Batelco, Business Communication Networks, Etisalcom W.L.L., Kalaam Telecom, Light Speed, Mena Broadband Services W.L.L., Zain, North Star, Orbit, TeleGulf and Viacloud W.L.L.. Of these, six were actually offering services to customers in the Bahraini market: Neutel

Telecom, Batelco, Kalaam Telecom, Light Speed, Zain and Orbit. The market is, however, overwhelming lopsided in Batelco's favour, with the incumbent telecommunications monopolist enjoying 96 per cent of the broadband market share, while the remaining four percent is divided among the other six companies.

In 2003 – at the beginning of the liberalisation process when Batelco was still the only ISP in the market – there were some 49,000 Internet service subscriptions, growing just 2.7 per cent to some 50,600 by year's end 2004, though a large number of existing customers switched from dial-up to broadband service. As show in Figure 7:7, beginning in the third quarter of 2006 the number of internet subscriptions, especially broadband, has begun to increase more rapidly, reaching almost 80,000 by the end of 2007. Though total penetration of ADSL Internet services all across the region is limited, the growth rates of broadband access became comparable to those in the developing world in 2006. This the same year Batelco unveiled plans to have ADSL access available to every home in the Kingdom by 2008 (*Middle Eastern - Convergence, Broadband and Internet Market* 2006, p 3).

Figure 7:7 Total internet subscribers in Bahrain, 2004-2007

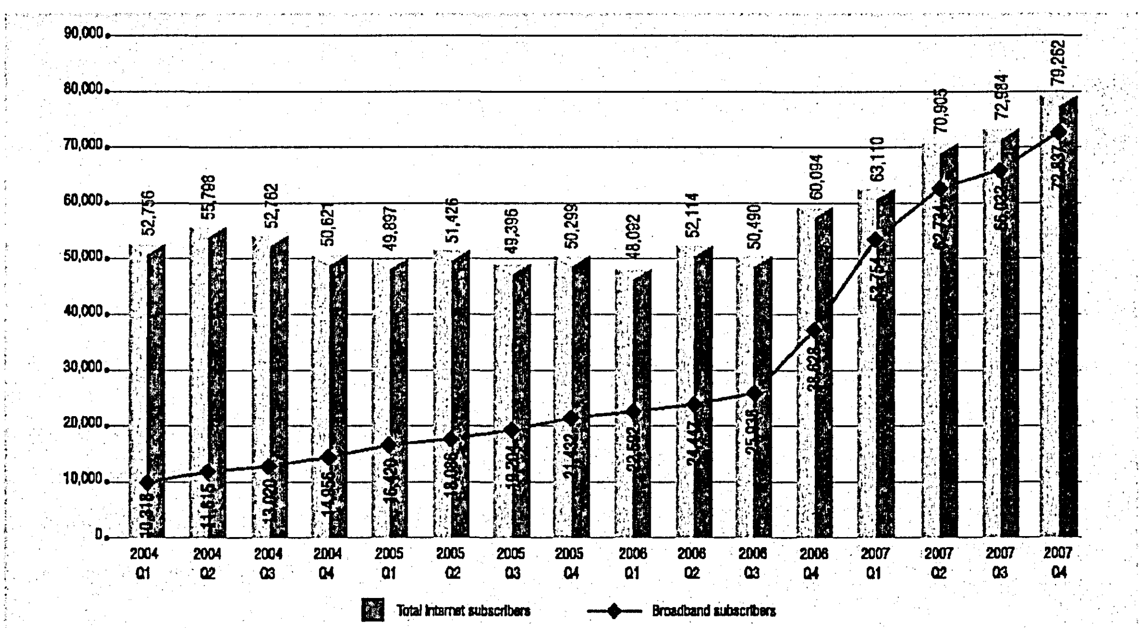


Figure 7:8 Broadband penetration of the business community – 2007

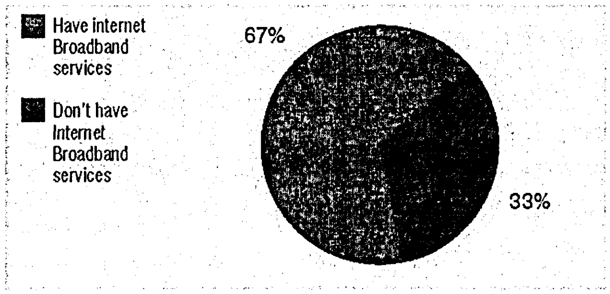
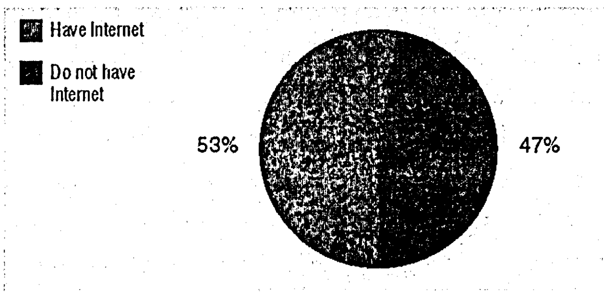


Figure 7:9 Bahraini households with internet connection – 2007



(Source: TRA 2007 Annual Report, pp. 20 & 22)

An assessment of the Internet situation in the Kingdom included in the TRA Development Review Panel's 2005 report noted that broadband advancement was a likely payoff of the liberalisation of the sector, though at the time it noted '...roll-out of broadband appears to be caught in a vicious circle of low initial demand deriving from high prices, leading to low levels of supply and hence high costs' (Cave et al. 2005, p. 10-11). Progress in regard to broadband, WiFi and other e-services has gradually been gaining momentum, but as of yet Bahrain's 'high-Tec revolution' can still be considered in its initial stages.

'Broadband Bahrain'

In February 2005 Batelco announced the US$55.6-million 'Broadband Bahrain' campaign, laying out a three-to-five year plan for expanding and investing in new internet infrastructure 'which will ensure faster access and cheaper prices; the continued roll-out of WiFi; placement of MPLS networks for businesses and organizations; and a raft of additional products, services and advances' (*Broadband Bahrain* 2005). The WiFi plans include installing wireless routers in public places around the country to offer internet access using a pre-paid system and offering businesses a post-paid WiFi service, while Broadband Bahrain also entails a general expansion and upgrading of fixed-line and mobile network infrastructure. For each of the three-to-five years of the plan, Batelco's stated intention is to add some 20,000 new Internet customers

(*Broadband Bahrain* 2005). However Internet costs remain relatively high and the Broadband Bahrain programme was likely to have been spurred in large part by widespread complaints over the narrow scope and inflexibility of services, such as poor VoIP service, deficient virtual services for big businesses and financial institutions, and degrading accessibility to international networks due to the shrinking capacity of Batelco's infrastructure (*The Pressure Increases on Batelco* 2006, p. 15). In fact Batelco's own customer surveys indicated that almost half of their Internet customers believed they were overcharged for a service that was too slow (*Batelco's Broadband vision* 2006). Batelco then announced in May 2006 that it was removing the option of unlimited downloading, instead issuing a cap of 15GB monthly and charging customers a premium for any downloading above this limit.

BIX (Bahrain Internet Exchange) and ISPs

The Bahrain Internet Exchange (BIX), established under the Telecommunications Law, is to be a not-for-profit mechanism that promotes competition, efficiency and consumer price savings, and while scheduled to come on-line in early 2005, as of the publication of this thesis, it is still not operational. Sheikh Hamad bin Hamad al-Khalifa, BIX Chairman, describes it as '...basically routers and switches. It's simple infrastructure that is very expandable. The idea is to start switching traffic between local companies, and as the demand grows...the exchange can grow too' (*Licensed and Ready* 2005 p 150).

The concept is to have all ISPs in the Kingdom connected to the BIX to facilitate faster and cheaper Internet traffic. Currently, if one person or organisation in Bahrain sends information over the internet to another party in Bahrain, that internet traffic leaves the Kingdom to run through a third party server in an outside country, then is routed back to the receiver in Bahrain. Once the BIX is operational it will act as a hub, where information sent from any ISP in the Kingdom will run through the BIX to any other ISP in the Kingdom without having to go through an outside server. This will speed connection times and offer savings to the ISPs in that they will not have to buy as much international bandwidth – though as it stands currently there is not an overly large volume of intra-Bahrain traffic (*Licensed and Ready* 2005, p. 150).

Government anticipates the BIX will facilitate the growth of e-commerce, allow ISPs to 'develop complementary services such as applications development and hosting, thereby feeding the growth of the IT sector more generally, creating jobs and building human capital in the Kingdom' (*Licensed and Ready* 2005, pp.150-151). Batelco will also be obligated to allow the BIX access to the company's networks, both local and international, with other ISPs then able to purchase access to these networks from the BIX. In this way the BIX should facilitate new competitors' entry into the market as currently potential new entrants face the prohibitive prospect of having to buy bandwidth wholesale from Batelco. As well, once the BIX is up and running, it is anticipated that the subsequent drop in usage fees will substantially boost business demand for Internet access, which will itself spur greater competition in the market (*Licensed and Ready* 2005, p. 151). Batelco's response to the establishment of the BIX can be captured in the words of Hani Radhi, Batelco's wholesale and carrier relations senior manager in 2005:

> In signing the agreement with BIX, we are demonstrating our commitment to respond to our obligations to facilitate competition in a timely and constructive manner. We anticipate that our efforts and co-operation with BIX will directly lead to a host of benefits for the people of Bahrain. Lower prices, better quality of service, greater awareness of the benefits of the Internet and a host of new products would all help boost the telecom market (*Gulf Daily News*, 27 April 2005, p. 16).

Nonetheless, detractors may see such a comment as the voice of reluctant conciliation from a monopoly player that is in reality still doing everything within its power to delay liberalisation reforms which would result in the loss of its market dominance.

The Telecommunications Regulatory Authority

In accord with the Telecommunications Law, the Telecommunications Regulatory Authority officially came into being on the 23rd of October 2002, entrusted to protect the interests of the consumer and ensure each and every sector of the telecommunications market became characterised by fair and effective competition between all licensed operators both new and incumbent, thus ending the monopoly of Batelco. The TRA outlines its directives in three categories: consumer protection, regulatory framework and regulatory policy. The regulator is financially and administratively independent from government, while '...enjoying all advantages of ministries, governmental entities, and official public sector organisations' (*The*

Telecommunications Law 2002, p. 11). A board of four directors and a chairman head the TRA, with members to the board appointed by the Government's Council of Ministers. The board meets at least four times a year and decisions are taken by majority vote and, in the event the votes are split equally, the chairman casts the deciding vote. Among the duties mandated of the TRA, as laid out in the Telecommunications Law:

- Protect the interests of subscribers and users regarding tariffs charged for services, the availability and provision of service, the quality of services and protection of personal particulars and privacy of services.
- Give final decisions as to applications for licences.
- Promote effective and fair competition among new and existing licensed operators.
- Monitor and enforce compliance with licence terms by licences.
- Set and collect application, initial, annual and renewal fees for licences, collect fines and fees under any licence and, where appropriate, collect fees for services provided by the TRA.

TRA Development Review Panel report

An assessment of the TRA's independence and regulatory performance was commissioned by the TRA's general director near the end of 2004 to see whether the regulator was fulfilling its mandate and to offer recommendations as to how to future operations should proceed. The three-person TRA Development Review Panel consisted of the following independent experts: Professor Martin Cave, director of the Centre for Management Under Regulation at Warwick Business School in the UK; Christopher Wright, a special advisor on regulated industries at the lawyers Slaughter & May, also from the UK, and Ian Martin, a financial strategist and analyst at ABN AMRO Bank in Australia (Cave et al. 2005, p. 2). In the course of their review the panel consulted government officials, business leaders, consumer groups and held a public meeting including representatives from all these groups and other interested person, culminating in the final *Report on the operations of the Bahrain TRA*, issued in March 2005.

In the report the panel noted that the TRA needed to adhere more to its legislated mandate rather than set its own priorities, while shifting its emphasis from licensing to 'facilitating competitive entry… it has a sophisticated framework for making competition assessments but it should not allow this to impede its ability to make practical progress in key areas after all, Batelco is overwhelmingly dominant in almost every sector of its operations' (Cave et al. 2005, p. 13). The panel also remarked how the TRA's mechanisms for settling disputes between operators was deficient, that the TRA needed to involve itself more in dispute resolution to try and solve the issue before it went to arbitration, and the TRA needed to greatly expedite and introduce flexibility to the entire dispute resolution process. Among the other recommendations the of review panel, as appeared on the front page of the *Gulf Daily News* on March 9, 2005:

- There should be a fast track for determining the key elements of access and interconnection for new entrants to the fixed line market.
- There should be a joint project established with the ministry of transportation on spectrum demand and availability.
- Price control should move to a non-objection process based on price capping with floors and ceilings for individual price changes.
- A timetable for tariff rebalancing should be established which is sensitive to the potential for consumer hardship.
- The key gaps in TRA resources need to be filled in.
- A less labour intensive way of issuing licenses is needed, especially for class licenses (where an authorisation process might be considered).

TRA Work Plan 2007-2009

In May 2007 the TRA release its so-called Work Plan 2007-2009. Based on consultations with the Government, current and potential licence holders, the business community, consumer groups and other stakeholders in the telecommunications industry, the Work Plan outlined the regulator's strategic trajectory for the next three years. As stated in the plan, the TRA identified six aspects of the market it saw as needed to be addressed (TRA 2007 Annual Report, p. 16):

- Enhancing the environment for sustainable competitive services.
- Fostering competition through proportionate regulatory intervention where necessary.
- Increasing customers' basic rights and interests

- Developing a regulatory framework that supports national development policies.
- Ensuring regulatory procedures are streamlined, appropriate, open and transparent so they support, not hinder, competitive and technological advances

The Work Plan goes further to identify specific initiates the regulator intends to undertaken by 2009, including: duct sharing and construction; international access facilitation; granting of an additional mobile license; creating an effective dispute resolution mechanism and a wholesale tariff control mechanism; a number portability project for fixed-lines and mobiles; a consumer awareness campaign and establishing structures for ensuring consumer rights (TRA 2007 Annual Report, p. 17).

Impact of liberalisation on Batelco

Batelco, despite losing dominance over the mobile sector, so far appears to be showing no ill affects from the liberalisation process, in fact quite the opposite. Between 2003 and 2004, the company's year-on-year gross revenues rose six per cent to BD203-million (US$550-million), with net profits increasing to BD84-million (US$224-million) from BD61-million (US$164-million), and earnings rising to 83fils (US$0.22) from 61 (US$0.16) per share[3].

Figure 7:10 Batelco's revenue and net profit (in US$-million)

Year	Revenue	Net profit
1996	275	75
1997	307	86
1998	356	116
1999	383	129
2000	410	143
2001	461	145

[3] 'fils' are a subdivision of Dinars, as cents are to dollars; 1000 fils = 1 Bahraini Dinar = US$2.65

Year	Revenue	Net profit
2002	502	156
2003	518	164
2004	550	224
2005	610	240
2006	635	n/a

(Extract from Batelco's official website http://batelco.com)

As Batelco's chairman Hassan Juma put it, 'These figures are outstanding by any standards; the fact that they were posted during the first year of competition in Bahrain's lucrative mobile sector illustrates Batelco's strength, depth and knowledge of its market and customers' (*Broadband Bahrain* 2005). As the Figure 7:10 shows above, Batelco's 'outstanding' performance under liberalisation has continued. Batelco's total revenue from 1996 until the end of the first quarter of 2006 was US$4.5-billion, and profit for the same period was US$1.5 billion.

Flexing market dominance

As mentioned earlier in this chapter, in May 2006 Batelco removed the unlimited downloading option from the list of packages Broadband Internet customers could choose from, instead enforcing a 15GB cap on monthly downloads and charging a 10fil (US$0.27) fee for every MB downloaded above this limit, in effect forcing consumers to restrict their internet use or pay substantially more. As an article on the consumer protest website boycottbatelco.com explained '...this is not an optional transition, as you will be forcefully migrated and have no option of staying with your current packages, even if you have an unlimited bandwidth package. Every ADSL user in Bahrain will be subscribed to the new threshold packages by 25th May, 2006' (*Boycott Batelco* 2006).

Moreover, Batelco continued to advertise its unlimited ADSL downloading package, with all customers who signed up then 'forcefully migrated' to the new limited package. The TRA intervened in June 2006, forcing Batelco to apologise publicly and refund customers who had unknowingly signed up for the unlimited packages. In a press release which appeared on page one of the *Gulf Daily News* on June 15, 2006, the company stated:

> Batelco failed to meet its obligations under the Telecommunications Law and its Licence. Batelco apologises to its consumers in that it has misled them through the advertisements issued that it could offer such packages when it was aware that it could not do so legally. This announcement is issued pursuant to the order to the Authority.

The above scenario demonstrates the importance of an effective and independent regulator in ensuring monopoly operators do not abuse their dominant position, as well as the need for the regulator to begin implementing effectual liberalisation policies to foster healthy competition in the market and give consumers alternatives. In this context the words of William Melody, managing director for Learning Initiative on Reforms for Network Economies (LIRNE), are meaningful:

> The success of the US incumbent telecom mergers and the re-emergence of monopoly power may have more severe consequences elsewhere, especially in developing countries. Most countries have neither large enough markets nor sufficiently liberalised markets to provide the diversity of opportunities necessary to develop their networks and services adequately in the face of an expansion of monopoly power by incumbent fixed and mobile operators. Incumbents are likely to be far more effective at creating and maintaining barriers to participation here than in the US. Thus the challenge of telecom reform and information infrastructure development facing developing country policymakers and regulators will remain a formidable one for the foreseeable future (Melody 2006, p. 2).

What are the challenges faced by the Kingdom of Bahrain? This chapter is consolidated by reviewing the obstacles and opportunities evolving within the telecommunications liberalisation effort.

Obstacles and opportunities in Bahraini telecommunications liberalisation

As stated earlier in Chapter 7, the TRA Development Review Panel noted a major fault of the TRA was its focus on granting licences as opposed to the bigger issue of reforming the market and introducing effective means to ensure fair competition. Although the TRA's Work Plan 2007-2009, if fully implemented and successful in the initiatives it has laid out, would likely help spur competition, it is yet to be seen how effective these undertakings will be. In seeking to lead the region in telecommunications development and establish itself as an 'information hub' – with all the associated competitive advantages accompanying such – it is imperative for the Kingdom of Bahrain that the TRA reorient its focus as well as give force to the 'pro-competition' rhetoric it exposes. While in long-distance markets Batelco is no longer the dominant player and competition seems to have some vigour, liberalisation has yet to fully take hold in any domestic sector, with mobile services so far showing the most significant results, though the entry of a third operator could stimulate even greater benefits. The review panel also noted that for liberalisation to create a vibrant telecommunications environment, there are two 'strategic issues' that need to be settled. One is that it is still rather vague where the authority for spectrum management rests in regard to allowing new competitors to participate in the market (Cave et al. 2005, p. 9). The panel concluded that prolonged wait times in allocating frequencies for new competitors to use discourages companies from pursing entry into the market, and that a definite schedule should be implemented for this process. The other strategic issue is the Kingdom needs to substantially increase its broadband capacities and related services in order for the banking, financial and other tertiary sectors of the economy to fully realize the potential of the Internet in enhancing their growth (Cave et al. 2005, pp. 9-10). While the TRA's Work Plan 2007-2009 makes note of issues concerning spectrum management, details on how these issues are to be addressed is still lacking, and thus one must question the likelihood that these issues will be resolved under the Work Plan.

Highlighting the need for the expanded telecommunications services in the banking sector, a 2007 report by the OBG noted Bahrain's banks are facing increasing competitive challenges for other GCC states, notably Dubai and Qatar, which are quickly expanding their of financial capacities (*Banking on Success* 2007, p.3). The same report noted that 'Yousef al-Essa, CEO of Addax Investment Bank, recently told OBG that Bahrain needs to address these challenges. He cautioned that Bahrain risks losing business to Dubai and other cities in the region, citing the recent decisions by Morgan Stanley, Goldman Sachs and Carlyle to base their regional operations in Dubai'.

Despite concerns regarding Bahrain's telecommunications market, it has also been seen as an attractive prospect for investors, as the TRA has issued some 117 licences in 12 categories in the past three years (*Licensing* 2007, pp. 1-19), though most of these are currently inactive. As options to Batelco's service would be well received by companies across the economy, new players are beginning to develop strategies to be able to operate under Batelco's oppressive market power – 'There are still a range of options for service provisions; new entrants can target big corporate clients by sector or location to find opportunities… Having read the writing on the wall, Batelco is chalking out its long term strategies to face the possible loss of market share' (*Dial Tones at the Ready* 2006, p. 165). A report by the Oxford Business Groups (OBG) outlines how Batelco is expanding operations regionally using a subsidiary called Batelco ME [Middle East] (*Dial Tones at the Ready* 2006, p. 165). Created in 1998, Batelco ME has thus far established joint ventures for Internet provision in Kuwait, Jordan and Egypt. While Batelco's 2006 revenue from foreign operations amounted to 10 per cent of gross income, the OBG notes the company is planning boost this to 30 per cent by 2009 through acquiring new licences and companies abroad. Whether Batelco will be able to accomplish this goal is still not clear – though a dominant player in the Bahrain Market, Batelco is relatively small in terms of the telecommunications industry globally and a study by Yale Braunstein, Meheroo Jussawalla and Stephen Morris points out the difficulties smaller telecommunications companies encounter when trying to expand beyond their domestic markets:

> Smaller corporations are at a disadvantage in the move to globalization for several reasons. The existing international telecommunications alliances have been created by some of the world's largest carriers, and they have exhibited a preference for dealing with others of a similar nature. There is a 'learning curve' when it comes to entering new markets internationally, and often the investments needed are quite large (Braunstein et al. 1999, p. 15).

At the same time however, Braunstein, Jussawalla and Morris also note that expanding to capture a major portion of a regional market is strategically important for smaller telecommunications companies to remain competitive (Braunstein et al. 1999, p. 20).

Conclusion

With the promulgating of the Telecommunications Law, the Telecommunications Plan the creation of the TRA, and the Second National Telecommunications Plan, it would appear government intends there to be a liberalised and competitive environment for telecommunications in Bahrain. Some six years after the liberalisation process was begun however, there would also seem to be a significant disparity between government's ambitions and the effectiveness of the mechanisms created to see those ambitions realized, as a quick overview of the different telecommunications sectors shows. Batelco is effectively the only fixed-line operator in the Kingdom, with an almost complete monopoly over services and network infrastructure; the mobile sector, which has seen the greatest results from liberalisation, is still not overly competitive as a duopoly, and in Internet service provision, while there is growing potential for an open market, Batelco still effectively operates as a near monopoly. As the TRA Development Review Panel Report outlined, the TRA has largely focused on more technical issues such as licensing, while it is apparent that a more useful approach for the purposes of liberalising the market would be for the TRA to begin facilitating some degree of competition, '...after all, Batelco is overwhelmingly dominant in almost every sector of its operations' (Cave et al. 2005, p. 13).

That the current telecommunications situation is what has evolved in the Kingdom should be unsurprising given that the enforcement activity of the TRA, the actions of Batelco and the resulting telecommunications environment are analogous with discussions, theories and case studies examined earlier in this thesis whereby a weak regulatory environment following on from market reform saw incumbent firms use strong-arm tactics to assert dominance and crush competition – to the detriment of services development and pricing for consumers.

A more thorough examination of the opinions of policy makers, industry players and consumers regarding the economic privatisation and liberalisation reforms underway in the Kingdom, and specifically in regards to the telecommunications environment, will further inform this study, and is the subject of the next chapter.

* * *

Chapter 8:
Attitudes regarding liberalisation and privatisation among policy makers, industry stakeholders and consumers

Introduction

Telecommunications liberalisation in the Kingdom of Bahrain is not an isolated reform policy, but part of a general movement on behalf of the government to make the economy more open and prosperous. King Hamad's vision has pushed forward many of the reforms, with the cabinet and ministers enacting laws and regulations to further the changes. Thus in this Chapter it is important to begin with the views to the heads of state regarding the overall reform process to put in context the comments which follow regarding telecommunications liberalisation specifically. This chapter will examine the opinions of ministers, government employees, and important players in the industry and consumers in Bahrain to develop a perspective that encompasses many of the facets across the spectrum of who is involved in and impacted by the changes in the telecommunications environment. This will include the successes of the current policy, its failures, its future potential and suggestions as to how the process can be changed to help ensure that potential is fulfilled.

Views of the king, the prime minister and the cabinet

In an interview with the Oxford Business Group, King Hamad and Prime Minister Sheikh Khalifa bin Salman al-Khalifa, stressed a crucial objective for the long term prosperity of Bahrain was raising the public living standard by creating more jobs through higher private sector participation in the economy (*Transforming Through Reform* 2005, p. 18). In this context, the prime minister said there are three challenges facing the Kingdom:

> First, to create an economic vision for a sustainable future for Bahrain; second, for its citizens to have the right education and training processes to equip Bahrainis to fill the jobs created from this vision; and third, to have effective labour market policies and practices.

The OBG reported that the prime minister regarded it as essential that sustainable economic development be driven by the private sector, with government's role being primarily as a 'facilitator and regulator rather than service provider'. The prime minister also outlined that the most significant goals of opening the market were to increase competition and efficiency in the economy and attracting investment from local and foreign sources:

> The private sector is seen as a true partner with the government in these new initiatives which reflect the overall objectives of the government. With the introduction of the new economic reforms the private sector will bring in new cutting edge technologies, business practices, and investment and employment opportunities in the Kingdom (*Transforming Through Reform* 2005, p. 19).

The prime minister also stated that the primary vehicle for government's reform programme to privatise and liberalise the Bahraini economy is the Economic Development Board (discussed in Chapter 4). With the aim of spurring greater private sector participation, the prime minister pointed out that government has loosened market regulations and has, to varying degrees, taken steps towards the privatisation and liberalisation of a number of sectors, including telecommunications, higher education, health services, public transport, municipal waste collection and power and water generation.

While the prime minister has made broad public statements concerning the intention of the government to further a market based economy in Bahrain, the realities of implementing this vision have met with cautious support from many within the government. Among leading officials interviewed as part of this research there was clearly an awareness of the difficulties that may result from rapidly pursuing a more open market based policy. According to Sheikh Khalid bin Abdullah al-Khalifa, Minister for the Prime Minister's Cabinet[1], interviewed in October 2004;

> [The] government still needs to have a clear vision and strategy for the privatisation programme… I totally agree that we should have independent institutions with clear strategies and implementation plans – there is a need for higher involvement of the private sector in the economic development, because the government can't continue in the role of provider… [We'll also] have to start considering imposing income tax laws to support the government's budget in order to continue to invest in capital projects.

He added that prior to holding a ministerial meeting to discuss the privatisation strategies, it would be meaningful to study the experiences of other countries with the

[1] Ministers of the Prime Minister's Cabinet in Bahrain need not always have a specified ministerial portfolio over which they have authority and are general cabinet ministers.

idea of adopting from them their best practices, especially in regard to the issues that match Bahrain's culture and best suit its needs. Comments from Cabinet Minister Mohammed al-Mutawa, interviewed in January 2005, parallel the views expressed by Sheikh Khalid bin Abdullah al Khalifa. Referring to Bahrain's entry into WTO and FTA arrangement with the US, he stated that:

> Monopoly affects the development of services, especially telecom, which is an important sector in the economy. That's why we joined the WTO and signed the Free Trade Agreement with the US, in order to open the telecom market and [establish] Bahrain as a regional IT centre. Thus [we should] open all borders to enable international free trade practices in the country by inviting private sector to participate in the economy's development. The main aim behind all these changes is to diversify the economy.

With regards to the government's marketing efforts for liberalisation, Mr. al-Mutawa was in favour the EDB being an independent entity equipped and empowerment to lead the liberalisation drive. As for the MPs' role, he was of the view that parliament shouldn't be more than a monitor of government's performance and legislation, as outlined in the constitution. Mr. al-Mutawa remarked that government should continue to invest in the public sector to raise its performance and productivity level to be comparable and competitive with that of the private sector. In liberalising and privatising the economy, he also thought it necessary that government maintains due diligence regarding its revenues and expenditures, entailing that government retains sizable share-portions in its divested companies and explores the possibility of implementing some form of tax collection. Mr. al-Mutawa added:

> In the telecom sector a well defined national plan is needed to supplement our information and communication technology as a tool for income generation. A year after liberalisation of the telecom market, we noticed as a direct result the competition changes in the prices and improvement in the customer services. That's considered the first harvest of the TRA. I totally agree that in order for privatisation and liberalisation [to succeed], a sound government policy for economic growth is needed. To be successful it requires a setup of a well defined strategy implemented by an entity independent from the government.

Two other ministers[2] interviewed who were instrumental in the government's early stages of formulating a privatisation strategy expressed similar views. One of them was then Minister of State Abdul Nabi al-Shoala, (interviewed in October 2004), who also is

[2] While Abdul Nabi al-Shoala and Saleh Ali Saleh were both cabinet ministers when these interviews were conducted in 2004, both have since departed their posts and been replaced.

an entrepreneur. In his view privatisation is a psychological phenomenon that aims at improving the efficiency and effectiveness of governmental bodies so as to approach those of the private sector. He believes that the government has to put more effort into research and development which, as the basis for economic growth, can be introduced by liberalising government procedures and regulations. Mr. al-Shoala also supported the idea of the sale of government shares to private companies in order to employ the revenue generated to create more job opportunities elsewhere. His conclusion on the socio-economic impacts of liberalisation was that '...it supports the labour market and improves performance'. To complement the liberalisation of the telecommunications sector, Mr. al-Shoala stated that the government must set its e-government strategy so that all services are diverted to the private sector. Saleh Ali Saleh, the Minister of Commerce at the time of his interview in November 2004, also noted his support for government's liberalisation strategies:

> Privatisation plays a great role in economic development. While the government supports the private sector involvement in the economy to the benefit of the society, the private sector has responsibilities towards the society. The missing link is the government has to have income in order to spend and so there should be a system of taxation on profits generated and licence fees.

However, unlike other ministers who agreed with government's approach to the liberalisation strategies, he was not quite in agreement with the way the policy was being implemented. Mr. Saleh stated:

> We as a government don't have a clear strategy. We need to look into other countries experiences and implement only those related to us and also focus on improving the rules and regulations...Government should be a controller and regulator with a well planed privatisation programme which could include introducing direct or indirect taxation in the future. The government should concentrate on ensuring just and transparent implementation of these laws.

Mr. Saleh's remark about 'just and transparent' laws is significant, as he likely anticipated a scenario wherein political factors could affect the transparency of implementation strategies. This assumes relevance in the backdrop of doubts raised in the Bahraini press about the lack of transparency in MTC-Vodafone being selected as a second operator, as well as questions raised in the press about the so called 'independence' enjoyed by the TRA. Among the events that raised these issues to salience was, in its deliberations regarding the awarding of the second mobile license, the government's own Financial and Economic and Financial Affairs Committee had recommended that the winning bidder be required to offer up 60 per cent of its shares for sale to Bahraini nationals and that the Bahrainisation minimum for employees be set at 80 per cent. Within a week of these recommendations being issued however, the TRA awarded the license to MTC-Vodafone without observing these two conditions, with both the committee that made the recommendations and the wider government authorities remaining silent and refraining from launching any investigation into allegations that officials involved in awarding the tender had been bribed (Shreef 2004). Such allegations need to be addressed as transparency and confidence in the even-handedness of governments institutions will likely be significant factor in creating a competitive telecommunications market. Mr. Saleh also noted the following:

> After the era of industrial revolution, now comes the age of information and communication technology where nations advance by effectively utilising them. Bahrain is a service providing country; we have to improve its standards to create a distinguished information service centre, looking at Ireland as an example. We should have the long term vision to open the market and develop competition... In the telecom market, the role of the TRA is to encourage and create competition, not demolition, taking into consideration that almost all sectors rely heavily on the telecom sector. The service has to be of exceptional quality and should provide a platform for e-commerce aimed at achieving improved economic efficiency.

In the view of this former minister of commerce, the socio-economic impact of liberalising the telecommunications industry is in creating a well-trained, versatile workforce capable of dealing with advancements in technology. In noting Ireland's example, Mr. Saleh pointed out the usefulness in setting up an independent Ministry for Information and Communication, separate from the present Central Statistics Organisation (CSO), to develop a national ICT strategy and implementation agenda. The comments made by both former ministers appear to be much more specific with regards to the weaknesses of the government in its liberalisation drive. While current and former ministers supported the intention of the government to liberalise, the message is clear: transparency and a willingness to learn from the experience of other countries are some of the critical determinants in the success of the privatisation and liberalisation strategy.

Views of members of Parliament

As observed in Chapter 4, in 2002 the Kingdom of Bahrain adopted a parliamentary system of government through elections as part of the country's modernisation programme. Spear headed by King Hamad's objective of giving citizens a role in the administration of their country and to ensure transparency in the government's administrative practices, parliament was given general powers through the constitution. It is now therefore meaningful to seek the views of members of parliament. Among those who were interviewed was Khalifa al-Dhahrani, President of the Parliament[3], who stated during an interview on December 19, 2004 that:

> As a parliament, we must review and change the regulations to aid economic liberalisation and make Bahrain a major investment and business centre. We believe in having more involvement of the private sector, in the economic development and the liberalisation efforts. Privatisation helps ease the fiscal burden and creates more job opportunities... Privatisation should be extended to cover all government owned entities, with the telecom sector liberalisation being a good example in this context.

The author, on the recommendation of the president of the parliament also selected three parliamentarians to be interviewed. The MPs noted their support for market liberalisation; however, all of them were of the view that the role of the government should be limited to that of regulator. When asked about their role in the privatisation programme, they stated that they have so far not heard anything about a vision or plan for the parliament regarding the privatisation programme, though they were in favour of government share holdings through holding companies listed on the stock exchange and added that the revenue of such companies should be directed to the needs of the less-privileged in the Kingdom.

When asked about the perception of their role in privatisation and economic development, none of the MPs gave a meaningful response. A search of the proceedings of parliamentary sessions since its inception in 2002 shows no evidence of a motion seeking government's strategic vision for its privatisation moves. The records also show that the majority of the issues tabled were social concerns with relatively little significance regarding fiscal policy or structural reform. For instance in 2005 Parliament wanted to force garment shops to stop displaying mannequins, claiming that it distracts

[3] In Bahrain the president of the parliament's role is much the same as that of the speaker in the English parliament.

the minds of young males in Bahrain. There have also been many 'letters to editor' published in the press criticizing the behaviour adopted by the parliament.

The members of parliament were of the view that, in respect to the role of the private sector in the development of the economy, preference must be given to Bahraini nationals and they have not witnessed much interaction in this regard between government and private sector. The MPs also supported the initiation of a separate ministry for privatisation, whose responsibility could be to formulate the strategies and visions for privatisation of the public sector's investments. The government, according to the MPs interviewed for this thesis, must make the private sector a partner in progress rather than simply a means to an end in economic development. Views of the MPs regarding Bahrain's WTO commitments were quite positive, in which they generally expressed a belief that such trade deals would help to speed up liberalising the economy. In specific regard to the telecommunications market, the MPs seemed upbeat about its affects on the economy and society, noting that it could create more employment.

In this regard one must look at the example of MTC-Vodafone which committed itself publicly to composing its workforce of a least 75 per cent Bahraini nationals, pledging US$2-million to train and educate locals for employment at the company, while actually achieving a 83 per cent Bahrainisation in its 208-person staff by the time the company began operations (*History of Mobile Telecommunications Company* 2004). MTC-Vodafone also claims that its extensive use of local suppliers and contractors will support 'secondary and tertiary employment'. The MPs however remarked that despite MTC-Vodafone's entry as the second mobile operator, effectively monopoly still exists. In their opinion, the government should have definite policies regarding privatisation and liberalisation so as to avoid substituting monopoly with duopoly.

Views of senior government servants

Mumtaz F. al-Ada, advisor at the Ministry of Statistics, was interviewed in August 2005 and made the following comments regarding the Bahrain government's privatisation initiatives:

> To implement privatisation programmes, we have to look at other countries experiences, especially the US'. Privatisation in the Gulf countries revolves

around national unity with a mix of political, social and economic considerations. To begin with, the government should separate finance from economy, because privatisation is an economic process by itself and not to be run by finance ministry.

Here Mr. al-Ada was referring to the previous scenario (until 2004) wherein there existed a ministry which combined the economy and finances of the country under the label of Ministry of Finance & National Economy. The point made by the advisor is pertinent since the Ministry acted as a central agency for collecting government revenue from all other ministries and practiced a centralised system of payment using a budgetary control method. The Ministry functioned solely as a finance ministry and little or no work was carried out for economic development. However, King Hamad, as part of his liberalisation moves, detached the economic developmental activity from the above Ministry and assigned the role to the EDB.

Mr. al-Ada continued with these comments:

> There should be emphasise placed on the private sector's involvement in the preparation process of the government's national economic development plan. To be able to reach the ultimate goal intended from the privatisation, the country has to have social stability. The promotion and marketing of the privatisation programmes should be done properly to deliver the overall objectives (interview August 2005).

When asked about the liberalisation of telecommunications market, he stressed that there should be a well designed and reliable e-government system to create an information technology platform to support the economy and facilitate investor entry into the market. For a legal perspective, Salman Seyadi, the director general of Legal Affairs, was also interviewed in August 2005:

> Legal Affairs has issued the privatisation law, the Telecom Law and the National Telecommunications Plan in coordination with the concerned parties. The laws are advanced and comprehensive and include social considerations with regards to protecting the employees affected by the implementation of these laws. The laws also defined the regulations concerning the selling of government owned shares, de-monopolisation competition and creation of an independent body to regulate the market.

A legal framework of the nature described by the director general gives the society the assurance of security when they do business with companies. However, in terms of the effectiveness of the privatisation moves, including telecommunications liberalisation, no situation has arisen whereby the legality was challenged. Thus, this aspect has so far had no direct impact on telecommunications liberalisation.

Views of stakeholders

No amount of research would add value to this thesis unless the views of the stakeholders in the telecommunications system were taken into consideration. To ascertain the extent to which stake holders view the opening of the telecommunications market as a boost to economic development in the Kingdom, the research focused on three main sources of data:

- Meetings and interviews with the concerned stakeholders.
- A survey conducted by the Bahrain Centre for Studies and Research.
- Data collected from other sources such as interviews with newspapers, journals and economic magazines.

A good majority of stakeholders expressed optimism regarding telecommunications liberalisation and its expected outcomes – i.e. everyone seemed hopeful there will be more competition and a greater variety of services for users. Operators noted how following from liberalisation mobile services grew rapidly, and while confident the same would happen in Internet service provision they also agreed the future penetration rate of the fixed telephone service would slow down. The impact of liberalisation is reflected in a report commissioned by MTC entitled '*How mobile telecommunications in the MENA*[4] *region are creating jobs and improving everyday life 2006'*, where it noted that five per cent of Bahrain's increase in GDP between 2002 and 2004 came from mobile telecommunications revenues. In response to the report, Dr. Saad Al Barrak, chief executive officer of the MTC Group, is quoted as saying:

> The report shows the potential of mobile communications to enhance not only the economic potential of countries and people but also to change the social fabric of our communities. At MTC, we have always believed that mobile communications are part of the framework of societies and the daily lives of people and this report attests to that fact (*How mobile telecommunications in the MENA region are creating jobs and improving everyday life* 2006).

[4] MENA – Middle East and North Africa

Dr. Mohammed al-Ghatam, chair of the TRA's board of directors, at the launch of the Bahrain Telecommunications Market in July 2004 stated that:

> Liberalising the [telecommunications] market is one of the most important accomplishments in Bahrain's recent history, as the first country in the region fully liberalised for all investors to operate their services in a healthy environment with competition and transparency (*Al Ayam News* 2004, July 1, p. 12).

Also speaking at the opening of the Bahrain Telecommunications Market was Andreas Avgousti, the general director of the TRA at the time who noted the economic benefits of liberalisation included increased FDI, technological advancement in the quality of services and imbuing the local workforce with the skills to participate in the modern economy. With the banking and tertiary sectors demanding state-of-the-art telecommunications services to grow their businesses, Mr. Avgousti noted the TRA's responsibility to shape a competitive market able to provide these services, and to that end had established '...a highly developed regulatory environment that is in line with international standards emphasizing on transparent processes and procedures,' (*Liberalising Climate* 2005, p. 149). With respect to the TRA's interactions with Batelco, Mr. Avgousti remarked:

> We deal with them, as well as other operators as required by law. For other service providers Batelco provide us with their retail prices, we then cross check them with other compatible services in other countries. New entrants will approach Batelco for the specified service and should they disagree on price, the TRA intervenes to set up the final price (*Liberalising Climate* 2005, p. 149).

Mr. Avgousti commented that the entry of a third mobile operator should be decided by the market, with 'spectrum availability' being the major issue. The TRA Development Review Panel noted much the same in their 2005 report: 'The crucial factor in this case is that spectrum availability – i.e. the allocation of 'space' through which operators can deliver services over a wireless network...' all of which is dependent on Batelco to deliver these opportunities through a fair and non-discriminatory process, and on time, which, as the review panel notes: 'this is our chief point' (Cave et al. 2005, pp. 7-8). Mr. Avgousti's response to the review panel's comments was:

> The TRA, with the Transportation Ministry, are in the process of formulating their final policy on all telecom spectrum related issues... As with all TRA

> decisions, we will carry out a consultation on the proposals and in due course announce the final spectrum policy to the public as soon as the decision is made (*Bahrain imposes "temporary" Wifi licenses* 2005).

However since Mr. Avgousti's comment in September 2005, there is still yet to be any TRA decision announced as to final spectrum policy, leaving Batelco with monopolistic control over spectrum availability and thus the leverage to effectively exclude competition from the market. As will be discussed in detail in the next chapter, one possible method to hobble Batelco's ability to flex its market dominance may be the establishment of an independent holding company to take ownership of Batelco's telecommunications infrastructure networks and the authority to rent, or otherwise make available, spectrum to competitors. This would solve the problem the TRA review panel raised in their 2005 report concerning the vagueness over where responsibility for spectrum availability lies, and Batelco could no longer indefinitely delay the entry of competitors. Allowing the current situation to continue would put at risk the future socio-economic prospects of the Kingdom and therefore should not be among the acceptable options.

Batelco has not been completely quiet regarding the spectrum issue as in December 2005 the company announced with much grandeur a 50 per cent cut in the cost of broadband services for a select category of businesses. In a press statement Batelco's senior manager for voice and data product marketing, Adel Daylami, remarked that the new package was 'designed for single-user' businesses, and the 'ideal choice for a small enterprise where only one person uses the service'. He added that:

> The reduced prices aim to transform the company's competitiveness, and to continually deliver better customer experience. Batelco aims to stay ahead of the competition in this market and has earmarked an investment of BD21-million (US$57-million) over the next three to five years towards their Broadband Bahrain initiative, which will provide faster and more affordable internet not only for businesses but residential customers as well (*Batelco slashes broadband business tariffs up to 50 per cent* 2005).

It remains vague which companies constitute the 'competition' referred to in this statement however, as Batelco has not allocated spectrum to any rivals, and thus maintains its position of sole service provider. What could be more likely is their announcement is a type of pre-emptive pricing strategy which would further discourage any competitors from seeking entry into the market. As the independent regulatory body, it would seem the TRA should be involving itself in these matters, and if it is not, questions regarding the TRA's independence and integrity should be asked. The interview with the former Commerce Minister Saleh Ali Saleh mentioned earlier in this chapter brought up these same issues, which have also been raised in the press, casting doubt on the actual 'independence' the TRA operates under. However, Mr. Avgousti, the Director General of TRA commented that:

> We have also faced problems getting the consumers, whether government, business or individuals, to understand the role of the body, how it is different, and that the body is totally independent. It does not answer to parliament, and it does not answer to the government or the prime minister. It does, however, answer to the general public because everybody is a customer and they are entitled to come and complain if they aren't happy about something (*Liberalising Climate* 2005, p. 149).

As long as Batelco owns the infrastructure and retains authority over making spectrum available – thus deciding if and when competitors can enter the market – the benefits of competition will remain elusive to the Bahraini customer. The TRA seems unwilling to effectively intervene, and it could be suggested the current scenario results from the absence of a well thought out liberalisation strategy from the policy makers in the National Telecommunications Plan. It also appears that with the growing dissatisfaction among some of the stakeholders regarding TRA's lack of independence, Batelco's monopolistic practices could cast a shadow over the liberalisation policies of the government. The author's interview with Saleh Tarradah, general manager information systems at Batelco, revealed the company's view on this issue:

> The opening of the market was fast just to break the monopoly of Batelco... Batelco deals with the TRA as a regulator, as per the law. We provide wholesale prices to the TRA and the TRA in turn imposes its own prices on all operators. TRA did not give sufficient time for Batelco to study the impact of the new service competition, and as a result [Batelco] was forced to establish a new department related with whole sale just to satisfy the requirements of the TRA and be able to respond within the time frame allocated. This new department also deals with the Bahrain Internet Exchange.

In Tarradah's view, the National Plan was little more than an implementation strategy with target dates and did not incorporate any visionary aspects as to how the future telecommunications industry in the country should look or its impacts on other sectors of the economy. Responding to the question related to the company's satisfaction with the current competitive environment in Bahrain, Mr. Tarradah replied that:

> Long before the introduction of market liberalisation policies the company has developed internationalisation strategies that have helped it to enter into international markets by forming new subsidiaries for operating in other countries.

Dr. Marwan al Ahmadi, CEO of MTC-Vodafone at the time of his interview in December 2005[5], said the TRA appears to be managing reasonably well with the legal aspects of government's liberalisation initiative and is considered the best regulator among GCC, though he indicated the TRA is soft pedalling with certain operators in stating:

> The TRA should minimize the regulations governing the operators and instead concentrate on tackling issues related to competition and be stricter when dealing with the operators. The TRA should focus more in meeting the end user needs which calls for a shift in its current trend of acting as a mediator. The Kingdom should offer more resources for all operators in order to facilitate their operations, and should have clear vision for opening the telecom market. Bahrain being a small country, the TRA should own the infrastructure and make it available to the new entrants by way of leasing or other means. Such a provision could result in elimination of Batelco's monopoly and better services for the consumers arising from a competitive telecom market. Such a change will be welcomed by the industry and would accelerate FDI flows into the country, resulting in accelerating the economic growth of the country.

Fixed-line service

Both mobile operators grasp the complexities of the telecommunications market, including the penetration rate and distribution of services, both noting fixed telephone services are nearly saturated in the profit-making area. Mr. Tarradah of Batelco stressed that they have penetrated the fixed lines market almost fully and only the new construction developments may require new entrants. [As will be noted later in this Chapter however, only two-thirds of Bahrainis have access to fixed-line telephones in their households]. Mr. al Ahmadi of MTC-Vodafone stated that through utilising the mobile network capabilities, they could also become competitors in the fixed-lined market.

[5] Dr. al-Ahmadi left this post in November 2006 when Khalid Al Farkh became the current CEO of MTC-Vodafone Bahrain.

However no company other than Batelco has of yet ventured far into the field of fixed-line service, despite national telecommunication plan clearly indicating the market be fully liberalised by 2004. This is likely due to the heavy start-up investment requirements for new entrants, the low volume of business and the subsequent long pay back period. However former the TRA general director, Mr. Avgousti, contends that the authority is setting the groundwork for new entrants to place a network parallel to, or operate through, Batelco's.

Customer views on liberalisation of the mobile telecommunications market.

While the government and business leaders may support the theory of liberalisation as a means to provide a more efficient telecommunications service, the extent to which theory operates in practice needs to be evaluated in the context of consumer opinion. This can only be ascertained by a survey of a representative sample of consumers within Bahrain. There are two surveys of note that have been conducted regarding the telecommunications market in Bahrain in recent years. Perhaps the first independent and thorough review of telecommunications in Bahrain was undertaken by the Bahrain Centre for Studies and Research (BCSR) in 2004, while in 2007 the Nielsen Company released a second study, commissioned by the TRA, which examined telecommunications usage in the Kingdom through customer surveys. These are the data which will be primarily used in this study to evaluate consumer attitudes concerning the extent to which liberalisation may have improved services, and they will be examined sequentially below:

The BCSR survey

The BCSR conducted a study in 2004 entitled *The Economic Impact of Liberalizing the Telecommunications Market in the Kingdom of Bahrain*, in which a random sample of 550 individual mobile phone users of different age, social status and economic strata were selected. The study did not indicate a margin or percent of error. The fixed phone users were not included in the survey because, though fixed-line service were also officially liberalised, no alternative operator came forward to offer fixed-line services. The sample included users of both Batelco (84.2 per cent) and MTC-Vodafone – now called Zain – (15.8 per cent). Since a customer's nature of employment impacts on their call duration, the type of connection and expenditure on mobile phones, the survey accounted for the following occupational groups with their percentage composition shown in brackets:

- Employee or worker (61.8 per cent) – 74.7 per cent of the working class mobile phone users belonged to the government sector while the financial sector represented only 4.2 per cent. The rest belonged to the services, oil and gas, manufacturing industries, and construction sectors.
- Department Manager or senior staff (6.2 per cent).
- Entrepreneur or businessman (5.3 per cent).
- Student (21.3 per cent).
- Unemployed, retired or housewife (5.5 per cent).

The field survey showed that 47.6 per cent of the sample used their mobile phone for private use, while 52.4 per cent used their mobile as an aspect of their employment, business and service dealings. Out of this 52.4 percent, 26.7 per cent used it for business dealings very little, 11.1 per cent medium use, 9.3 per cent frequent use, and 5.3 per cent more frequently. Private mobile phone users were also noted to use their mobiles for other purposes, such as administrative purposes and other services, though the extent of usage in this respect varies from one individual to another. The BCSR stated in the survey that the various characteristics of the sample are representative of all the demographic groups studied. The following tables have been put together by this author from the findings of the BCSR survey in order to present a summary of the customer views. Comments associated with each table, corresponding by number, can be found in the list following the tables:

Table 8:1 Quality of service

Interview question	*Yes*	*No*	*Undecided*
Any improvement in mobile phone service noticed?	69.5%	21.8%	8.7%

Table 8:2 Quality of service – to what extent improvement is noticed?

Interview question	Very big	Big	Medium	Poor
Extent of improvement in service noticed:	52.6%	31.2%	3.1%	13.1%

Table 8:3 Any decrease in the cost of mobile phone calls during 2004?

Interview question	Yes	No drop noticed
Reduction in cost of mobile phone calls during 2004 noticed:	59.6%	40.4%

Table 8:4 Extent of decrease in the cost of mobile phone calls during 2004

Interview question	Substantial	Medium	Small
Extent to which the cost has decreased:	7.9%	49.7%	42..4%

Table 8:5 Increase/drop in the average number of mobile phone calls during 2004

Interview question	Increase	Drop	No change
Increase/decrease in number of mobile calls:	55.1%	7.1%	37.8%

Table 8:6 Extent of the increase in monthly mobile phone calls during 2004

Interview question	Large	Medium	Small
Increase in number of mobile calls:	48.5%	41.6%	9.9%

Table 8:7 Changes in average monthly expenditure on mobile phone calls during 2004, as indicated by customers

Interview question	Large/very large increase	No change	Decreased
Increase/decrease in average monthly mobile calls during 2004:	45.5%	40.9%	13.6%

Table 8:8 Benefits accruing to business as a result of mobile phone during 2004 –feedback from businessmen and staff

Interview question	Saving in time	Gaining new customer	Increase in productivity	Boost to sales
Impact of mobile phone liberalisation on economy	41%	36%	16.4%	6.6%

Table 8:9 Customer support for telecommunications liberalisation

Interview question	Supportive of liberalization	Liberalisation has negative effects	Liberalization has no effect	Unsure of the outcome
Supportive of telecom liberalisation?	75.6%	4%%	9.71%	6.6%

The results shown in the tables above are analysed below to garner a more complete picture as to what the impacts of telecommunications liberalisation in Bahrain are, with the following derivations apparent from the BCSR survey results:

8:1 - Majority of the customers (seventy per cent) stated that the quality of mobile phone service has improved which is a sign that the telecommunications liberalisation did result in better customer service to some degree.

8:2 - In analysing the extent to which improvement has taken place it was found that of eighty-four per cent of the seventy per cent who commented services had improved also felt that there was a significant improvement in service. This again gives credence to the finding that there was noticeable improvement in services.

8:3 - Sixty per cent of respondents felt that the cost of mobile calls has come down during 2004. Looking at the cost aspect, it appears that liberalisation has also resulted in some amount of reduction in cost. It could be viewed that sixty per cent, as a start, is encouraging and in favour of the concept of liberalisation.

8:4 - However, 49.7 per cent of the respondents felt that mobile phone cost reduction was medium while forty-two per cent felt it was small. While trying to assess the extent of cost reduction, the study shows that there was no major reduction in costs. This finding could be an area that requires more exploration for the policy makers as to why liberalisation has not resulted in any substantial reduction in costs. Pricing structure of the operators and TRA's role in determining the prices could be areas for further fact finding and more research is required to arrive at a proper conclusion.

8:5 – Fifty-five per cent felt that the number of calls have gone up while thirty-eight per cent felt that there was no change. One reason for this could be the entry of the additional operator has prompted many customers who are already Batelco subscribers to also go for an additional mobile number with MTC-Vodafone. In addition, many new customers would have been attracted to the aggressive marketing strategies of MTC-Vodafone. Some of their strategies included the sale of laptops at reduced prices on an instalment basis to those who registered for new numbers.

8:6 - With regards to the number of calls made, 48.5 per cent felt that the number of calls have increased to a large extent while 41.5 per cent felt only a medium increase and ten per cent stated only a small increase. Combining 'large' and 'medium' in this finding, ninety per cent have noticed medium or above medium increase in calls, which could be taken as a positive sign in relation to the liberalisation scenario.

8:7 - For the average monthly expenditure on mobile calls during 2004, 45.5 per cent felt there was a large increase, forty-one per cent did not observe any change and 13.6 per cent felt there had been a decrease. This response may be related to the finding in 8:4 above, showing 49.7 per cent felt there was a decrease in cost of mobile calls (medium reduction), as it is possible that even a relatively medium to small reduction in rates (due to competition in the liberalised market) could result in a substantial increase in mobile call expenditure.

8:8 - As far as business benefits are concerned forty-one per cent felt that there has been savings in time, thirty-six per cent felt it aided in gaining new customers and 16.4 per cent felt an increase in productivity. It appears that businesses gained in a number of ways from the telecommunications liberalisation.

8:9 - Of the total 550 customers interviewed, approximately seventy-six per cent were supportive of liberalisation, ten per cent felt that it has had no effect, and only 4.4 per cent said it has negative effects with 6.6 per cent undecided. This finding shows that the majority of customers hold the telecommunications liberalisation process in a positive regard thus far.

Evaluating mobile services according to the user type – business or personal

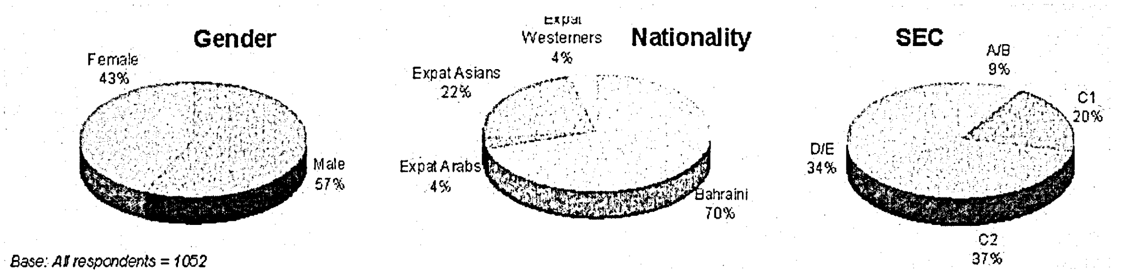
While personal use of a mobile phone is generally considered consumption, use of mobile phones for business is usually noted as a business expense, or factor of production. This differentiation required the author to distinguish between the two in the evaluating the economic affects of the telecommunications market liberalisation and the reaction towards it and following three observations resulted: Firstly, the results of the field survey indicated mobile phone users in business firms saw more improvement in the services offered by telecommunications companies – 78 per cent of business users confirmed an improvement in services compared to 69.6 per cent of private users. It could be interpreted that the firms using mobile phones as a factor of production are more acutely aware of the quality of service in their business model, and thus are able to distinguish improvements in service quickly.

This leads into the second observation, namely that business users accounted for 68.6 per cent of those who commented on a drop in prices compared with 59.2 per cent who used mobile phones for personal use. Again, as business users likely monitor their costs of production closely, they would also tend to notice more the changes in price for telecommunications services. Finally, the results of the field survey further demonstrate that business users of mobile phones are more enthusiastic towards telecommunication liberalisation, with 81.9 per cent seeing liberalisation in a positive light, compared to 75.3 per cent among those who used mobiles for private purposes.

The Nielsen Company survey

In May 2007 the TRA commissioned Nielsen to undertake a market research study aimed at obtaining detailed knowledge of the behaviour of the different customer groups in Bahrain, which, broadly speaking, was divided into residential users and corporate/business users. [While selections of the results of both the residential and business customer surveys are discussed below, the emphasis of the discussion is overwhelming on the residential users. This is due to the fact that the sample size for the residential module – 1052 persons interviewed – was deemed by this author to offer results endowed with a good deal of statistical value. However the sample size for the business survey – 159 interviews – was deemed by this author to be a rather small. Thus while the results gleaned from the business survey may offer points of interest worth examining further, there should be caution taken in placing too much weight in the survey results as they stand by themselves.] The study did not indicate margins of error in its results. Responses to the survey questions were gathered from respondents through face-to-face interviews. The various topics covered in the survey were fixed-line usage, mobile usage, long-distance calling, internet/broadband usage, as well as public awareness of the TRA.

Figure 8:1 Nielsen residential survey demographic makeup



(Source: Nielsen 2007, 'Understanding telecom usage in Bahrain, residential module findings')

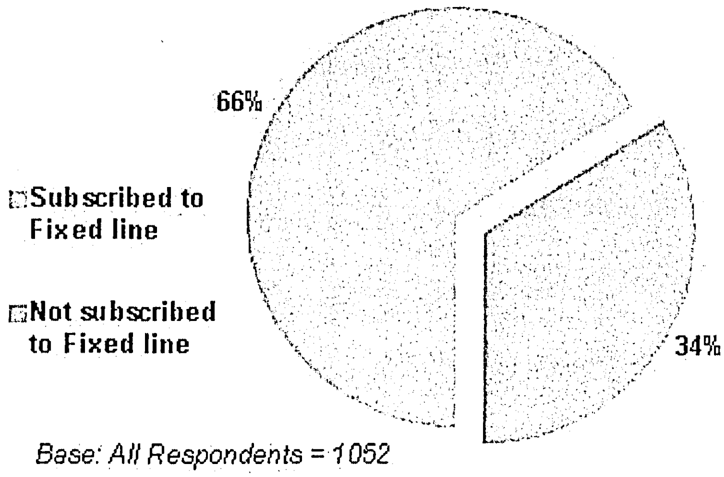
Socio-economic class (SEC) of the interviewees was determined on the basis of professional occupation and the income associated with such, with the general parameters of each SEC class outlined below:

- SEC "A" – Owners, CEOs and senior management of large companies and senior government officials.
- SEC "B" – Airline pilots, physicians, lawyers, judges, university professors, senior accountants, etc.
- SEC "C1" – Teachers, junior scientists, aircraft mechanics, legislative assistants, managers of medium-sized businesses (five-10 employees), etc.
- SEC "C2" – Bank cashiers, typists, clerks, shop-keepers, self-employed artisans (carpenters, plumbers, electricians, etc.) non-commissioned officers, nurses, etc.

- SEC "D" – Policemen, soldiers, firemen, drivers, fishermen, cooks, waiters, artisans working for others, barbers, etc.
- SEC "E" – Watchmen and night guards, street vendors, unskilled labourers, servants/maids, etc.

Fixed-line usage

Figure 8:2 Residential fixed-line penetration – 2007

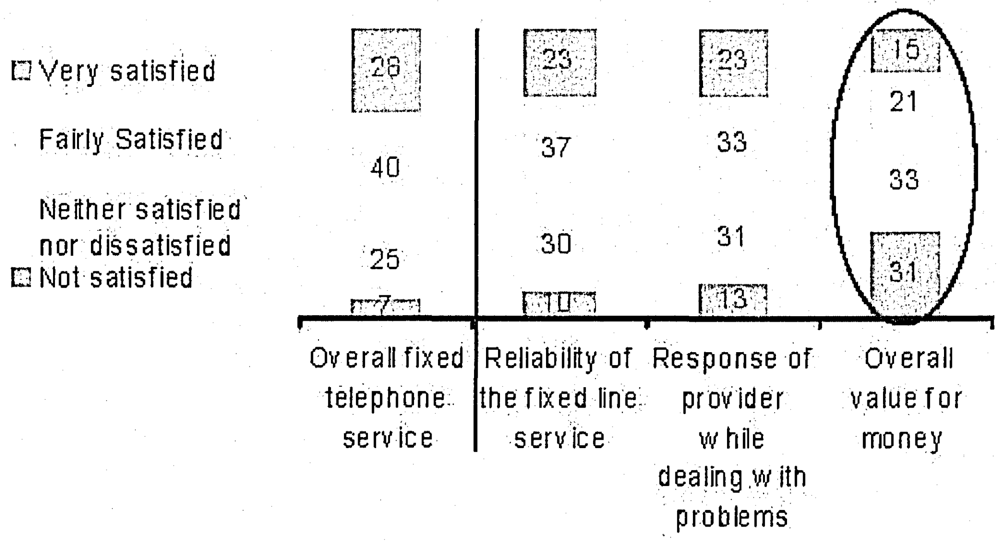


(Source: Nielsen 2007, 'Understanding telecom usage in Bahrain, residential module findings')

As noted in Figure 8:2 above, the Nielsen survey found that about two-thirds of Bahraini households have a fixed-line subscription. Among those that did not have a fixed-lined connection, the reason the majority (85 per cent) gave for such being the case is that they had a mobile phone they could use instead. 11 per cent answered that the reason they did not have a fixed-line was due to the prohibitive cost, two per cent answered that the building they live in does not offer fixed-line connections and one per cent said they have a fixed-line at work, thus do not need one at home as well.

Interestingly, only 30 per cent of those who have a fixed-line actually know what the monthly rental charge is, with most under the impression – wrongly – that they are charged per minute of calling. 20 per cent admit to having no idea how their fixed-line bill is calculated.

Figure 8:3 Residential customer fixed-line satisfaction – 2007

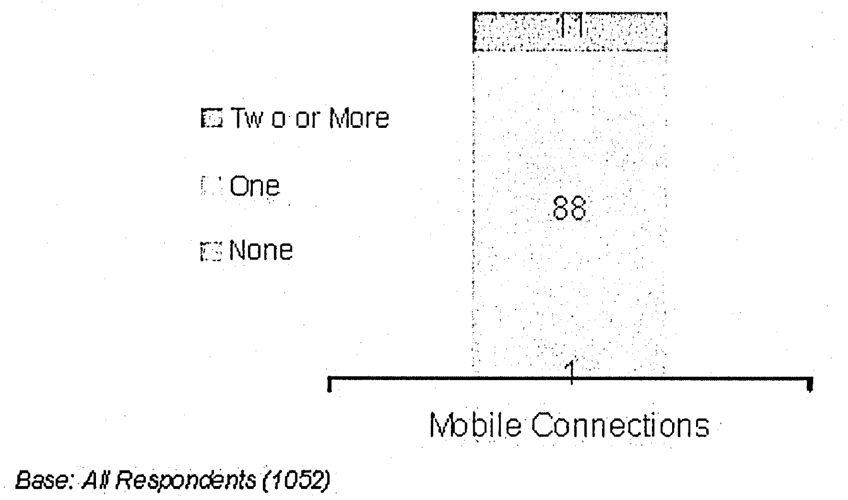


(Source: Nielsen 2007, 'Understanding telecom usage in Bahrain, residential module findings')

In terms of customer satisfaction rates, of those respondents who answered yes to having a fixed-line subscription in their household (693 persons), the majority (68 per cent) responded that they were very or fairly satisfied overall with their fixed-line service, while just seven per cent said they were not satisfied overall with their fixed-line service, as Figure 8:3 above shows. The largest source of discontentment was in regard to overall value for money, with 31 per cent of the sample responding that they were not satisfied that they were getting value for their money, while 36 per cent said they were very or fairly satisfied they were getting value for their money. In terms of suggestions for improvements, 81 per cent responded they would like to see tariffs reduced, 42 per cent said would like to see improved quality of fixed-line service, 41 per cent would like to see the range of services improved and 37 per cent would like improvement in the quality of customer care when problems occur related to service.

When asked, if the option existed, would they be willing to switch carriers, 34 per cent said they would be 'likely' to switch fixed-line service providers, 39 per cent said they were neither likely nor unlikely to switch and 27 per cent responded that they were unlikely to switch even if given the option. When asked how important it was to them to retain their existing phone number, 40 per cent said it was 'important', 38 per cent said it was 'neither important nor unimportant' while 22 per cent said it was 'not important'.

Figure 8:4 Mobile penetration – 2007



(Source: Nielsen 2007, 'Understanding telecom usage in Bahrain, residential module findings')

As shown in Figure 8:4 above, mobile penetration is nearly universal, with 99 per cent of those interviewed responding that they owned a mobile number, while 11 per cent responded that they had two or more mobile numbers. For those with two or more mobile SIM cards, the reasons they gave for this are: 74 per cent have separate business and personal use numbers, 17 per cent prefer to call different people from different networks, while seven per cent use a second number when travelling overseas.

When asked which mobile connection type they were using, 69 per cent said they used Batelco pre-paid services, 14 per cent responded Batelco post-paid services, 20 per cent responded Zain pre-paid services and four per cent said Zain post-paid services [the total of these percentages is greater than 100 per cent as a result of some respondents using two or more mobile numbers].

In regards to value added services (VAS), the most commonly used is SMS messaging, with 80 per cent of mobile users responding that they regularly send SMS messages. The next most commonly used VAS is MMS, with 38 per cent saying they use this service regularly. Of the other VAS' offered in the mobile market (including downloading of wallpaper, ring tones and games, mobile info, email, internet browsing and video calling), none was used regularly by a large number of people, with the most frequently used being downloading of ring tones, which 16 per cent of respondents said they did with some regularity.

Figure 8:5 Residential mobile consumer satisfaction, by company – 2007

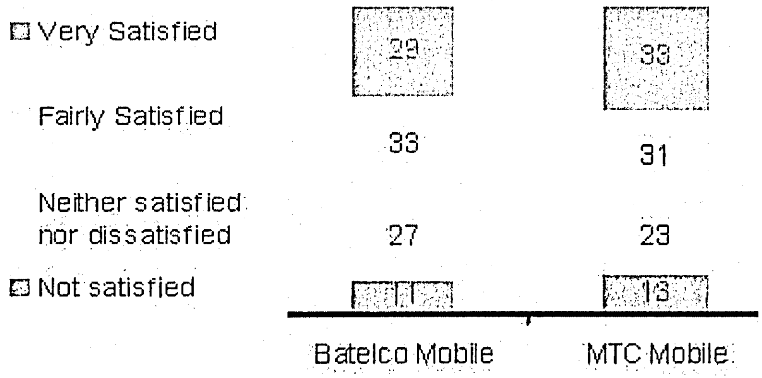
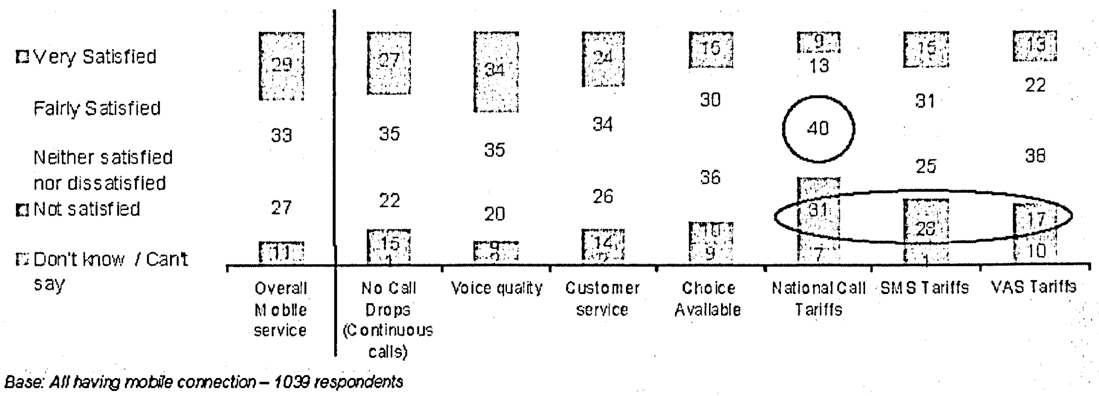


Figure 8:6 Residential mobile consumer satisfaction by category – 2007



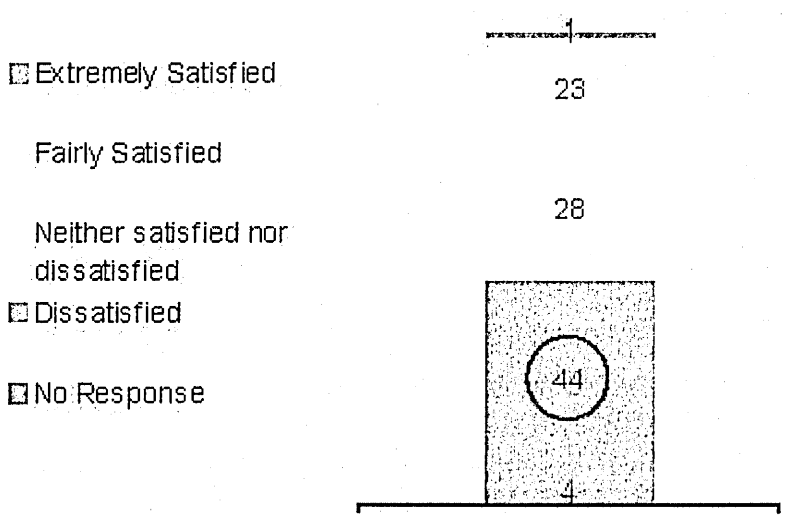
(Source: Nielsen 2007, 'Understanding telecom usage in Bahrain, residential module findings')

As shown in Figure 8:5, consumer satisfaction levels between the two mobile companies are fairly equivalent. [While there was no margin of error published with the Nielsen survey, the differences in the four responses in Figure 8:5 – i.e. 'very satisfied', 'fairly satisfied', 'neither satisfied nor dissatisfied' and 'not satisfied' – range between two and four per cent when comparing results for the same answer between Batelco and MTC Mobile (Zain) – i.e. 33 per cent are 'fairly satisfied' with Batelco and 31 per cent are 'fairly satisfied' with MTC Mobile – which is conceivably within, or at least very likely close to, what the margin of error for the survey would be.] As shown in Figure 8:6, across both companies, overall 62 per cent of residential customers are either very or fairly satisfied with their mobile service, compared to 11 per cent which remarked that they were not satisfied with their mobile service. The specific categories of service where the most dissatisfaction was record was in national call tariffs (31 per cent not satisfied), SMS tariffs (28 per cent not satisfied) and VAS tariffs (17 per cent not satisfied). Unsurprisingly, when asked about areas of service that could be improved, 82 per cent of respondents answered 'reduce charges and tariffs'. Other answers were 'improve quality of mobile service' (35 per cent), 'improve range of services/features available for mobile' (32 per cent) and 'improve the quality of customer service when there is a problem with the service' (23 per cent).

When asked 'have you ever switched mobile service providers?', only seven per cent answered yes. Of those that had switched, the main reasons given for switching were: cheaper costs (23 per cent), promotional offers (19 per cent) and quality of services offered (14 per cent).

Long-distance calling

Figure 8:7 Residential consumer satisfaction with long-distance service – 2007



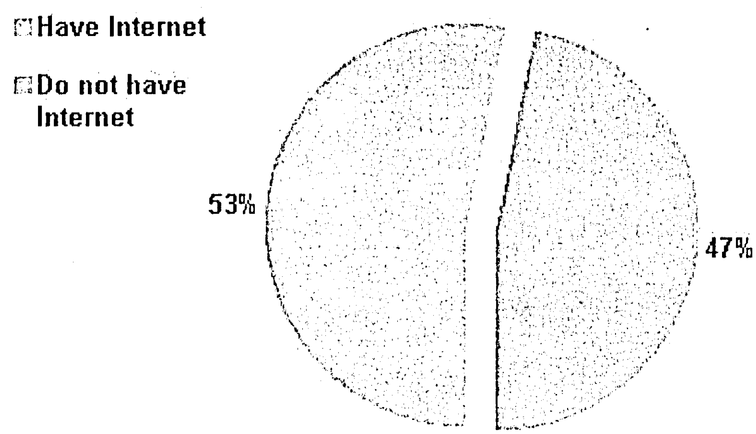
(Source: Nielsen 2007, 'Understanding telecom usage in Bahrain, residential module findings')

The Nielsen survey uncovered the interesting statistic that a significant segment – 40 per cent – of the sample group did not make international calls at all. Of those who did make international calls, the average was two to three per week, with average call duration falling between three to 10 minutes. With regards to respondents' regular method of making long-distance calls, near two-thirds (60 per cent) uses their mobile phone, some 28.5 per cent use a fixed-line, 9.5 per cent use Internet cafés, while the remaining two per cent uses payphones. One out of three respondents used a pre-paid calling card when making international calls [, the rest paid for long-distance calls through their normal bill payment mechanism].

As can be seen in Figure 8:7 above, 44 per cent of respondents who make international calls are 'not satisfied' with the service, with the survey finding that for an overwhelming majority, call pricing was their top concern.

Internet usage

Figure 8:8 Residential Internet usage – 2007



Base: All respondents – 1052

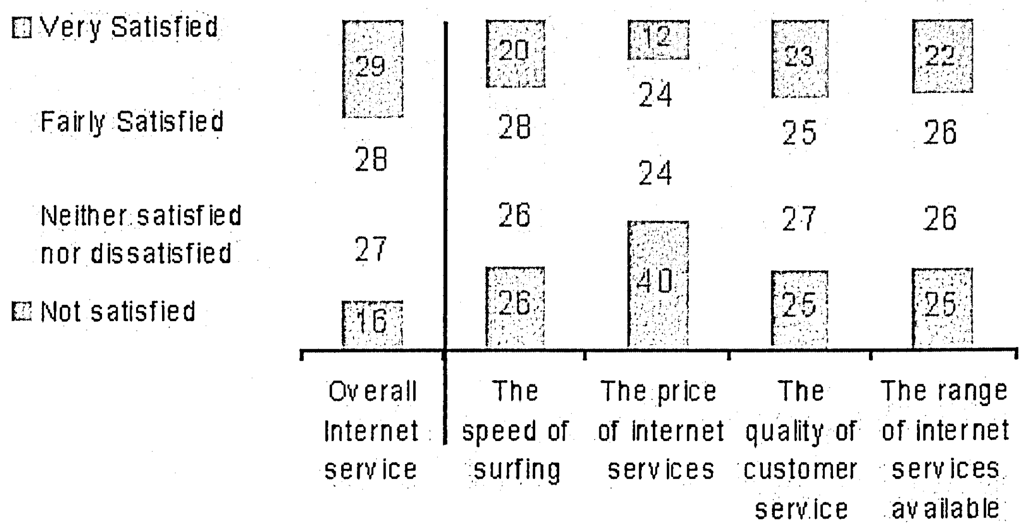
(Source: Nielsen 2007, 'Understanding telecom usage in Bahrain, residential module findings')

As shown in Figure 8:8, more than half of respondents (53 per cent) said they have an Internet subscription at home. Of these, 97 per cent had subscriptions with Batelco – 67 per cent for broadband and 31 per cent using a dial-up connection (two per cent gave no response when asked what type of connection they were using). 75 per cent of those using a dial-up connection said they would consider upgrading to a broadband connection if the price for a broadband connection was reduced. 27 per cent of dial-up users also noted they may consider upgrading to broadband if they knew more about the service.

Of broadband users, 39 per cent are signed up to Batelco's 256 Kbps, BD10 (US$27) per month package, 30 per cent have the 512 Kbps, BD25 (US$67.5) package, 20 per cent have the 1MB, BD40 (US$108) monthly package, two per cent the 2MD, BD60

(US$162) package, while 10 per cent are not aware of the package to which they have subscribed.

Figure 8:9 Residential Internet service satisfaction rates – 2007



(Source: Nielsen 2007, 'Understanding telecom usage in Bahrain, residential module findings')

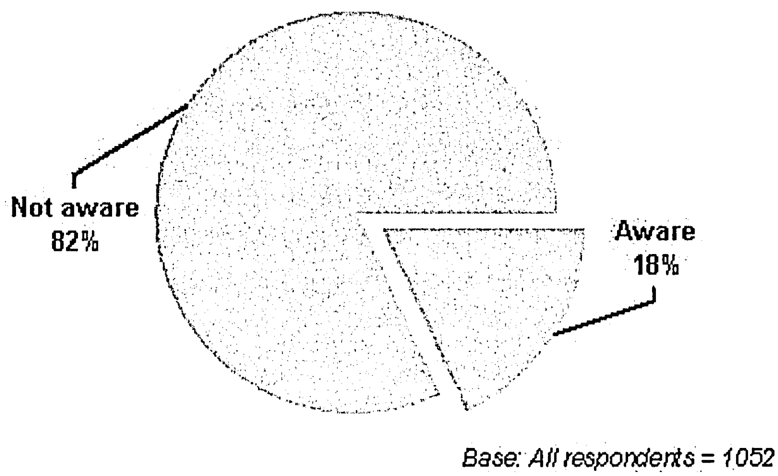
As shown in Figure 8:9, while overall 57 per cent of survey respondents said they were very or fairly satisfied with their Internet service, when asked about specific aspects of their Internet service, there was substantially greater levels of responses of 'not satisfied' – e.g. 40 per cent said they were 'not satisfied' regarding the price of internet service. Unsurprisingly, when asked for suggestions for improvement, 87 per cent of respondents said 'reduce charges and tariffs', 61 per cent said improved quality of Internet service and 50 per cent answered 'improve the quality of customer service when there is a problem with the service'.

Awareness of TRA

82 per cent of survey respondents were previously unaware of the TRA, as shown in Figure 8:10 below. Of those who were aware of the TRA, 49 per cent said their awareness came from newspapers, 37 per cent said 'friends and relatives', 32 per cent said they knew of the TRA through television, billboards (11 per cent), Internet (eight per cent), radio (two per cent) and cinema[6] (two per cent).

[6] The TRA has run several advertisement campaigns regarding using mobile phones with courtesy, which included short commercials which played in cinemas before the feature presentation began.

Figure 8:10 Telecommunications users awareness of TRA



(Source: Nielsen 2007, 'Understanding telecom usage in Bahrain, residential module findings')

Summary of findings from the Nielsen business survey

In regards to business usage, the Nielson survey found the following:

• Regarding companies with fewer than 100 staff, the main concern related to telecommunications was the cost of service. Second was service quality.

• Most companies are relatively satisfied with Batelco in terms of mobile and fixed-line services, with slightly more satisfaction being expressed for mobile provision than for fixed-line provision. 30 per cent of companies did, however, have reservations about call tariffs.

• There is a pervasive lack of awareness that any companies other than Batelco exist as alternatives for fixed-line service, and thus Batelco has almost complete market share.

• Only 60 per cent of business have mobile numbers registered to the company, and of these 90 per cent are with Batelco.

• SMS is the most frequently used VAS for business, but generally there has been low uptake of VAS in the regular functioning of the business day, with low use of VAS on both fixed and mobile – only 15-18% use voice mail.

• About half of all local and long-distance calls are shorter than three minutes long.

• 93per cent of businesses stated it was important that they retain their current number, and thus while 18 per cent said they may consider switching providers, this was only under the condition that they could migrate with their current number (, other conditions were that tariffs must be less and service better).

• Three-quarters of all long-distance calls are dialled over IDD on a fixed-line.

• More than 35 per cent of companies are unsatisfied regarding long-distance calling rates.

• Only two-thirds of companies subscribe to broadband internet, or any other form of data service. Of these, effectively all of them are have service contracts with Batelco.

• 18 per cent of companies continue to use dialup internet connection.

• The area of greatest dissatisfaction among companies regarding the telecommunications services they subscribe to relates to internet and data services, most notably in the areas of speed, service and price.

• Companies' spending on telecommunications services is currently highest for fixed-line services, with mobile and internet coming next, respectively.

Evaluating the Nielsen survey

The most consistent theme identified by the Nielsen survey across all segments of the telecommunications market is respondents dissatisfaction with the price of services: 31 per cent of fixed-line user said they 'not satisfied they were getting value for money' and 81 per cent wanted to see tariffs reduced; 31 per cent of mobile users were not satisfied with national call tariffs and 82 wanted to see charges reduced; 44 per cent of long distance callers were dissatisfied with the service, largely due to high tariffs; 75 per cent of those using dial-up internet connections said the price of broadband service was preventing them from upgrading, while 11 per cent of those without a fixed-line telephone said it was because the cost was prohibitive. The Nielsen business survey also found cost to be the top concern of companies in regard to telecommunications services, with 35 per cent of businesses also unsatisfied with international calling rates. This makes it clear that the TRA needs to push ahead with bringing greater competition into the market – or if it is unable to do that, implement regulation in the best efforts of mimicking what the effect of competition would be.

In terms of what the market potential is for prospective new entrants: in fixed-lines, with one-third of respondents saying they had no fixed-line connection, as well as 34 per cent of those with fixed-line subscriptions saying they would change carriers if the option presented itself, there is definitely market potential available for other fixed-line service providers. In terms of the residential mobile market, while this author is hesitant to say it is saturated (even at well more than 100 per cent penetration), it is fair to say the 'low-hanging fruits' have been plucked, and that further market development will likely be innovatively and technologically driven, rather than brute expansionism. Regarding Nielsen's business survey however, with only 60 per cent of respondents reporting mobile numbers registered to the company, there would seem to be a degree of opportunity left in the business segment for mobile service providers to sign up new customers. In regards to Internet subscriptions, there seems to be untapped market potential in both residential and business segments, with 47 per cent of respondents not having internet at home and a full one-third of companies without broadband internet. Internet services are also the segment of the telecommunications market where both residential and business customers voiced the most dissatisfaction in terms of speed, service and pricing; thus while there is great room for service providers – until now effectively only Batelco – to expand their customer base, there is perhaps greater room for improvement in the services they provide.

Among the issues the Nielsen survey identified that would impact upon competition, in fixed-line and mobile sectors at least, is number portability: 40 per cent of residential fixed-line subscribers said it was important for them to keep their present number, while 93 per cent of businesses said the same. The need or want to keep the same phone number can have the detrimental effect – from a competition standpoint – of holding a consumer to a certain service provider when they might otherwise have switched.

Another striking issue the Nielsen survey brought to light – and that the TRA must address – is the general lack of public awareness regarding aspects of the telecommunications networks they use: only 30 per cent of fixed-line users know how much their monthly rental fee is, or even that they are *not* being charged by the minute; this could be a significant contributor to the high level those who said they are not satisfied that they are getting value for their money, as they do not have the proper basis from which to accurately judge the charges on their telephone bill. As well, in regards to Internet usage, 27 per cent said they would consider upgrading to broadband if they knew more about the service. Perhaps most astonishingly however, even six years after its creation, 82 per cent of respondents were unaware of the TRA. The Nielsen business survey also noted that there is a 'pervasive lack of awareness' among consumers regarding options for fixed-line service other than Batelco, which cannot but hamper the growth of competition, as how can companies other than Batelco gain market share if no one knows about them? Greater awareness would allow consumers to be better informed of their options when purchasing telecommunication products, in regards to buying the services that suit their needs and at prices accommodating to their budget. An informed consumer base can 'buy smart'; instead of feeling there is no choice but to accept the price gouging of the dominant market player, the informed consumer can opt instead for the cheaper – though smaller and less well known – services of a new market entrant. Thus an informed consumer base in itself can help promote competition through exercising its purchasing power discerningly.

Comparing the BCSR and Nielsen surveys

It is common and useful in the social sciences to use surveys to measure changes in a population over time – ask a group of people a series of questions today, then ask the same (or a similar) group of people the same (or a similar) set of question a year later, and one can compare the answers to measure changes in the responses over time. In regards to the BCSR survey and the Nielsen survey, while they were conducted through interviewing a similar group of people (a random sampling of people in the Kingdom of Bahrain) and they are separated in time by approximately three years (the BCSR survey being conducted in 2004, the Nielsen survey in 2007), it is not valid to compare the results and findings of these surveys with each other. The reason for this is they measured different things.

For the most part, the questions in the BCSR survey asked respondents to give their assessment of the changes they had noticed regarding aspects of the telecommunications sector. [e.g. 'Quality of service – to what extent improvement is noticed?' or 'Any decrease in the cost of mobile phone calls during 2004?']. What the BCSR survey did not ask, for the most part, is for the respondents to qualify their personal experience [, e.g. how much do you pay for mobile phone calls?] or what was their level of satisfaction.

Conversely, the Nielsen survey did *not* ask respondents to give their appraisal of whether they had notice change over time. Instead the Nielsen survey for the most part asked respondents what their situation was currently [, e.g. do you have a fixed-line connection? yes or no], what was their level of satisfaction regarding different circumstances [, e.g. what is your level of satisfaction with fixed-line service? 'Very satisfied', 'fairly satisfied', etc.), and what their preferred situation would be [, e.g. what improvements would you like to see in fixed-line service? Lower tariffs, better service, etc.].

As discussed in Chapter 6, when two sources of data are quantifications of different things, 'one cannot validly compare apples with oranges'.

Conclusion

When King Hamad took the throne in 1999 he began a broad process of political and economic reform to liberalise the economy and stimulate continued growth and prosperity, with the announcement to liberalise the telecommunications sector coming as part of the optimistic political atmosphere of that time. It is apparent from the statements of the King, the cabinet ministers and the government officials that they support a shift of government's role from the provider and supplier of services to a more hands-off regulator, and while expressing support for privatisation and liberalisation generally, they support telecommunications reforms specifically. The author's research has, however, failed to locate any evidence of a link between the ministers' feedback and the formulation of the National Telecommunication Plan, despite the significance of telecommunication deregulation in expanding trade and business in the Kingdom, as well as its relation to compliance with the WTO free market policy requirements. This has led to the criticism expressed in this chapter regarding government's lack of a 'vision for the future'. As noted in a number of interviews, among the approaches Bahrain can pursue to remedy this is to study the examples of other countries which have pursue much the same policies, and tailor the most suitable best practices to the Bahraini scenario.

The mobile sector is different from the other sectors however, in that some successes of liberalisation have been realized, as a look at the BCSR survey results shows. While the majority of both private and business customers were of the opinion that the quality of mobile services has increased, a comparatively larger percentage of business users expressed they had noticed greater improvements in service quality. As the Nielsen survey found however, there are still large segments of the telecommunications market where greater competition is needed to address dissatisfaction with service provision, as well as the fact that market potential exist for new entrants to exploit to acquire market share and create competition.

While there are no ready solutions for the lack of desired momentum in the Bahraini telecommunication liberalisation process, after an analysis combining the findings from the different chapters in this thesis, a model will be proposed in Chapter 9 as a possible means to push the liberalisation process forward in Bahrain.

*   *   *

Chapter 9: Analysis of the forces driving telecommunications reforms in Bahrain – the benefits now and for the future

Introduction

This chapter will bring together the finding of previous chapters into an analysis of the development of telecommunications in the Kingdom of Bahrain and the challenges regarding regulation. Following from the analysis will be this author's suggestion for a new model through which further developments in the telecommunications environment may be best facilitated to realise the fullest benefits of liberalisation and competition for Bahrain. This research has resulted in the following findings:

1. The driving forces in Bahrain behind the establishment of a privatised and liberalised telecommunications environment.

2. The extent to which privatisation, liberalisation and the regulatory environment of Bahrain telecommunications have been and will be beneficial to the Kingdom's economic development.

While these findings were discussed in the earlier chapters, consolidation of the findings throws light on the lessons learned by Bahrain and helps in reviewing the current strategy.

The forces driving Bahrain's telecommunications privatisation and liberalisation

Since the 1970s, oil revenues have propped up substantial GDP growth in Bahrain while at the same time creating a dependence on this finite natural resource and reducing pressure to diversify the economy into other sectors, thus effectively impeding overall economic development. Not unaware of the limits of its oil resource wealth, the government has been pursing diversification of the economy to increase private sector activity and foreign investment. Privatisation of the Bahrain Telecommunications Company in the early 1980s, as discussed in earlier chapters, was part of this diversification strategy, since a well developed telecommunications infrastructure is one of the basic ingredients for economic diversification. Government's grasp of this fact was highlighted by former Minister of Commerce Ali Saleh, during his interview as reported in Chapter 8, where he stated: "After the era of industrial revolution, now comes the age of information and communication technology where nations advance by effectively utilising them. Bahrain is a service providing country; we have to improve its standards to create a distinguished information service centre..."

While the divestment of Batelco was limited in scope to Bahrain, the launch of the UK's privatisation program in the early 1980s impacted on the global economic scenario – as discussed in Chapters 2 & 3 – paving the way for privatisation, and later liberalisation, to be the future mechanisms of development in telecommunications sectors worldwide. This global trend lent itself to the development of a more market based and liberalised approach to broad international agreements regarding telecommunications, such as ONPs in the EU in the late 1980s and 1990s and the 1997 WTO Basic Telecommunications Agreement – both discussed in Chapter 3 – as well as specific country-to-country agreements, such as the 2004 FTA between Bahrain and the US, noted in Chapter 4. As a participant in the global economy and a member of the WTO, Bahrain's moves to liberalise its telecommunications sector are necessary to meet its international commitments, as Cabinet Minister Mohammed al-Mutawa remarked in his interview in Chapter 8:

> Monopoly affects the development of services, especially telecom, which is an important sector in the economy. That's why we joined the WTO and signed the Free Trade Agreement with the US, in order to open the telecom market and [establish] Bahrain as a regional IT centre. Thus [we should] open all borders to enable international free trade practices in the country by inviting private sector to participate in the economy's development. The main aim behind all these changes is to diversify the economy.

Although the Kingdom's successes in economic expansion thus far have been concurrent with Batelco being the sole provider for most telecommunications services, as Mr. al-Mutawa states above, liberalisation of Bahrain's telecommunications sector is spurred by the knowledge that a monopoly provider is not sufficient to establish the quality and efficiency of service Bahrain requires for the healthy diversification and future prosperity of its economy. As stated in Chapter 2, the view that privatisation is the solution to boosting enterprise performance – as argued by Freidman, Hayek, King, Niskanen, and Guislain – needs to be looked at from a different perspective given that there are cases, including Bahrain, where privatisation has not resulted in overwhelming improvements. For example, more than 25 years after privatisation, Batelco remains a monopoly service provider for fixed lines and Internet, with the company both willing and able to exploit its power over customers by charging heavily for limited services, as illustrated in Chapter 7. This view also concurs with Cook and Uchida's 2001 study, discussed in Chapter 2, where they found only a minimal link between privatisation and economic growth and noted that the former might actually hinder the latter, while Jackson et al. (cited in *The General Concepts of Privatisation* n.d., p.32) found that increased competition and organisational reforms are more important in generating wider economic benefits than making public companies private.

Whereas telecommunications was once regarded at a natural monopoly – also discussed in Chapter 2 – the technological advancements of fibre-optics and other ICT innovations noted in Chapter 3 have made the entry of competition into the markets much more feasible and cost effective, with competition then driving down consumer prices, enhancing services and itself spurring greater penetration of ICTs into society and across markets generally. It is this modernising affect that well executed telecommunications reforms can bring – so plainly apparent from the case study of Singapore discussed in Chapter 3 – which Bahrain was pursuing when it stated in the 2003 National Telecommunications Plan that 'government seeks to encourage the development and availability of the widest possible range of information and communications technologies and services within Bahrain', as discussed in Chapter 7. Prime Minister Sheikh Khalifa bin Salman al-Khalifa was quoted stating much the same in Chapter 8: 'With the introduction of the new economic reforms the private sector will bring in new cutting edge technologies, business practices, and investment and employment opportunities in the Kingdom,' (*Transforming Through Reform* 2005, p. 19).

Telecommunications liberalisation is also pushed by the moves the government is taking to alter its role in the economy, as the prime minister described in Chapter 8, to 'facilitator and regulator rather than service provider,' with many in government adopting the New Right prescripts – discussed in Chapter 2 – calling for unburdening the public services from the bureaucracy of the state to usher in a modernisation of the economy. The comments in Chapter 8 of Sheikh Khalid bin Abdullah al-Khalifa, Minister in the Prime Minister's Cabinet, reflect the importance of private sector participation in economic development; telecommunication liberalisation also comes under this framework and government expects a liberalised telecommunications service to provide the necessary environment to promote business.

In analysing the implications of this approach, Yale Braunstein, Meheroo Jussawalla and Stephen Morris note in *Comparative Analysis of Telecommunications Globalization* how 'freer trade' in a nation's telecommunications market has three notable economic benefits: the introduction of new products and services, a decrease in prices for both business and residential customers through increased competition, and increased private investment in the telecommunications sector (Braunstein et al. 1999, p. 13). These authors point to two main trends evident in the modern telecommunications industry: the swift progress of technological advancements and the general understanding that liberalisation of the telecommunications sector is a cornerstone to promoting the expansion and enhancement of the industry (Braunstein et al. 1999, p. 1). Braunstein, Jussawalla and Morris also note that telecommunications markets in which direct competition is allowed experience greater rates of growth than markets which are dominated by a monopoly, and that the introduction of competition into the markets of developing nations may have a more profound impact upon growth than in developed countries – the growth rate of traffic per subscriber between 1990-1999 in developing countries with competitive markets was been 11.7 per cent, while in markets with monopoly providers this growth rate was been 5.2 per cent (Braunstein et al. 1999, p. 13). Moreover, Braunstein, Jussawalla and Morris point out how telecommunications liberalisation is necessary for the general growth and well-being in a nation's economy:

> Multi-national corporate customers are demanding that regulators in many countries allow competition in the provision of business services in the belief that competition will lead to lower prices and a wider range of services. Historically, multi-national corporations will move operations out of countries where access to adequate and reasonably priced telecommunication services is lacking (Braunstein et al. 1999, p. 18).

Many businesses currently operating in the banking, financial, tourism and other major tertiary sectors of the Bahraini economy are already demanding this modernisation of the telecommunications network though liberalising the market. In effect businesses in the Kingdom are demanding Bahrain move to truly establish itself as the type of information society described in Chapter 2. As noted in Chapter 7, other banking and financial centres around the GCC region are gaining momentum with Dubai and Qatar among the most notable, while Yousef al-Essa, CEO of Addax Investment Bank, warned that the decisions by Morgan Stanley, Goldman Sachs and Carlyle to base their regional operations in Dubai could be part of a continued flight of business away from Bahrain if the competitive situation in the Kingdom is not improved (*Banking on Success* 2007 p.3). Chapter 4 also raised the 2006 McKinsey Consultants report entitled *Reforming Bahrain's Labour Market: The Case for Change* which noted, 'Dubai is making great strides in many of the sectors that Bahrain could once think of as its own, including transport, trade, logistics and even finance'. The demands of the Bahrain Financial Harbour, Bahrain's newly acquired Formula 1 facilities, the Kingdom's massively expanding luxury-resort living and tourism facilities – outlined in Chapter 4 – all bring pressure to bear on government to create an advanced and efficient telecommunications environment through which these businesses can grow and gain a regional competitive advantage. As well, the Nielsen survey outlined in Chapter 8 the dissatisfaction in the various segments of telecommunications provision for residential consumers in the Kingdom, especially in regard to tariffs and charges.

Liberalising telecommunications to accommodate and facilitate this growth in business is not only economically preferable, but likely to be socially necessary. As discussed in Chapter 4, Bahrain will have 100,000 new job-seekers over the next 10 years and the civil services will not be able to accommodate them, and thus private sector growth is required to avoid large-scale unemployment. The tension already existing in the Kingdom – explained in Chapter 5 – where a politically disenfranchised and disgruntled Shiite majority is already disproportionately poor, obliges governments to foster private sector growth to increased employment opportunities for all its citizens in order to maintain social stability. It was also shown in Chapter 5 that concerns regarding the preservation of the Islamic culture of the Kingdom in the face of increased exposure to Western culture via the Internet are relatively minimal, but that the government also has both the regulations and mechanisms in place to protect the Kingdom's value system if it is ever deemed to be threatened.

The current and future benefits of privatisation, liberalisation and the regulatory environment of telecommunications for Bahrain's economic development

The liberalisation reforms, as envisioned by the Prime Minister, are the means to pursue 'sustainable economic development driven by the private sector,' and in the process raising the public living standards, creating jobs and easing the fiscal burdens on government through higher private sector participation in the economy (*Transforming through reform* 2005, pp 18-19). Concurring with this idea was Zakaria Hijres, the former CEO of the EDB, who – in Chapter 4 – noted that the vehicle of sustainable economic development ought to be the private sector, and that the role of government in Bahrain ought to be that of a 'facilitator and regulator, rather than service provider and investor,' *Treading the Board* 2005, p. 55). This is how, in the words of the prime minister, 'The private sector is seen as a true partner with the government...' (*Transforming Through Reform* 2005, p. 19) while '...the government supports the private sector involvement in the economy to the benefit of the society...' as former minister of commerce Mr. Ali Saleh stated in Chapter 8.

Given the above, it should be noted that Bahrain's government is not pulling out of direct participation in private sector economic activity, but instead, it is willing to come in as a partner to encourage confidence in major schemes or to push their development along. An example of this is the Bahrain Formula 1 Circuit and associated facilities, where the government funded much of the US$150-million construction costs of what is an essentially private sector project.

The mechanisms through which government is formulating and realizing its economic reforms, as noted in several chapters throughout this thesis, is the EDB, currently chaired by Crown Prince Sheikh Salman bin Hamad al-Khalifa. Among the EDB's projected results of the privatisation and liberalisation reforms – noted in Chapter 4 – is doubling Bahrain's 2005 level of GDP by 2015, with GDP growth of 6-9 per cent each year from 2005-2015 concurrent with a five per cent growth in employment for each of those years. The forecast of the consulting firm McKinsey discussed in Chapter 4 noted Bahrain could more than double its GDP between 2005-2015, to US$26.5-billion, with other 10-year targets including upping per capita income to BD12,000 (US$31,800) from an estimated BD5,108 (US$13,585) in 2004, and creating 150,000 new jobs. [It should be noted that all of these forecasts and targets were arrived at before the world descended into severe economic turmoil in September 2008 – the so-called 'global financial crisis'. As of the time that this thesis was submitted, it was still unclear what the impact of the global financial crisis would be in Bahrain. However, due to the world-wide nature of the financial crisis and Bahrain's integration into the global marketplace, it is all but assured that there will be some negative impacts in the Kingdom, entailing the downward revision of short, and perhaps medium term, prospects for growth. The extent of these revisions has yet to be determined however.]

Almost all the current and former ministers and parliamentarians were supportive of the government's liberalisation moves for the reasons stated above. They pointed out that telecommunications liberalisation could lead to both a more fertile environment for business development and social benefits for Bahrainis. For example former Minister of State Abdul Nabi al-Shoala noted in his comments in Chapter 8 that among the socio-economic benefits of liberalisation was that "...it supports labour market and improves performance." The comments of minister and MPs comments thus support the hypothesis that competitive telecommunications market can contribute more effectively to the economy and society than a state run or private telecommunications monopoly service.

In analysing Bahrain's progress toward liberalising its telecommunications market, it is worthwhile to consider a 2002 World Bank study entitled *An Assessment of Telecommunications Reform in Developing Countries* which noted four factors that are important in such a process: (1) privatisation of the SOTE monopoly, (2) introduction of competition, (3) opening the market to foreign investors and (4) the establishment of regulations to enforce competition (Fink et al. cited in Sanchez & Hwa 2003, p. 4). In regard to the first factor, as stated earlier, Bahrain took the step of privatising Batelco in 1981. In regard to the other three factors, there have been varying degrees of success in each and these will be examined below.

Mobile service in Bahrain is the one area of the telecommunications market where liberalisation has resulted in some degree of competition and a relatively significant amount of foreign investment. The entry of Zain seems to have been successful in both driving down prices and enhancing service, as noted in the results of the BCSR survey in Chapter 8. The majority of all interviewees also expressed an optimistic view about the liberalisation process while 4 out of 5 business users commented that they were in favour of liberalisation, a likely sign that liberalising the telecommunications market is good for businesses across the economy. As noted in Chapter 7, it is hoped that Batelco and Zain could be spurred to develop and enhance their service further with the entry of a third mobile operator into the market, which was initially planned for 2005, but had only entered the tendering process by the time this research was completed in the autumn of 2008. Another expectation is that a third provider would drive down prices for services and will slim existing margins for Batelco and Zain, forcing them to find new sources of revenue to compete and driving a wave of new efficiency reforms through the technological infrastructure they have developed.

Fixed-line services opened for full competition on July 1, 2004, and to date there has been only limited erosion of Batelco's market share and limited foreign investment in the sector. As noted in Chapter 7, growth in recent years has been modest but steady in the fixed-line market. The impacts of the Second National Telecommunications Plan enacted in 2008 have yet to materialize however, and should the Government follow through with the section which 'requires TRA to ensure that there is a full rebalancing of tariffs of fixed telephony' [quoted from Chapter 7], there may be a downward alteration in the trajectory of the market. With potential weaknesses in prospective customers base and expensive infrastructure investments to start up due to delays in being able to access Batelco's pre-existing infrastructure, the TRA Development Panel Report 2005 noted that Batelco will likely retain its fixed line monopoly, and thus the TRA has to act as a counter-weight to balance the company's market dominance in this sector (Cave et al. 2005, p.7).

Internet service provision, like fixed-line telephone service, is at least theoretically open for competition. However, Batelco is still the only effective player in the market through its monopoly on infrastructure and the company's control over competitor access to its infrastructure networks. Unlike fixed-line service though, the subscriber rate for internet service is growing rapidly and demand is expected to continue to be strong in the future – as outlined in Chapters 3 and 7 – suggesting a more viable option for foreign investment than fixed-line service offers, but such investment has yet to materialise significantly.

The development of competitive markets in all the above segments of the telecommunications market – and the ensuing improvement in prices and services such would spur – would undoubtedly be welcome by respondents to the Nielsen survey who voiced their dissatisfaction with the current state of telecommunications provision in the

Kingdom, especially in regards to charges and tariffs. In assessing the regulations the Government of Bahrain has enacted to create competition in the telecommunications market, the role of the telecommunications regulator entrusted to enforce these regulations must be scrutinized.

The crucial role of the TRA in liberalisation

TRA chairman Dr. Mohammed al-Ghatam endorsed the government's liberalisation moves in his interview with this author in December 2004 – noted in Chapter 8 – highlighting that through liberalisation Bahrain has provided investors a healthy, competitive environment to operate in with a developed and transparent regulatory framework, while the TRA's general director, Andreas Avgousti, noted direct investments in the telecommunications market will create additional job opportunities for local manpower and foster a high tech environment in the Kingdom.

As discussed above and in previous chapters, members of the government at all levels, consumers in general and businesses from various sectors of the economy regard a modern and competitive telecommunications network as the essential nervous system of the new economy in Bahrain, but a crucial element in its establishment is the regulation of the market by the TRA. In this regard it is important to re-state the point from Chapter 3 that a coherent and effective strategy to shape the positive progressive development of ITC infrastructure and services within a nation can spur 'sustainable development in the fields of public administration, business, education and training, health, employment, environment, agriculture and science' (*World Summit on the Information Society* 2005, p. 11). At the same time it is worthwhile to note the examples of Mexico and Sri Lanka from Chapter 3, where weak regulation led the incumbent telecommunications monopolies to flex their market dominance for self-benefit at the cost of general detriment.

As the International Telecommunications Union (ITU) has observed, 'it is one thing for countries to make a policy decision to create an independent regulatory agency, and quite another to empower the agency to act independently and effectively', while Sanchez and Hwa note:

> [This] rings particularly true when it comes to developing countries… because the staff of new regulatory agencies in developing countries tends to be

> relatively inexperienced, the regulated industry is likely to challenge the legitimacy of the new agency if the following effective regulatory practices are not followed: accountability, adherence to legislative mandate, efficiency, fairness, independence, objectivity, and transparency. Among these practices, transparency seems to be the most important because it promotes the legitimacy of a regulatory agency and helps it avoid regulatory capture [i.e. being too dependant on the industry being regulated]. Given the watch-dog effect of public scrutiny, an agency whose actions are transparent is more likely to be accountable, efficient, fair, objective, independent, and can more easily adhere to its legislative mandate (Sanchez and Hwa 2003, p. 5).

The ITU also lists transparency among the crucial factors of success for telecommunications liberalisation reforms, noting that 'only those governments that established and implemented sound regulatory frameworks could expect to attract long-term, stable private investments in their ICT sectors' (ITU cited in Sanchez and Hwa 2003, p. 6).

The former minister of commerce Mr. Saleh Ali Saleh, in Chapter 8, emphasized the need for complete transparency on the part of government with regard to the implementation of the regulatory framework, noting that while privatisation and liberalisation are the proper means to pursue economic development, he was critical about the lack of a clear strategy on the part of the government. Dr. Marwan al Ahmadi, CEO of Zain, also noted the lack of a "...clear vision for opening the telecom market," pointing out that the TRA is rather hands-off in its approach [i.e. the TRA Review Panel noted how the TRA has thus far seemed more concerned with the semantics of regulation – such as establishing a 'sophisticated framework for making competition assessments' – rather than taking concrete steps to ensure competitor entry].

As outlined in Chapter 7, in theory the mechanisms government created to bolster a liberalised market should work but have so far been either ineffective or delayed in their implementation, with the TRA being less than 'transparent' about the reasons for these delays, leading the TRA's independence to be questioned. As the TRA Development Review Panel report outlined, the TRA has largely relegated itself to more passive roles such as licensing while sidestepping substantive action to bring about genuine competition in the market. Among the more direct actions the TRA has so far taken was to intervene in 2006 when Batelco continued to advertise unlimited internet access when in fact it no longer allowed customers this option, as was outlined in Chapter 7. However this episode again highlights the need for the TRA to take concrete steps towards creating the conditions for a competitive market, as consumers are at the mercy of Batelco's whims with regard to the company's internet policy and fees, and can either accept the new, limited access packages of Batelco, or go without internet service. The BIX, as described in Chapter 7, would significantly alter the make-up of the ISP market in favour of competition and curb Batelco's ability to abuse its dominant market position, but for reasons unspecified it has yet to begin operations.

Among the factors for success for other countries around the world regarding telecommunications liberalisation has been the effectiveness and transparency of an independent regulator. In Bahrain it is apparent that the TRA has been neither effective in creating a competitive telecommunications market nor transparent regarding how it goes about its business, which erodes the perception that TRA is acting independently and damages the credibility of the regulator. This is especially important regarding spectrum availability as competitors need spectrum made available to enter the market, Batelco has a monopoly on spectrum allocation and appears to be delaying granting competitors access and the TRA has either been unable or unwilling to intervene as of yet. The TRA is not naïve to these issues either – as recently as May 2007 the TRA published a consultation document where it stated:

> [C]urrent and prospective licensees have identified that one of the most critical obstacles to the deployment of alternative telecommunications networks and the development of competition is the restricted ability of licensees to construct ducts [accessing Batelco's network]. This is perceived as being mainly due to the fact that Batelco continues to enjoy unique rights with respect to the planning, building, maintenance and protection of the telecommunications network infrastructure (TRA 2007).

Despite knowing why there is no effective competition in most areas of Bahrain's telecommunications provisions, the TRA is still only in the 'consulting' stage and is refraining from commitment to take action.

With regard to a third mobile telecommunications operator entering the market, Mr. Avgousti stated in Chapter 8 that it will depend on the spectrum availability, which in turn depends on Batelco since they own the lines. However, because there is no competitor, it is up to Batelco to decide about the broadband spectrum and the TRA is yet to address this issue. It is unclear whether government has taken this up in their strategy as a significant policy issue, though this scenario indicates that Bahrain's liberalisation scheme ought to be formulated better, with a proper regulatory framework based on the Kingdom's telecommunications setup.

As was made apparent by the comments in Chapter 8 of Mr. Avgousti, the TRA does not seem to feel it is under any immediate pressure to solve these issues either, as '...the body is totally independent. It does not answer to parliament, and it does not answer to the government or the prime minister. It does, however, answer to the general public because everybody is a customer and they are entitled to come and complain if they aren't happy about something'. And complain the public has, yet the changes are still yet to substantially materialise. The definition of 'independent' which Mr. Avgousti is using in the above statement is likely misplaced as 'the term "independence" as used in the context of telecom reform... does not imply independence from government policy, or the power to make policy, but rather independence to implement policy without undue interference from politicians or industry lobbyists' (Melody cited Sanchez and Hwa 2003, p. 5). As noted in Chapter 7, the TRA review panel has stated that 'regulation should retreat as the tide of competition advances. But at the moment competition is only prospective.' If the Kingdom is to realize its goals for a liberalised telecommunications sector, future economic prosperity and social development generally, both the TRA and the BIX must begin to fulfil their mandate as stipulate under the Telecommunications Law, while a lack of action will jeopardise the success of the Bahrain's telecommunications liberalisation reforms. With the stakes so high, it is imperative that the TRA be held to account for it performance in regulating the telecommunications market, such that continued failure to inject a competitive dynamic into the market place will be met with consequence.

It has been more than six years since the telecommunications liberalisation process began and the benefits have so far only trickled in for customers in the Kingdom because of Batelco's ability to exclude competitors from using its infrastructure and the TRA's unwillingness or inability to facilitate competitor entry into Batelco's networks. Thus it would appear that the very structure of the liberalisation model was not designed to promote competition and facilitate new entrants into the market. This has prompted this author to develop an alternative model for liberalisation – one which also takes into consideration the small size of the market, the effective utilization of Batelco's infrastructure availability, and the holding company which the Government launched in

2006 to manage and administer the shares of all the companies in which the Kingdom of Bahrain owns stake.

Alternative model for telecommunications

The first Telecommunications Law was promulgated in January 2002, and since then except for long-distance calling cards and Zain cellular services other operators have been unable to enter the market. This is largely a factor of Batelco's ability to delay giving competitors access to its networks and thus preventing customers from enjoying the real fruits of liberalisation. Thus it would seem there is a need to develop a meaningful model that would place all operators at par without giving an opportunity for monopolistic practices to hinder the progress of liberalisation.

In creating a foundation upon which to form a new model for the structure of telecommunications in Bahrain, this author has researched and examined case studies of telecommunications reforms undertaken in countries around the world, as outlined in Chapter 3 and elsewhere in this thesis. There is a limit to which any one example can be applied to the situation in Bahrain however. Even among European nations pursing the common goal of the ONPs in the 1990s, the diversity of cultural, geographic and economic conditions in each nation led to a diversity of means by which telecommunications reform was pursued, as well as the varying levels of accessible capital and consumer affluence causing the pace at which new telecommunications developments unfolded to be staggered across the various countries. Similarly, while nations the world over have pursue the common goal of telecommunications privatisation and liberalisation – and there are certainly commonalities between the circumstances under which it is being attempted in the Kingdom and the circumstances within which it has been attempted elsewhere – the intersection of all the various factors at play in the Bahraini scenario have, in certain meaningful ways, the cumulative effect of placing the Kingdom in a fairly novel place in the documented history of telecommunications reform.

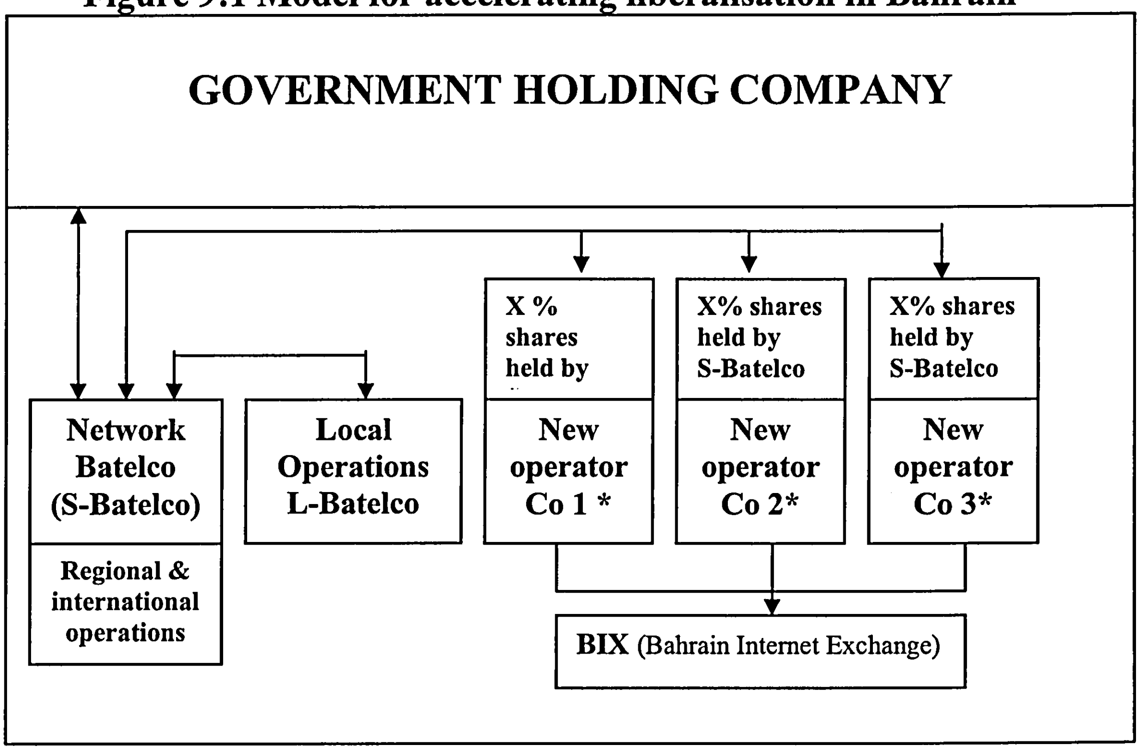
Even when looking to Bahrain's neighbours in the GCC, it is difficult to draw heavily from any one of their individual experiences to inform the path Bahrain should pursue, given the fact that Bahrain was by decades the first GCC state to privatize its SOTE and was several years ahead of all of its neighbours in liberalizing its telecommunications market. While Bahrain may have smallest domestic telecommunications market in the GCC, the Kingdom is the at vanguard of the region's telecommunications market reforms and as such it is conceivable that neighbouring states are watching the progress of Bahrain's reforms – and their successes and failures – to inform their own market reform policies.

Thus, instead of adapting to the Bahraini context any one model for telecommunications reforms, this author has instead selected, where appropriate, from several successful models of reform from around the globe and used these in the construction of a new model for telecommunications in the Kingdom. This new model also has incorporated within it certain structures which are fairly new and without extensive precedent in the history of telecommunications reforms. As will be shown below, it was necessary to utilize these new structures in the new model to address certain challenges the Kingdom faces for which, due to the intersection of the various factors at play in the Bahrain, this author found there to be a lack of historic precedent from which to glean substantial guidance.

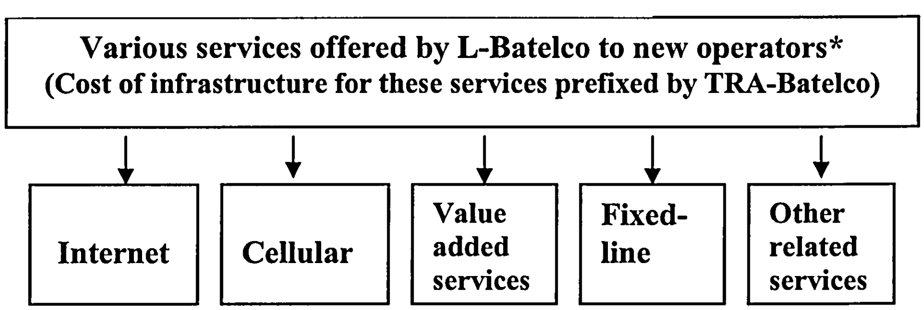
In view of the limited market that Bahrain offers to competitors, the model should be developed in such a way that, when applied to real life, it offers an attractive opportunity from investment and expansion. It should offer the potential of enticing rates of return for well-placed and strategic investments, offers competitors speedy approvals and licensing processes, ease of operations, a transparent set of regulations, and most important of all, an independent regulatory body that ensures fair business practices. More importantly, this model should be able to deliver the fruits of liberalised telecommunication services to the customers and alleviate the present duopoly scenario. The model, shown in Figure 9:1 (below) is based on the present liberalised environment and is formulated based on the following framework:

The Economic Development Board of Bahrain has set up a holding company to hold the shares in various companies where the Bahrain government has a stake. Accordingly the shares held by the Government in Batelco would also be held by the holding company – i.e. the Government must divest of all direct stakes in Batelco. As stated by Ramamurti earlier in this chapter, and shown in the examples of the UK and Jamaica, telecommunications reform is much more effective and credible when the state no longer has a vested interest in protecting the incumbent monopolist. As well, such divestment would seem to give an independent regulator even more independence to move strongly against a private company's market manipulations. In the 2008 Second National Telecommunications Plan, the Government of Bahrain seems to have recognized the need for it to divest of its shares in Batelco, noting that it plans to have the divestment completed of most, if not all of its shares, within the next three years. This should allow the TRA a freer hand in dealing with Batelco and give its threat of sanctions against the company for non-compliance greater credibility – assuming, of course, the TRA chooses to take up the opportunity to move forcefully to open the market for competition, which is an issue which will be dealt with below.

Figure 9:1 Model for accelerating liberalisation in Bahrain



Explanation of various services offered by Batelco:



(Figure 9:1 above is only a generic guideline. A detailed model that addresses specific issues including legal and contractual issues, which involves all the stakeholders – TRA, Bahrain Government, and the operators – will have to be formulated and simulated before implementation.)

Thus the holding company plays a key role to play under this proposed model. For operational and accounting purposes, Batelco must be segregated into two functional units – one could be termed as a Network Batelco Company and the other, Operating Batelco Company, with the former holding all the current infrastructure of Batelco such as hardware, software, licenses etc., while the latter would handle the operations related to providing telecommunications services to the customers.

The Network Batelco would provide its infrastructure to the new operators based on their needs to provide services to customers. In turn, the Network Batelco would be given a percentage shares in each of the new companies, which acts as an additional motivational factor for Batelco to allow them use of its infrastructure – Network Batelco is thus a company that holds a percentage of shares of all operators. The advantage of this arrangement is the new operators do not have to worry about investing in infrastructure required to offer fixed-line, Internet and mobile services – which would thus avoid the situation described in Chapter 2 of 'a host of smaller businesses investing heavily in functionally identical yet operationally independent networks covering the same areas [which] would likely be painfully costly, economically inefficient and ultimately unsustainable for all involved'. [The above arrangement would also fulfil Finger's 'regulation of scarce resource' objective of regulation, noted in Chapter 2]. Instead it is more cost effective, thus more profitable, for them to lease the infrastructure from Batelco at rates prefixed by Batelco – explained below – for a share of profit in return for using the infrastructure. Thus this model is likely to encourage more operators to enter the market and compete in both mobile and fixed lines, unlike the present scenario where new entrants hesitate to enter the fixed-line service due to their apprehension about the large infrastructure investments required and uncertainty of earning a fair return on their investments.

The new model for telecommunications also adapts a version of what has been in practice in the UK since 1994, when BT was required to supply separate accounts for each of its divisional segments, as discussed by Cave in Chapter 2. As well, the new model incorporates the principle of non-discrimination, which plays an important role in both the UK and the 'common carrier' legislation of the FCC in the US, as discussed by Horwitz, also in Chapter 2. The new model for telecommunications would necessitate that Network Batelco and Operational Batelco supply different accountings of their businesses to the Government of Bahrain. The TRA would then hold Network Batelco to the principle of non-discrimination in the supplying of its services – i.e. Network Batelco would be forced to sell its services and access to its infrastructure [for Internet, fixed-lines and mobile] to Operational Batelco at the same price it charged other competitors in the market. The TRA would also set a bracket of minimum and maximum rates operators would be allowed to charge customers. This model would help to promote competition by denying larger companies the ability price smaller competitors out of business (i.e. set prices below cost and absorb the loss with larger financial resources until smaller companies can no longer compete and are forced out of the market), at the same time that this model would prevent operators from charging customers unreasonable high rates.

As happened with Singapore, the pervasiveness of regulation in the different areas of the telecommunication sector would be rolled back as competition took hold and grew to healthy, sustainable levels – i.e. the Singapore case studied in Chapter 3 noted how the IDA, recognizing in 2003 that SingTel's one-time monopoly in the long-distance market had been reduced to a 30 per cent market share through blossoming competition, saw fit to release SingTel from its regulatory shackles and allow free-market mechanisms to function unrestrained in that sector. Similarly, in Bahrain, over time and with the successful introduction of competition into the market, the new models for price bracketing mechanisms will focus less on specific price controls and more on anti-competitive pricing policies generally, [in line with the Chapter 2 discussion on the normalisation of regulation over time]. The new model must allow for the space for competition to grow, but it must also avoid the damage to the markets which over-regulation can cause, as out-lined by Crandall & Hausman in Chapter 2, or, as Littlechild remarked:

> Regulation is essentially a means of preventing the worst excesses of monopoly; it is not a substitute for competition. It is a means of 'holding the fort' until the competition arrives. Consequently, the main focus of attention has to be on securing the most promising conditions for competition to emerge, and protecting competition from abuse. (Littlechild 1983, p. 11).

As a first step in the process of entering the Bahrain telecommunications market, all operators would approach the TRA for licensing (Operational Batelco already has been issued licenses for providing the various services). After the TRA issues the license, a new operator would approach Batelco for selecting infrastructure for the services the operator proposes to offer, which Batelco must supply using the principle of non-discrimination. In case of any dispute that arose between new operators or undue delays in connections being established to Network Batelco's networks, the TRA will be the arbitrator and empowered to extract the appropriate penalties for non-compliance.

Network Batelco will be responsible for the international operations of Batelco such as alliances with overseas operators etc. The whole methodology would be implemented with total transparency and in compliance with the regulatory provisions of the TRA, thus the TRA would have to shift its strategic approach towards enforcing its regulatory authority and fulfilling its government bestowed mandate.

Along with the benefits likely to arise from this new model for telecommunication in Bahrain, this author also recognizes that the new model has the potential to facilitate collusion among telecommunications companies operating in the Kingdom. To forestall this possibility, the TRA must be vigilant in its scrutiny of industry players and empower itself to extract penalties and take antitrust measures should collusion become apparent. To ensure this, the TRA must be held to some form of accountability to make certain it is fulfilling its mandate and has not become 'captured' by players in the industry it is meant to be regulating – a concept discussed in Chapter 2 and currently a Bahrain-specific issue in regard to the TRA's relationship with Batelco. Among the options policy-makers in Bahrain ought to consider for regulator accountability are the suggestions of Baldwin & Cave – such as requiring the TRA to submit periodic reports or 'rolling plans of action' to special committees and/or ministers of the government for approval, as well as holding TRA reforms to cost-benefit analysis requirements – as discussed in Chapter 2. These moves would also greatly increase the transparency of the TRA and offer it enhanced credibility. Additionally, as Stirton and Lodge noted in relation to the Jamaica case study in Chapter 3, success in regulatory policy in itself helps to strengthen the authority of the regulator. Just as the Jamaican judiciary played a role in the countries telecommunications reform successes – in presiding over lawsuits in which C&W attempted to reestablish its monopoly power – the Bahraini judiciary has also shown itself fairly efficient and effective in its handling of business and commercial law – as noted in Chapter 4 – which is an asset that could also be incorporated into regulatory and/or regulator accountability mechanisms. The optimal apparatus and process through which to elicit regulator accountability is, however, the subject of additional study and will not be determined by this thesis.

In looking to a model of successful telecommunications reform, what becomes apparent in an analysis of the Singapore case study is that the success of the city-state's reforms did not come about as a result of timid half-steps in approaching policy and regulation. Rather, the Singapore has shown, and continues to prove today, that it is both willing and able to implement bold and sweeping reforms where and when it deems such is necessary to bring about the ends it seeks. Singapore recognized early on that to be a world leader in ICT, vibrant competition in its telecommunications market was necessary; thus the government and the regulator staunchly imposed change upon the structures of telecommunications environment in the country – adapting their blueprints for development to circumstances as they unfolded – to make this competition a reality. For Bahrain to succeed in its own telecommunications reforms and to become the ICT hub of the Middle East, such vision and commitment must be shown on the part of the government and the TRA – i.e. to resolutely do what is necessary for the establishment of thriving competition in telecommunications.

While Bahrain seeks to emulate the same success of Singapore, a major difference between the countries that would makes unwieldy a simple transplantation of the Singapore model into the Bahraini context is underlying business environment of the two countries – as noted in Chapter 3, Singapore scores among the most competitive and free economies of the world, and while the reality in Bahrain is that, though aspiring to greater things, the Kingdom is currently a relatively undiversified, resource-based economy.

In this context, the fairly unique crossroads Bahrain is at in the documented history of telecommunications reforms becomes apparent. While Bahrain's GDP per capita ratio would portend the affluence of a developed nation, the Kingdom's infrastructural and private sector development, while both expanding rapidly, place the Bahrain in developing country status. As mentioned above, to attract investment by telecommunications companies, the opportunity must have an enticing potential profit. While the general wealth of the Kingdom would is an attractive asset, as is the growth potential Bahrain has shown, the currently underdeveloped private sector and the small population base may lead to questions as to whether the potential return on investment in Bahrain's telecommunications sector is appetizing enough to feed in one's capital. This is what the profit-sharing aspect of the model is meant to counter, as the degree to which the model is profit-sharing it is also risk-sharing, thus helping to ease the apprehension of companies considering market entry. Risk-sharing and the holding company model would also help uphold the integrity and coherence of the system – i.e. the diversified sources of financing upon which the telecommunications network is based would offer it increased fiscal durability – thus helping to fulfill the second of Finger's 'Objectives of Regulation in Network Industries'. The above, coupled with a credible, accountable and transparent regulator to ensure that the interconnection commitments of the incumbent operator are enforced – and at a fair price – and the result is a telecommunications environment much more alluring for investment from competing companies. By attracting new investment, the new model would also help to ensure there is adequate capital available to for the deployment of new infrastructure and greater development of product and services.

As noted earlier in this thesis, increased competition in the telecommunications market will help increase the competitiveness of the economy generally, fueling greater economic diversification and growth of the private sector, which in turn will create a more lucrative market for the telecommunications companies to provide services in. As the profitability of the telecommunications sector becomes ever more apparent, there will arise the need to assess the degree to which the risk-sharing elements of the new model are still necessary, or, whether they should be scaled back to allow greater play in the mechanisms of the free market, as the TRA must take care not to coddle telecommunications operators.

Furthermore, the results of the Nielsen survey in Chapter 8 show it is imperative that there be a multi-pronged approach to fostering a competitive telecommunications market in Bahrain. In addition to this author's new model for restructuring the telecommunications sector and implementing TRA accountability, such things as introducing number portability – as Singapore undertook to implement in 2007 – could have a major impact on market competitiveness; this derives from the fact that, as outlined in the Nielsen survey, there are significant numbers of both residential and business customers who would consider changing services providers, but are essentially trapped with the service provider they have due to the importance maintaining the same phone number has for them. As well, the Nielsen survey showed that the TRA must undertake effective awareness programs in order to foster an environment in which consumers are properly informed and thus able exercise their purchasing power in a pro-competitive fashion; or, to put that conversely, it is difficult to see how a healthy, competitive market can come into being when large proportions the market's foundations – i.e. the consumers who buy the products and services – are unaware how their bills are calculated, do not know the difference between dial-up and Broadband, are oblivious to the fact that there are – albeit nascent – alternatives to Batelco in fixed-line and Broadband services, and are ignorant that there even is a TRA to which they can voice their many grievances regarding telecommunications provision.

As Singapore did in 2005, Bahrain also needs to take a special interest in, and establish a coherent strategy for, the development and deployment of Broadband to wire the island into a technologically advanced communications web, or the Kingdom's own 'super-highway' for data. As was noted in Chapter 7, while talk of such development – in the form of the BIX and otherwise – is easily lauded, actual developments are lagging and Bahrain's 'high-tec revolution' is still very much in its infancy. As was pointed out in the Nielsen survey, the top complaint of both business and residential users in regards to telecommunications provision is internet data services, which is the necessary nervous system of any country hoping attain the status of an 'information society'. Thus, the TRA must follow the lead of Singapore's regulator and establish performance targets for Batelco Network, backed by credible threats of painful sanctions should these targets not be met.

In outlining this new model for telecommunications, this author means to offer only basic parameters or guidelines, and before these new structures could be implemented, there would need to be many specific legal, regulatory and contractual issues worked out in detail. As well, this author is by no means attempting to lay claim to a framework that will solve all challenges regarding the regulation of telecommunications in Bahrain for all time. As has been discussed throughout this thesis, telecommunications is an industry which is relentlessly advancing – in technological capacity, in global reach and in penetration of almost every facet of human beings' personal and professional lives. To assume any regulatory structure attempting to oversee such an industry could remain static would be folly; as was noted in Chapter 3, 'regulators must acclimatize quickly to the rapidly shifting markets over which they are responsible so as not to stifle advancements by the application of outdated and, at best ineffective and at worst detrimental, policies.' Therefore this author recognizes that his proposed model for restructuring the telecommunications market in Bahrain must be dynamic in nature, incorporating mechanisms to allow it to adapt and be responsive to the needs of consumers and companies as they arise in the continuous evolution of the industry. Exactly what these mechanisms are and how they would function must be determined through further study,

Having consolidated the finding of this author's research into an analysis in this chapter, the following section will now conclude this thesis study.

*   *   *

Chapter 1 outlined the aims of this study were to (1), ascertain the driving forces in Bahrain behind the establishment of a privatised and liberalised telecommunications environment; (2) ascertain the extent to which privatisation, liberalisation and the regulatory environment of Bahrain telecommunications have been and will be beneficial to the Kingdom's economic development.

Liberalisation drivers - policy decisions of the government

In the course of this thesis it has been determined that there are a number of forces driving the privatisation and liberalisation process, many of them related. It was found that the government's desire to diversify its economy away from heavy dependence on oil revenues to be among the major factors in its sweeping economic reforms, among them being telecommunications privatisation and later liberalisation. The desire to modernise the economy to facilitate and accelerate economic growth by establishing Bahrain as an 'information hub' and dominant regional financial centre is also driving the telecommunications reforms. Businesses such as banking and financial services already operating within the Kingdom are also demanding a competitive telecommunications environment, with the subsequent lower prices and enhanced services, to maintain their own competitive edge over regional rivals. While interviews with Government Ministers offered their vision for Bahrain as one of building an economically sustainable future through facilitating the education and training Bahrainis need to fill the jobs created in this modernising economy, further fuelling economic diversification.

In the aim of pursing freer markets, the Kingdom has also obliged itself undertake telecommunications reforms through the international trade agreements to which it is a signatory, such as the WTO Basic Telecommunications Agreement and the FTA with the US. These agreements, along with liberalisation and privatisation reforms taking place across the entire Bahraini economy, are part of a broader agenda the government is trying to implement in order to shift its role in the economy from that of being the main provider and supplier of services, to one of being a facilitator and regulator of market mechanisms. This shows the government has adopted, to a degree, the prescripts of New Right philosophy regarding withdrawing the state's presence from actively participating in the functions of the economy and to allow free market mechanisms latitude to determine the path to economic progress. The government has signalled through adopting its new economic model that the private sector will be given a wide birth in Kingdom's future economy, though at the same time government has recognized the need for market regulation and that it would be negligent and irresponsible for government to take on a completely *laissez faire* approach to the Kingdom's economic development. The aim is to create the desired sustainable economic development through increased private sector participation in the economy and thus more jobs for Bahrain's growing population – a modern, competitive telecommunications environment is essential in achieving these economic goals, and thus government's economic ambitions are driving forces behind telecommunications liberalisation.

In regard to the extent to which privatisation, liberalisation and the regulatory environment of Bahrain telecommunications have been and will be beneficial to the Kingdom's economic development, it can be concluded from this study that properly restructuring competition into the telecommunications market can indeed promote the economic goals of government, namely increasing private sector participation in the sustainable development of a modernised economy. Telecommunications is the nervous system of the modern economy and thus a healthy telecommunication market where competition spurs efficiencies, lower prices and enhanced services, bodes well for the economy as a whole – both in attracting new business and allowing existing businesses to expand and enhance their services.

The research findings have also led this author to believe that Bahrain's moves towards an open economy have not brought about notable friction with regards to the Islamic nature of the Kingdom and its social values, largely due to the predominantly liberal character of the population. This author acknowledges, however, that since the Governments of Bahrain's efforts to bring competition into the provision of Internet services have thus far been unsuccessful (i.e. Batelco is still effectively the monopoly provider of Internet services), it is not possible at this time to determine if, in the event that a proliferation of competition occurs and the price of an internet connection decreases to the point where the vast majority of the population can afford Broadband access, whether the resultant increase in exposure to Western values would create tension with the more religious or traditional segments of Bahraini society.

This study has found, however, that government has already developed both the ways and means to resolve issues of cultural concern should any inadvertently arise from its telecommunications liberalisation reforms. This would imply that even in the event of a proliferation of competition and ready access to the Internet for every Bahraini, the government will be able to protect the Islamic nature of the Kingdom to the degree that it sees fit. Moreover, the findings of this study suggest that level to which the government would be opposed to an increased influx of new cultural perspectives resulting from increased internet usage is relatively low. Reinforcing this point is King Hamad's pronouncement in 2003 that Bahrain must develop an open society which can cope with a world of rapid change and that the government is committed to ensuring human security, the rights of women and children and the right to freedom of expression.

Impact of telecommunication reform on Bahrain's economic development

As noted in Chapter 3 of this thesis, the Arab World Competitiveness Report (Sulaf Zakharia cited in Augusto Lopez-Claros, pp. xii-xiii) applauded Bahrain for its achievements on telecommunications liberalisation and opening its market through multilateral and bilateral trade agreements, remarking '...policies matter a great deal for economic outcomes, and Bahrain's example is an encouraging message for the region.' In concrete terms, as laid out by the EDB, telecommunications liberalisation is expected to help facilitate growth in the private sector to the point of doubling GDP between 2005 and 2015, with a subsequent 5 per cent growth in employment for each year over the same period. [These estimates, however, were made before the global economic crisis began to unfold severely in September 2008. Given the global nature of the crisis and Bahrain's integration into the global financial system, it can be expected that these estimates will be lower than currently stated. At the time of the publishing of this thesis, it was still undetermined what the impact of the worldwide financial crisis would be in the Kingdom.] This study has also shown that there is a direct correlation between the competitiveness of telecommunications market and the level of ICT infrastructure investment in that market, with both of these factors contributing to the competitive ability of that nation to attract multinational companies to establish themselves within its borders.

While evidence shows positive results growing from Bahrain's overall privatisation and liberalisation reforms, there are certain obvious weaknesses regarding telecommunications, especially in regards to market regulation. The major success of the telecommunications reforms thus far has been the introduction of Zain (formerly MTC-Vodafone) as the second mobile service provider that has led, according to the BSCR customer survey, to lower prices and better service, though the mobile market is still only a duopoly. Batelco's monopoly in fixed-line service appears to be solid and will likely be maintained for the foreseeable future. Regarding Internet service, while there is increasing potential for a competitive market, especially if and when the BIX comes online, for now Batelco is still the only effective service provider. The TRA has not been able, or is possibly reluctant, to intervene and speed up the process of opening the telecommunications markets to greater competition.

This study has identified that among the factors most important for the effectiveness of a regulator in a telecommunications market is the transparency with which that regulator conducts itself. The TRA in Bahrain has not been forthcoming or revealing about the process by which its decisions are made, nor the reasons why more than five years after the market in Bahrain was "liberalised", there is still only one effective competitor to the incumbent monopoly telecommunications operator, and that competition is solely in the provision of mobile service. The result of this lack of transparency has been that the level of independence the TRA exercises has been questioned as speculation arises as to what interests the regulator is actually beholden – i.e. whether the 'regulatory capture' has occurred.

All this leads to the conclusion that to make the liberalisation process a meaningful one which achieve its objectives, Bahrain needs to develop a better model for liberalisation based on its long term vision.

Future Research

The fact that there are no standardised models that can be adapted opens up further opportunities for Bahrain to re-engineer its liberalisation program, creating a sound model built on attributes specific to the Kingdom, including: its long term economic growth vision and current economic realities, size of the country, population, social and cultural facets, and the monopolistic trends of incumbent operators. The new model for telecommunications in Bahrain and the other changes in market policy discussed in Chapter 9 could be developed in such a way that when applied to real life, they would attract competitors by offering a healthy potential return on investments, speedy approvals and licensing processes, ease of operations, transparency in regulation, and be in full compliance with the provisions the laid down by the government in legislation to create a vibrant and competitive telecommunications sector in the Kingdom.

While this author believes the model suggested in Chapter 9 provides a useful foundation upon which to based future investigations regarding improvements in Bahrain's telecommunications liberalisation reform agenda, it is important to note that the proposed model is a generic one which requires further research since it involves many strategic issues, while fundamental shifts in both the TRA's approach to enforcing regulatory provisions need to be undertaken. Determining the means of actualising the new model, as well as its broader economic, political and social implication, requires further research and examination, and thus is material for future study. Another crucial area for future research raised in this thesis is a determination of the optimal apparatus and process through which to elicit accountability, and thus greater transparency, from Bahrain's Telecommunications Regulatory Authority.

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Interviews

Name	*Organisation*	*Designation*	*Date of interview*
Sheikh Khalid bin Abdullah al Khalifah	Ministry of PM Court	Minister	Dec. 2004
Mr. Mohammed al-Mutawa	P.M Court	Advisor and former Minister	Jan. 2005
Mr. Ali Saleh al-Saleh	Ministry of Municipalities & Agriculture	Minister	Feb. 2005
Mr. Nabi al-Shoalah	Ministry of State	Former Minister	Feb. 2005
H.E. Khalifah al-Dhahrani	The Parliament	Chairman	Feb. 2005
Mr. Jassim A. Aal Mr. Othman Sharif Mr. Jassim al-Mawali	The Parliament	MPs – members of Finance Committee	Feb. 2005
Dr. Mohammed A. Ghaffar	Ministry of Information	Minister	May 2005
Saleh Tarradah	Batelco	GM info. systems	June 2005
Mr. Salman Seyadi	Legal affairs	Head	Aug. 2005

M. F. al-Ada	P.M. Court	Advisor	Aug. 2005
Dr. Marwan al Ahmadi	MTC-Vodafone	CEO	Dec. 2005