Accounting for the divergence between privatisation theory and practice in developing countries: the case of the water sector in Ghana

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Abstract:

The performance and operation of privatisation in the water sector in developing countries typically diverges from that proposed within the rationalising theoretical framework. There is a broad literature that considers the various aspects of such performance and operation, from the nature of outcomes typically characterised by dispute and renegotiation, to the implications for consumers. It is the purpose of this thesis to analyse the underlying factors that contribute to this typical dispute and renegotiation process, utilising the theoretical rationale for the programme, and its associated weakness and assumptions, as an explanatory framework. Through this analysis it is possible to expose and identify the particular aspects of private sector participation (PSP), the contracts established and administration thereof, which contribute to such problematic implementation. The utilisation of such a framework further permits the identification of likely implications for the functioning of PSP where implemented prospectively. The examination of these connections is performed in a case study environment, with privatisation of water services in Ghana providing the context. The Ghanaian experience shows significant deficiencies in contract design that entail considerable delays and disputes between parties, with contractual deficiencies intensifying the already inevitable role of institutional intervention. Conceptions of water as a merit good and human right, problematic commercial viability, and an incoherent implementation with local contextual variation all further contribute to the contradictory environment of the water sector in Ghana. Theoretical weaknesses, inconsistencies and problematic assumptions are manifest in the sector and contribute to divergence in performance, and where ideological commitment to the programme is evident, this divergence is exaggerated. Theoretical validity for sector policy is therefore questionable, with consequences of increased distortion in risk transfer, significant concessions to the private sector, and the increased role of This process, it is proposed, threatens the functioning of the programme where implemented, with regulation undermined, inherent and acknowledged renegotiation and dispute, paralleled by a failure to provide sufficient capacity and structure to sector institutions.

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Abbreviations:

AfDB	African Development Bank
ASP	Alternative Service Provider
AVRL	Aqua Vitens Rand Limited
CWSA	Community Water and Sanitation Agency
DFID	Department For International Development (UK)
ERP	Economic Recovery Programme
FDI	Foreign Direct Investment
GATS	General Agreement on Trade in Services
GII	Ghana Integrity Initiative
GoG	Government of Ghana
GPRS	Growth and Poverty Reduction Strategy
GWCL	Ghana Water Company Limited
GWSC	Ghana Water and Sewerage Corporation
HIPC	Heavily Indebted Poor Country
ICSID	International Centre for Settlement of Investment Disputes
IFI	International Financial Institutions
IMF	International Monetary Fund
MDBS	Multi-Donor Budget Support
MDG	Millennium Development Goals
MIGA	Multilateral Investment Guarantee Agency
MNC	Multi-National Corporation
NCAP	National Coalition Against Privatisation
NDC	National Democratic Congress
NGO	Non-Governmental Organisation
NIRP	National Institutional Renewal Programme
NPP	New Patriotic Party
NRW	Non-Revenue Water
OBA	Output Based Aid
PIDG	Private Infrastructure Development Group
PMU	Project Management Unit
PNDC	Provisional National Defence Council
PPI	Private Participation in Infrastructure
PPIAF	Public-Private Infrastructure Advisory Facility
PPPUE	Public-Private Partnerships for the Urban Environment
PSP	Private Sector Participation
PURC	Public Utilities Regulatory Commission of Ghana
PUWU	Public Utility Workers Union of Ghana
RRR	Repair, Replacement and Rehabilitation fund
SOE	State Owned Enterprise
SSA	Sub-Saharan Africa
WD	Water Directorate
MICDC	Makey Cookey Dooky at win a Cookey at

Water Sector Restructuring Secretariat

WSRS

Chapter One:

Introductory chapter

Context for research

Privatisation of water services in developing countries has expanded through the period from the early 1990s. The programme, incorporating various forms of private sector involvement in service provision, has been implemented as a means of attempting to redress the issues encountered in many developing countries' systems of service provision. The history of service provision in many developing countries can be characterised by a post-colonial period of escalating underinvestment in and degradation of infrastructure, together with poor management of services threatening the sustainability of the systems of provision (Nellis, 2006; Smith, 2004). These conditions of service provision combine with broader trends of increasing population and urbanisation, placing increased pressure on existing infrastructure and impelling the consideration of service expansion (Nellis, 2006; Lobina & Hall, 2003). Experiencing these trends and conditions in the 1980s, developing countries have been further subject to financial aid and debt programmes facilitated by international financial institutions such as the International Monetary Fund (IMF) and the World Bank. The requirement to finance improvements in service provision combined with financial aid or debt restructuring provided an opportunity for those international financial institutions to implement programmes conceived to improve provision through means alternate to those previously attempted, with a shift from state-oriented provision to that involving the increased utilisation of the private sector (ibid.).

In professing solutions to these conditions and for the improvement of water service provision in developing countries, international financial institutions have supported, through conditionalities attached to financial aid and debt relief, reform of services through the incorporation of the private sector Proponents of the programme of privatisation find in their operation. substantiation for their position in the body of neo-classical economic theory. with public choice (e.g. Niskanen, 1975; Krueger, 1974) and property rights (e.g. Alchian & Demsetz, 1973) theories being primary components. Such component theories find a basis in the consideration of the optimal mode of economic organisation, and the resolution of externalities occurring within transactions. Private or government resolution of externalities, the proposition of efficiency of the former and costs associated with the latter (e.g. Coase, 1960), give a foundation for property rights and public choice theories. The introduction is thus rationalised by the inherent efficiency of operation which is proposed to follow, contributing to greater sustainability of provision, commercial operation and subsequently investment necessary for the expansion of services.

Financial aid or debt relief provided by the IMF and World Bank, together with the condition of water services within the host countries, typically determines the incidence of the introduction of the private sector. Utility contracts with these sponsoring agencies have been implemented in 35

countries globally, taking the form of divestitures, concessions, and management and lease contracts - each with varying associated risk for the private sector (PPI, 2009). Privatisation of water services under the aegis of international donor agencies has been attempted variously in South America, in Asia, and in Africa (PPI, 2008a). The 'reform window' established by the combination of desperate need for funding and related willingness of developing country government to acquiesce to alternative reform, together with altered direction of donor agencies conditionalities, provided the basis for initial water sector programmes with long term contracts, with private sector investment for infrastructure (Hall et al, 2002). Subsequent programmes, particularly from the late 1990s onwards, feature a reduced private sector commitment together with an increasing recognition of local conditions and institutions. This temporal trend in the change in form of private sector participation (PSP) in the sector is consequential of the performance and operation of contracts implemented, with many instances of dispute, renegotiation and cancellation (Hall & Lobina, 2006b; PPI, 2008a).

Of the regions noted, the most extreme conditions of service provision typically exist in sub-Saharan Africa, where shortages in water resources combine with decaying infrastructure, considerable indebtedness, population growth and urbanisation (Lobina & Hall, 2003; UNECA, 2006; Bayliss, 2009). Concession contracts have been attempted in Mali, Gabon and Cape Verde; lease contracts in Senegal, Central African Republic, Gambia, Guinea, Niger, and Tanzania; and management contracts in Burkina Faso, Ghana, Uganda, Rwanda, and Chad (PPI, 2008a). Privatisation in these countries thus represents a cross section of the various forms of privatisation, each with varying levels of commitment required of the private partner. These cases of privatisation further follow the temporal trend of decreasing commitment, with the move from concession contracts to management contracts over time. Where privatisation has been implemented, there has frequently been a failure of contracts to proceed as intended, with a majority of contracts globally entering some form of dispute, renegotiation or cancellation. 80 per cent of concession and lease contracts in sub-Saharan Africa have been "terminated or are the subject of major disputes between the public authorities and the operator over investment levels" (Hall & Lobina, 2006b), with other management contracts also being characterised by dispute between parties (e.g. South Africa, Guinea, Niger (ibid.)), and certain disputes advancing to international arbitration (e.g. Tanzania (ICSID, 2010)). The process of dispute, renegotiation and cancellation comes about typically through tariff rises and public opposition, strategic misrepresentation by contract parties, distorted risk allocation, sub-optimal and incomplete contracts, failure to comply with terms, and shortfall in institutional and administration capacity (Lobina & Hall, 2003; Harris et al, 2003; Kirkpatrick et al, 2004; Guasch & Straub, 2006).

Increasingly, and as a response to these trends in performance and operation, reforms of water service provision and the introduction of the private sector in that provision has been integrated into broader reform programmes that seek to revise wider institutional, economical and political conditions within the host country. This is most easily observable in 'Poverty Reduction Strategies'

established under the directives of international donor agencies (e.g. IMF, 2003; 2005; 2009). While these broad programmes ostensibly attempt to improve conditions of poverty within host countries, their design seeks to do so by means of revision of governance and institutional structures for better coherence with those agencies and associated funding mechanisms. This process, a 'post-Washington consensus', considers the state as an 'enabler' for the private sector, as providing conditions for the operation of the private sector (Fine, 2003b; Smith, 2004). This revision remains however aligned with the underlying theoretical foundations of privatisation, with technical facilitation of private sector operation lacking recognition of local political, social and cultural factors determining performance and operation of the programme (ibid.).

The history of the donor-sponsored privatisation programme in developing countries demonstrates a shift in sector investment trends, with parallel trend of performance characterised by dispute, renegotiation and cancellation of contracts. Considering the need for improvements in water service provision in developing countries, the purported improvements associated with the privatisation programme appear to be significantly at odds with the experience of privatisation where implemented. Where efficiency and sustainability of operation, investment and improved management are proposed, the privatisation programme deriving from the body of neo-classical economic theory in fact manifests itself as something quite different, with frequent disputes, renegotiations and cancellations. The performance and operation of privatisation where implemented in the water sector in developing countries appears to diverge significantly from those propositions of the rationalising theory of privatisation.

Motivation for research

The conditions encountered in the water services in many developing countries are proposed to be improved through the introduction of the private sector in systems of provision: poor management, low levels of investment or increased demand for services is proposed to be resolved through improved efficiency. sustainability, better management and utilisation of resources results. Equally, privatisation reduces the impact on service provision of the public sector, of the purported inefficient and political or personal utilisation of resources in a nonoptimal manner. Yet, in practice what results from the introduction of the private sector in water service provision is problematic implementation with frequent disputes and subsequent renegotiations or cancellations of contracts. This divergence in proposed and actual performance and operation of PSP in the water sector motivates the consideration of the basis for such a divergence. Considering the programme of privatisation of water service provision rationalised by efficiency of operation of the private sector, to what degree are those determining factors observable in practice integrated within the rationalising framework? Does the rationalising of the privatisation programme, by referring primarily to the efficiency of operation of the private sector, necessarily exclude the recognition of those determining factors from the outset? To what degree do the assumptions and weaknesses associated with the rationalising theory contribute to divergence in operation and performance from that proposed? The assessment of the underlying rationale for privatisation, and subsequently factors that determine performance and operation of the programme, provide a basis for addressing these questions, as outlined here.

The conceptual basis for privatisation derives from the conception of the individual and state, the particular capacities and associated constraint of each. The economic theory underlying privatisation incorporates the concept of the individual as *homo economicus*, with self-interest and maximisation of personal utility providing the basic tenets of this conception of the individual and their motivation (Persky, 1995). Such an abstraction provides a powerful tool within economic modelling and subsequently theory, and underlies the characterisation of the individual in public and private sectors. A second important conception underlying the privatisation framework is that of the limited rationality of the individual, based on limited knowledge, and subsequently the limitation of state authority where such fallible individuals operate in government (e.g. Havek, 1976). Counterpart to this conceptualisation of the individual and state is the consideration of the appropriate mode of economic organisation, that which provides optimum total welfare. Where externalities are consequent of a transaction, their resolution may be best served through government or private sector processes. With the establishment of appropriate property rights and minimal transaction costs, market resolution, it is proposed, provides a more efficient means by which to resolve externalities (Coase, 1960). It further avoids the proposed inherent inefficiencies and costs of government intervention (ibid.). The basis of privatisation, in both theoretical and ideological terms, is established: the inherent characteristics have inevitable consequences where the individual is active in the public and private sectors, the scope of government should be restricted, and market resolution of externalities provides a more efficient mode of economic organisation than government.

Property rights theory advances the purported advantages established: ownership of rights distributed across a collective results in a potentially inefficient use of resources, free-rider problem, and high costs of negotiations, while private ownership focuses the consequences of action on the individual, with externalities associated with action being factored into decision making by that individual, and with resultant efficiency of operation and resource utilisation (Alchian & Demsetz, 1973). Counterpart to this, public choice theory proposes that the public sector has inherent costs related to both the activity of bureaucrats themselves and to the bureaus they operate. This includes the personal gains available in bureaucracy (perks of the office, power and public reputation), and the inefficient operation of bureaus which follows from this, including the maximising of bureau budgets by those operating them. The public individual functions with limited capacity for profit as a motivating factor and thus seeks to maximise their utility through opportunities available to them in public office (Niskanen, 1975). Rent-seeking further compounds the negative effect on economic efficiency (Krueger, 1974).

The theoretical framework rationalising privatisation has not, however, developed without a certain complement of critique. While the theoretical

foundation for privatisation describes particular conceptions of the individual, the state, and the public and private sectors, these conceptions and theories make various assumptions, and contain various weaknesses and inconsistencies that make their application in the water sector in developing countries potentially problematic in terms of proposed outcomes. The adequacy of property rights theory may be questioned where complexities are introduced to the model, primarily deriving from asymmetric information, and subsequent principal-agent problems. Asymmetric information and incomplete contracts entail the distortion of transfer of objective and risk from principal to agent, providing the possibility of moral hazard and adverse selection. Costs are associated with these problems, and their resolution may require the intervention of external agencies (Williamson, 1979; Grossman & Hart, 1981). With respect to public choice theory, the proposed link between bureaucrat and bureau budget maximisation are questioned, together with the supposed bilateral relationship of bureau and sponsor (Breton & Wintrobe, 1975; Convbeare, 1984). The conception of bureaucrats as rent-seekers is also subject to criticism concerning the necessary consideration of the social impact of each rent-seeking activity and the subjectivism inherent therein (Hindmoor, 1999).

The water sector is characterised by conditions and qualities which entail that the privatisation of service provision takes a form which deviates from that proposed in the theoretical rationale for privatisation, and it follows that these various aspects of critical appraisal may be applicable. The reasons for this deviation can be found in the two forms of particularity of the water sector: conditions of natural monopoly which characterise the sector; and conceptions of water as a public and merit good, and as a human right. The presence of incomplete contracts and market failure entails the presence of the principalagent problem, with distortion of risk transfer, opportunistic activity, transaction costs and the inevitable intervention of regulatory agencies. competition under conditions of monopoly, and subsequent government intervention, contradict assumptions made in the theoretical rationale for privatisation. If monopoly provision simply alters form from public to private, then the private enterprise comes to act as their bureaucratic predecessors in assuming a rent-seeking position, and information asymmetry is likely to continue (Florio, 2004). Institutional consideration is therefore integral to the application of the model to the water sector in the form of regulation, to attempt both surrogate competition and for reasons relating to the nature of water access as citizen and human right, as a public and merit right, and therefore as a responsibility of state provision. It should be considered therefore that the simple transfer of management from public to private does not necessarily result in improved efficiency. The improved performance of privatised water services cannot therefore be derived from the proposition of public choice and property rights theory, but is heavily dependent on the conditions found in the sector and in particular the regulation of private firms.

A further level at which the theoretical rationale for privatisation may be assessed is that which considers the more substantial underlying assumptions associated with the above economic orthodoxy. Where the conception of the individual as self-interested, utility-maximising and best judge of their needs is

succeeded and the associated assumptions discarded, the theoretical underpinnings of the various theories supporting private ownership are threatened, and the propositions of those theories should be questioned (Sen, 1977). For example, universal service provision is typical in many countries, and the application of neo-classical theory as a rationale for privatisation appears to be inconsistent (Doyal & Gough, 1991). Udehn (1996) takes these concerns further in maintaining the rhetorical strengths of the theoretical approach have modified its status to one which has greater social implications, as an ideological force based on essentially flawed theoretical foundation.

It may be maintained that where the privatisation programme is implemented in the water sector in developing countries, rationalising theory provides a defining factor in the design and implementation, yet associated assumptions and inconsistencies identified may also be valid. The various levels of critique of the theoretical framework substantiating privatisation provide a potential insight into the origin of the issues encountered where the programme is implemented in practice. It is apparent that where disputes, renegotiations and cancellations are the typical outcome of PSP in the sector, these issues are frequently related to the particular contract implemented and the administration thereof. The particular propositions of the theoretical underpinnings of PSP, and their parallel critiques, demonstrate that factors such as the contract, mode of implementation and administration are critical. Existing studies of PSP in the sector consider particular issues such as: trends in PSP and the prospects for alternate models for service provision in the water sector in developing countries (e.g. Hall, 2001; Hall & Lobina, 2004 & 2006a; Bayliss & Fine, 2007a; Grimsey & Lewis, 2004; Nellis, 2006); the failure to apply coherent policies alongside privatisation to facilitate implementation and operation, such as adequate regulation (e.g. Kirkpatrick & Parker, 2004 & 2005; Kirkpatrick et al, 2006; Mitlin, 2002; Majone, 2006; Ogus, 2005; Parker et al, 2005); the lack of capacity of the privatisation programme to resolve issues regarding service provision in peri-urban or slum areas where population growth and urbanisation are most evident (e.g. McGranahan & Satterthwaite, 2006; Trémolet & Hunt, 2006; Nyarko & Odai, 2008; Water Utility Partnership, 2003); the failure to incorporate local communities (e.g. Amenga & Grusky, 2005); or the supranational policy framework as determined by sponsoring agencies (e.g. Bayliss & Cramer, 2003; Smith, 2004; Fine, 2003b). The particular focus in the present research, utilising rationalising theory and the various associated critiques as an explanatory framework, is the analysis of the contract design and implementation, and its coherence or otherwise with the institutional environment, as a means of elucidating the process of dispute, renegotiation and cancellation typical of PSP in the water sector. Thus research complements existing studies that provide details of performance and consumer outcomes, but supplements these accounts by focusing on the specific nature and origins of this typical process, and the derivation of this from rationalising theory.

Aims and objectives

So, the performance of privatisation where implemented in the water sector in developing countries frequently diverges from that advanced by the proponents of the programme, together with underlying body of theory rationalising their propositions. Inconsistencies, weaknesses and problematic assumptions, and their alignment with conditions typical in the water sector, are paralleled by the performance and operation of the programme where implemented: many contracts are characterised by dispute, renegotiation and cancellation, risk and liability increasingly remains with the government, and there is a decrease in private investment in the sector. The divergence in practical implementation from that proposed within the theoretical rationale, and that utilised by proponents of the programme, thus provides a phenomenon and a contradiction which motivates the research of this thesis. The following discussion describes the examination of this apparent phenomena, and in particular the potential linkages between, and causality of, diverging performance of privatisation from rationalising theory that forms the basis of this thesis, and describes the exploration of these connections in the case study context of Ghana.

The apparent disconnect between intended programme operation and that which is manifest in reality in developing countries, suggests the requirement for the construction of the case of privatisation in the water sector with a focus on the empirical observation of implementation of the programme, and the interpretation and mutation of the policy at the local level. The divergence in performance and operation from that proposed suggests it is necessary not only to look at the concrete objectively observable characteristics of conditions in the water sector, but also the actions and conceptions of those operating therein. The scope and nature of research is thus determined in part by this necessary form of investigation, and as such takes place within a constructivist and interpretivist research framework.

Subsequently, it is possible to establish more detailed scope and particular lines of investigation by which to examine phenomena associated with water privatisation in developing countries. This is primarily defined by the overarching hypothesis which subsequently guides further research questions, that which states that the weaknesses, inconsistencies and problematic assumptions of the rationalising theory of privatisation provide a foundation for the divergence in performance and operation of the programme from that proposed within this rationale, and, subsequently, the validity of this rationale for application in the water sector in developing countries should be questioned. Questions to be addressed within such an examination are various, covering connections between theory and practice. The disparity between the propositions and reality of privatisation is the motivating context for this thesis: why is there a divergence in the propositions associated with the theoretical rationale and actual performance and operation of the programme where implemented in the water sector in developing countries? considering the particular aspects of this rationale: to what extent, and in what ways, do the component theories of this rationale, and their weaknesses, inconsistencies and problematic assumptions, contribute to this divergence?

Relating to the contextual implementation: in what respects do the conditions typically found in the water sector in developing countries undermine the validity of the theoretical framework for application in this context? Regarding the implementation of the programme: to what extent are local conditions – social, political and institutional norms and capacities – recognised in the form and mode of implementation of the privatisation programme? More speculatively then: does ideological commitment to the programme, founded on an inherently flawed theoretical model and applied in contradictory conditions, negatively affect the likelihood of coherence with local environmental conditions and thus more successful operation? Finally: does the theoretical framework rationalising privatisation provide a valid basis for application in the water sector in developing countries?

Identifying potential linkages between these factors – flaws in theoretical rationale and performance diverging from that proposed – provides an insight into role of contract design, implementation and administration in performance and operation, and subsequently the means by which policy development may be revised to address such diverging performance. It is intended that, through this process, this thesis identifies the particular aspects of implementation of PSP which contribute to the process of dispute, renegotiation and cancellation of contracts which characterises the programme where attempted in the water sector. In providing examination of such details of PSP in the water sector, research here provides a counterpart to other studies considering various aspects of provision as noted above. In this endeavour, the thesis intends to highlight aspects of the underlying rationale for privatisation that contradict the intended aims of the reform programme, prove problematic in implementation, and subsequently provide a basis for revised policy development.

Subsequent to the determination of a hypothesis and associated research questions, the scope and nature of the research framework is further determined by consideration of appropriate and practical data collection. Considering the mode of implementation of the privatisation programme, and the scope and nature of investigation as determined above, the scale of research is necessarily coherent. Research is undertaken within a case study context at the national scale, providing specific advantages when attempting to assess the privatisation programme in developing countries. The reception, interpretation and mutation of privatisation in developing countries contribute to its differential performance. Similarly, the activities associated with privatisation – those which derive from the ideological commitment to the programme in contradictory conditions - are implicit within the policy framework, yet also contribute to its performance. These factors are only evident within the national context, and as such require study at this level. The approach further provides the interpretative framework essential for the understanding of the implementation of privatisation in the national context of the developing country. opportunity that is afforded by the case study for the contextualised appreciation of a broad programme, such as privatisation, is important, and it is the intention for the case study to be an instructive example of a more general phenomena.

Sub-Saharan Africa is typically characterised by the most acute conditions, in terms of resource wealth, infrastructure condition, requirement for expansion of service provision, or institutional capacity. Data collection is aided significantly by the contemporaneity of operation of PSP (in terms of engaging actors involved in PSP, for example), hence the investigation of PSP contract active at the time of study is thus preferable. Just as location and contemporaneity inform the selection of study, the scale of the study requires to be consistent the intended aims of investigating implications for performance of the rationalising theory. The consideration of implementation of privatisation at the national scale is the most obvious and coherent scale at which to study the performance of the programme, in terms of assessing integration with national institutional and policy environment for example.

The selection of Ghana as the case study country provides an opportunity to examine one of the most recent instances of the implementation of the privatisation programme. The privatisation contract was initiated in 2006, and implementation is ostensibly in the form of a management contract with various agencies and institutions being formally involved in its operation – including the government, regulator, state holding company, private company, state enterprise commission - together with other agencies informally involved, such as NGOs. The form of contract and the methods utilised in implementation provide an instance of the modified approach of programme sponsors which follow from previous experiences which characterise privatisation in the sector as typically diverging from proposed performance. This therefore adds to the value of researching this particular case. Fieldwork was undertaken in 2009, with examination of the performance and implementation of the contract involving primarily qualitative data collection substantiated and contextualised with analysis of broader secondary and quantitative data. Interviews were conducted with individuals working for various agencies noted above, with the intention of assessing the extra-economic factors which appear determinant of contract completion and performance. Further analysis of secondary data regarding performance of the service provider permits the assessment of technical performance, and analysis of contract and policy documentation complements the technical and extra-economic analysis.

Organisation of thesis

The thesis will be organised as follows. Chapter two describes the theoretical rationale underlying the privatisation programme, together with the various established critiques of this rationale, and their relation to conditions typically found in the water sector. The chapter further offers a review of the more substantial critique of theory deriving from conditions of the sector – the conditions of natural monopoly, public and merit good status, which undermine basic conceptions of the underlying economic theory. Chapter three considers the implementation of privatisation in the water sector in developing countries, covering the change in form of privatisation (dependent on performance and investor interest), and the operation and performance (characterised by disputes, renegotiations and cancellations of contracts). The chapter considers

this history of privatisation in the water sector in developing countries, both globally and with a more specific focus on sub-Saharan Africa.

The fourth and fifth chapters consider the development of research design and subsequent appropriate form and location of application, that of case study in Ghana. The fourth chapter describes the development of the research framework: the requisite scope of research and the research questions which derive from the preceding consideration of theory and implementation, and the consequent appropriate methodology for application, including the rationale for the selection of case study as the means by which to explore the intended objectives. Chapter five provides a background to the implementation of privatisation, the incorporation of the programme into broader reforms and the conditions of the water sector and contract design. The chapter further outlines the actors present in the sector in Ghana, and the broad issues existent in water sector provision.

The sixth and seventh chapters consider the technical and the political, social and cultural factors, respectively, which impact on the performance and operation of privatisation. Chapter six describes the problematic contractual design, with numerous aspects left to ex-post resolution and thus substantiating dispute. Chapter seven subsequently describes the political, social and institutional environment within which the contract operates – those factors which determine outcomes where these non-contracted factors are significant – and their impact on the implementation of the privatisation contract and associated technical factors. It will be shown that the political, social and institutional environment has a significant impact on the performance and operation of the contract.

The eighth chapter provides an analysis of the preceding two chapters, with a focus on the relationship of the data with rationalising theory of privatisation. It is maintained that data supports the various critical analyses of the rationalising theory, including the impact of asymmetrical information and the principal-agent problem, the continuation of rent-seeking under the private operator, the prevalence and inevitability of intervention by government in the operation of the service provider, and lack of consideration for the institutional environment present in the host country. The validity of the rationalising theory is brought into question where it is shown that inconsistencies, weaknesses and problematic assumptions contribute to the divergence of performance and operation from that proposed. Furthermore, an apparent ideological commitment to the rationalising theory in fact contributes to this divergence, demonstrated in the particular form of programme implemented in the case of Ghana. The concluding ninth chapter provides a discussion of the broader inferences of the data found in the case study of Ghana, the implications for the validity of development policy based on the theoretical rationale which underlies that of water sector privatisation, and potential implications for the viability of PSP going forward.

Chapter Two:

Theoretical rationale for privatisation: associated underlying inconsistencies, weaknesses and problematic assumptions, and their correlation with water sector particularities

When assessing the performance of privatisation of water services in developing countries, it is necessary initially to consider the theoretical foundations of the policy programme. Privatisation finds its theoretical rationale in a particular conception of the inherent capacity of the public and private sectors, deriving from the inherent capacity and tendencies of those individuals working within each sector, and the necessary scope of government intervention. Neo-classical economic theory provides the basis for this conception, and includes the centrality of the self-interested, utility maximising individual, and the selfdetermination of this individual both in relation to their needs and in their relation to the state structure. The mode of economic organisation, and the associated scope of government intervention, thus finds a basis in such a conception of the individual. The limitation of state intervention which follows from this conception of the individual is advanced where externalities are considered, where the greater efficiency of resolution through market transaction is proposed (Coase, 1960). The basis for the conception of inherent capacities of private and public sectors is thus established, with further particular theories extending this analysis.

Further specific theories describe the intrinsic superiority of the private sector, with parallel inherent problems associated with the public sector. Property rights theory provides an assessment of the performance of individuals under varying systems of rights ownership, concluding that the externalities of individual action, which do not impact on individual decision-making under communal rights systems, are internalised under private property rights (e.g. Demsetz, 1967; Alchian & Demsetz, 1973). Public choice theory proposes that under public ownership, the welfare cost is increased through inefficient resource use and costly monitoring procedures (Niskanen, 1968; Krueger, 1974). The combination of these fields of theory therefore provides a foundation for the implementation of privatisation of service provision.

As will be maintained here, the somewhat rudimentary theoretical rationale for privatisation may be questioned where basic assumptions are abandoned. Primarily deriving from the abandonment of complete information, propositions of property rights theory may be undermined where applied beyond this abstraction. Where this is the case, assumed propositions of property rights theory may be attenuated through a complication of the principal-agent relation, increased transaction costs, and moral hazard and adverse selection problems (e.g. Grossman & Hart, 1981 & 1983a; Williamson, 1979). Regarding public choice theory, there are inconsistencies in the particular theories, for example relating to manifestation of personal utility (e.g. Sigelman, 1986), or to total utility following from rent-seeking (e.g. Khan, 2000a; Hindmoor, 1999). Coherence and consistency of the theoretical rationale for

privatisation may therefore be questioned in general terms. This is furthered where the basic conception of the individual as central to the neo-classical framework is brought into question, and as will be noted in this chapter, conceptions of universal need, as contrasting to individual self-determination, undermine this conception. A final consideration to be made when assessing the underlying theoretical rationale for privatisation is the likely correlation of assumed conditions, and those various aspects of the critique of this rationale, with conditions found in the water sector. It will be maintained here that these conditions typically diverge significantly from those assumed in the underlying and frequently correspond to the identified weaknesses. inconsistencies and assumptions of the rationalising theory. This divergence may be attributed to two aspects of water service provision: natural monopoly, entailing market failure; and, water as a resource is characterised by qualities of public and merit good, and as a human right.

The chapter will be structured as follows. The first section considers the basis for the rationale for privatisation, including the conception of individual and state and particular rationalising theories. The second section considers the weaknesses of each theory in general terms, where assumptions are removed, and where inconsistencies assessed. The third section offers a critique of the underlying conception of the individual, and the fourth section considers the correlation of these various aspects of critique with conditions typically found in the water sector.

2.1 Theoretical rationale for privatisation: conceptual basis and particular theories

Privatisation, as a preference of private over public modes of production or service provision, incorporates a particular view of each of private and public sectors, and an associated conception of state capacity. At the foundation of propositions regarding the superior capacity of the private sector and associated inferiority of the public sector, and limitation of state intervention, is a particular conception of the individual and their inherent tendencies. The innate propensity for self-interest and maximisation of personal utility provides proponents of privatisation a foundation for claims regarding efficient resource utilisation where the individual operates in the private sector and corresponding inefficient utilisation where in the public sector. The intervention of government in the economy, on the basis of resolution of externalities, further provides a basis for the proposed efficiency of private sector operation incorporated in public choice and property rights theories.

Conceptual basis for privatisation: the individual and state

Initially, it is necessary to consider the theoretical basis to the conception of the state-individual relationship that underlies the privatisation programme, and the conception of the individual as *homo economicus*, as central to much economic modelling. Self-interest and maximisation of personal utility provide the basic tenets of this conception of the individual and their motivation, with an

associated concept of rationality of action. As shall be maintained here, while this conception establishes the basis of individual action within each of public and private sectors, when considering the implications of bounded rationality, limited capacity for knowledge and subsequently constrained, the implications for privatisation theory may be twofold.

The basis of economic modelling in the conception of the individual as self-interested and seeking to maximise their personal utility provides the field with a powerful tool by which to assess resource utilisation and exchange. *Homo* economicus, frequently considered to find origins in early neo-classical work such as those of John Stuart Mill (Persky, 1995), is a powerful tool in the abstraction of social relations and resource transfer for the purposes of economic modelling. The conception of the individual as motivated by selfinterest and maximisation of personal utility simplifies motivation of action, entailing predictability and thus modelling. Associated with these proposed character traits is rationality of choice within those alternatives available to the individual. Such a characterisation of the individual is acknowledged, even by those purported to be principal advocates of homo economicus as a conceptual tool (including Mill), to be an abstraction, with alternate motivating characteristics pertinent in individual action (ibid.). Regardless, this abstraction provides a potent force in economic theory and its subsequent application beyond the realm of abstract modelling.

Relevant application may be seen first in Hayek (1976), whose conception of the individual as limited in rationality provides a basis both for the incorporation of market failures but also limitations to state intervention. Hayek provides an assessment of the limitations of individual knowledge and rationality which can be countered against that assessment central to the rational choice model, and which he formulates as a departure of the 'true individualism' of the British theorists in the eighteenth and nineteenth centuries from the 'so-called' individualism of the Cartesian school. Regarding 'true individualism', Hayek considers this to be "an antirationalistic approach, which regards man not as a highly rational and intelligent but as a very irrational and fallible being" (ibid. 8). Furthermore, it is "a product of an acute consciousness of the limitations of the individual mind [while the Cartesian School] is the product of an exaggerated belief in the powers of individual reason" (ibid.). Following from the limited rationality of the individual, the responsibility of those in power should be limited, and that where institutions intervene in economic processes they should evolve organically rather than be planned. Reason, as the basis of individual action, is a socially developed concept and therefore no individual should be allowed unilaterally to "pass final judgement on the capacities which another possesses or is to be allowed to exercise" (ibid.). It follows from this, firstly, that imposition of centrally defined laws should be prevented and organically developed laws preferred, and secondly, that unilateral and potentially authoritarian or coercive power should be restricted. characteristics of government are easy to identify with the characteristics of the ideological programme of which privatisation is typically part, where the state is conceptualised rather as a medium for the establishment of the conditions in which individual freedom may be exercised.

Thus a privatisation programme is presented with two aspects of validation in the particular conceptions of the individual presented here. As self-interested and pursuing maximisation of personal utility, the individual possesses characteristics at the foundation of purported inherent performance of public and private sectors, to be discussed below. The capacity and extent of state intervention is further described by the limitation of rationality of the individual, and thus the limitation of those individuals within the state structure. The ideological potency of this conception of the individual and their freedom relative to the state offers a further tool by which promotion of any privatisation programme may be advanced.

Economic organisation and government intervention: resolution of externalities

The consideration of the appropriate degree of government intervention in economic transactions finds a basis in the analysis of externalities. Where any activity has an associated impact on individuals not party to the contract, this may be considered as a positive or negative externality dependent on the nature of this impact. Common examples of negative externalities include pollution resulting from factory activity, or where positive, improved environmental conditions consequent of private forests, parks, land etc. (e.g. Pigou, 2010). Those theorists working within the field debate the means by which to resolve such externalities to achieve equalisation of private and social net products, with a divergence between those proposing resolution through market mechanisms and those maintaining the necessary intervention of government (e.g. Pigou, 2010; Coase, 1960). Proponents of market resolution, as associated with the subsequent conceptions of property rights and public choice theories, maintain the greater efficiency of this mode of resolution.

The proposed resolution of externalities through market interaction, and subsequent associated support for property rights and public choice theory, finds its basis in the countering of proposed inevitability of resolution through government intervention. Consideration of externalities can be seen to originate in the work of Pigou (2010). Concerned with the maximisation of total utility, Pigou recognised the divergence of marginal social and private net products negatively affects this potential maximisation. Pigou proposes that, due to externalities affecting those other than contract parties, the modification to the contractual relation will not resolve the internalisation of such externalities. Resolution, therefore, must be made through state intervention:

"It is plain that divergences between private and social net product of the kinds we have so far been considering cannot, like divergences due to tenancy laws, be mitigated by a modification of the contractual relation between any two contracting parties, because the divergence arises out of a service or disservice rendered to persons other than the contracting parties. It is, however, possible for the State, if it so chooses, to remove the divergence in any field by 'extraordinary encouragements' or 'extraordinary restraints' upon investments in that field." (Pigou, 2010)

The proposed required government intervention for the internalisation of externalities is thus established.

Contrary to Pigou's interpretation of the resolution of externalities, other theorists maintain that market interaction may provide an alternate means. Such a proposition finds its basis primarily in the work of Coase (1937 & 1960), where, for the resolution of externalities by negotiation between affected parties, Coase relies on the requirement of the appropriate attribution of property rights and a minimal incidence of transaction costs (ibid.). Coase in this sense counters Pigou's reliance on government intervention through the proposition of the alternative reliance on common law remedies and property rights:

"Coase, in contrast to Pigou, assumes a Lockean system of property rights where rights evolve from and are enforced by private action and private law. Property rights are endogenous to the market process. Like Pigou, Coase focuses on transaction costs, but because of his recognition of actions taken at common law, Coase sees far fewer instances of unaddressed external costs. Coase provides profoundly important insights as to how markets operating within a rule of law minimize all forms of cost, including those termed externalities." (Barnett & Yandle, 2009: 133)

Thus, where property rights are attributed appropriately, internalisation of externalities is more likely, and thus there is an improved condition of total utility, of social product relative to private product (Coase, 1960). This provides a basis for the advancement of property right attribution for the improvements of total utility through the reduced impact of externalities.

What has become known as the Coase theorem is premised on this requisite attribution of property rights, together with the absence of significant transaction costs. Coase recognises the implications of such constraints for the likelihood of resolution and internalisation of externalities through the market mechanism. The potential costs associated with market transactions incorporate market research, contract design and monitoring, and negotiations. Where these costs are significant, and where they are greater than the potential gains made from the transaction, the transaction will not take place. At this point the consideration of alternate means of resolution should be made, whether by organisation within a single entity the firm – which has associated administrative costs, or ultimately through government intervention. The latter may be particularly appropriate where there are significant costs, for example due to large numbers of affected parties (Coase, 1960). However, the nature of government and potential exposure to political influence entails costs:

"[T]he governmental administrative machine is not itself costless. It can, in fact, on occasion be extremely costly. Furthermore, there is no reason to suppose that the restrictive and zoning regulations, made by a fallible administration subject to political pressures and operating without any competitive check, will necessarily always be those which increase the efficiency with which the economic system operates. Furthermore, such general regulations which must apply to a wide variety of cases will be

enforced in some cases in which they are clearly inappropriate. From these considerations it follows that direct governmental regulation will not necessarily give better results than leaving the problem to be solved by the market or the firm." (Coase, 1960: 18)

While emphasising comparison of costs of each mode of economic organisation in resolution of externalities, the emphasis on the costs associated with government intervention provides a basis for the subsequent centrality of these costs within public choice theory (Barnett & Yandle, 2009).

The centrality of potential costs of government intervention and the potency of appropriate property rights, and the assumptions necessary for the efficiency of market resolution, provide a basis for the utilisation of the issue of externalities resolution to advance either market or government resolution. Those proposing the necessary intervention of government in many instances of externality identify the assumptions necessary for the more efficient resolution through market transactions to be so significant as to render the analysis impotent in real world conditions:

"It is clear [...] that transactions costs are a crucial variable in the selection of suitable institutional mechanisms for the modification of externality. Unless ways can be found to reduce the transactions costs associated with market solutions, market solutions [...] will remain the plaything of academic economists, largely ignored by policy makers and the general public." (Randall, 1972: 182)

The significance of transaction costs noted here by Randall, and their implications for the intervention of government, are countered elsewhere by proponents of market resolution. As noted by Barnett & Yandle, the intervention of government should be weighed against the benefit resulting from that intervention – a point they maintain is overlooked by many social scientists, as "the concept of externality is so powerful and so pervasive as to relegate neoclassical welfare analysis to the academic dustbin" (Barnett & Yandle, 2009: 135). The failure to consider the nature and extent of the implications of externalities by proponents of government intervention combines with the likely public choice issues:

"[G]overnment agencies are not perfect institutions, and public decision-makers are neither omnipotent nor pure public servants. Hence, even a clear instance of market failure may not justify a government attempt at remedy." (ibid.: 146)

The consideration of the resolution of externalities provides further conceptual background to the subsequent particular theories that are utilised in the validation of privatisation. The attempts to assess the form of economic organisation appropriate to particular transactions, and subsequently the optimisation of total utility, establishes the basis by which to promote the importance of property rights attribution and the potential negative impact of public sector intervention. Despite the necessary assumptions which underlie

the 'Coase theorem', this analysis provides a potent foundation for proponents of the programme.

Particular theories rationalising privatisation: public choice theory

Public choice theory considers the operation of publicly managed and owned goods and service production, and maintains that it has inherent costs related to both the activity of bureaucrats themselves and to the bureaus they operate. The former concerns the personal gains possible in holding a bureaucratic position, and includes perks of the office, power and public reputation. The latter concerns the inefficient operation of bureaus which follows from this, including the maximising of bureau budgets by those operating them. Public choice theorists argue further that the frequent misguided consolidation of bureaus in state formations leads to the formation of a 'bilateral monopoly' with government, with the consequence of absence of competition and measures of performance.

The central proposition of public choice theory is that the self-interested, utility maximising individual, where active in a role of public office, will use their position in a way that negatively affects economic efficiency. The public individual functions with limited capacity for profit as a motivating factor, and thus seeks to maximise their utility through opportunities available to them in public office. As Niskanen (1968: 293) notes, "the several variables that may enter the bureaucrat's utility function are the following: salary, perquisites of the office, public reputation, power, patronage, ease of managing the bureau, and ease of making changes". Thus inefficiencies of public ownership and management derive from the utility maximisation available to the public sector individual. In the course of maximising personal utility, bureaucrats are also inclined to maximise the budget of their bureau, aiding the ease of operation of the bureau and the improvement of their personal power and public standing. However, the tendency to inflate bureau budgets is not generally conducive to their efficient operation, furthering the inefficiencies apparent in the personal utility maximising of public officials (Niskanen, 1968). The maximising of bureau budgets often takes the form of overcapitalisation, as "a bureaucrat's rewards are specific to his tenure in that position; this leads him to prefer present spending to future spending and, thus, to prefer production processes with higher capital costs and lower operating costs", with short-termism thus characteristic (Niskanen, 1975: 639).

Inefficiencies of operation of public bureaucracies are intensified where the actions of private firms are subject to regulation or state approval of some function of their operation. Krueger (1974), in an assessment of import licensing as a case of inefficiencies resulting from state intervention, maintains that firms expend resources competing for a limited numbers of licenses or licenses apportioned relative to firm size – resources which are non-productive. Most importantly for public choice theory, Krueger further maintains that in the competition for licensing, resources are devoted to less formal or illegal means of influencing public officials with the intention of gaining favour for their firm. The firms active in such transfers thus divert resources from productive

operations to competition with other firms for rents sought by public officials: a welfare cost incurred through the intervention of the state and bureaucrats in economic transactions (ibid.).

Public choice theory further describes the inefficiencies resulting from the typical structural formation of public bureaucracies. Niskanen (1975) notes the tendency in state structures for bureaucracies to be consolidated, with production of a particular good or service being limited to one bureaucracy. This is final contention of public choice theory: the cost of monitoring bureaucracies. Where competition between producers of goods and services is present, the cost of monitoring is reduced or eliminated through the increased incentive for efficiency. Conversely, where production is restricted to monopoly agencies as is the case for public bureaucracies, the cost of monitoring increases. The incentives for monitoring are reduced as the costs increase, a process increasing the potential for inefficiency of operation of the bureaucracy. Costs of monitoring public agencies is thus further reason for proponents of public choice theory to oppose the operation of such agencies, favouring instead the inherently efficient private sector.

The costs of rent-seeking, of the lack of competition, and of monitoring public bureaucracies entail a welfare cost which impact on the performance of public production and services (Tullock, 1967). Public choice theorists therefore recommend that where public production is deemed necessary following consideration of externalities, their operation should be modified to better resemble the operation of the private sector. Where services have been under public ownership and management and their performance has come under scrutiny, public choice theory provides an explanatory framework for this performance.

Particular theories rationalising privatisation: property rights theory

Just as proponents of privatisation may cite public choice theory in a critical appraisal of the operation of services under public control, they may further refer to property rights theory in calling for the expansion of private operation of services. Property rights theory maintains that ownership of rights distributed across a collective results in a potentially inefficient use of resources, free-rider problem, and high costs of renegotiations of rights where circumstances change. On the contrary, private ownership focuses the consequences of action on the individual, with externalities associated with action being factored into decision making by that individual.

Just as the existence of externalities provides the basis for potential government intervention and therefore public choice issues, they further provide the basis for the consideration of the importance of property rights. Coase (1960) noted the importance of the definition of these in the market resolution of externality problems, and this importance attributed by Coase mirrors that of Hayek. The concept of the state and individual of Hayek incorporates 'abstract principles', including the concept of private property,

which promotes in the individual responsibility for their actions, including negative externalities:

"The endeavour to make man by the pursuit of his interests contribute as much as possible to the needs of other men leads not merely to the general principle of 'private property'; it also assists us in determining what the contents of property rights ought to be with respect to different kinds of things. In order that the individual in his decisions should take account of all the physical effects caused by these decisions, it is necessary that the 'sphere of responsibility' of which I have been speaking be made to comprise as fully as possible all the direct effects which his actions have on the satisfactions which other people derive from the things under his control." (Hayek, 1976: 17)

The importance of property rights as alluded to by Hayek is taken up by other theorists in the development of property rights theory, in particular Demsetz (1967) and Alchian & Demsetz (1973). Differential systems of property rights – be they communal, private and a mixture of these – provide a basis for the differential operation of social structures. Property rights theory therefore defines ownership as "socially recognised rights of action", whereby the right to use resources is defined by the ability to benefit from resources or, alternatively, the proscription from harming others by use of resources (Alchian & Demsetz, 1973: 17). The incorporation in property rights of both positive and negative effects of resource use, for both the individual and others, entails that the effect of externalities on individual action is dependent on the degree to which ownership is allocated to the individual.

Where communal property rights exist, maintains Demsetz (1967), there is no means by which externalities associated with resource use can be brought to bear on the individual which make use of the resource. Communal property rights determine that resources may be used on a 'first come first served' basis, with neither the state or individual able to restrict use by any individual. The result of this system, argues Demsetz (1967), is both inefficient resource use and potential harm to other individuals. Furthermore, the means by which such a system of property rights is modified relies on the consent of each individual within that society, with the result that transaction costs of such negotiations are significant (Alchian & Demsetz, 1973). Ultimately, the costs of inefficient resource use, harm associated with that use, and high costs of transactions are not borne by the individuals which engage in the use of those resources.

Consequently, proponents of this theory consider a system whereby private property rights are allocated to individuals to be superior. In legislating a system of private property rights, the "community recognises the right of the owner to exclude others from exercising the owner's private rights" (Demsetz, 1967: 354). Referring to land use, Demsetz (1967) describes the benefits of private property rights:

"In effect, an owner of a private right to use land acts as a broker whose wealth depends on how well he takes into account the competing claims of

the present and the future. But with communal rights there is no broker, and the claims of the present generation will be given an uneconomically large weight in determining the intensity with which the land is worked. ... [P]rivate ownership of land will internalise many of the external costs associated with communal ownership, for now an owner, by virtue of his power to exclude others can generally count on realising the rewards associated with husbanding the game and increasing the fertility of his land. This concentration of benefits and costs on owners creates incentives to utilise resources more efficiently." (Demsetz, 1967: 355-356)

Implications in privatisation policy

The above discussion describes the various aspects of the theoretical framework which rationalises privatisation programme. The foundation is established for the propositions regarding efficiencies and costs of private and public sectors, contained in property rights and public choice theories respectively, subsequently advancing the optimal utilisation of resources as is the central concern of this body of theory. This theoretical basis provides various factors which may inform privatisation policy where implemented in practice. The determination of policy may be seen to derive from aspects of theory which describe the particular mode of economic organisation, including the extent of activity of public and private sector, but furthermore the role of such a policy within broader political and social programmes.

Regarding the former, the particular mode of economic organisation is intended to bring about greater efficiency of operation, and subsequently the more productive utilisation of resources, as the primary objective of the policy. Thus, following from the above theoretical basis, privatisation policy should incorporate the necessary factors of competition, flexibility of operation of the private sector, the sufficient attribution of property rights, and the parallel reduction in the scope of intervention of political actors. The transfer to the private sector affords the more efficient operation or production through competition between firms, both for consumers and in the capital market In addition the attribution of property rights to those (Parker, 1993). responsible for the operation of privatised enterprises entails the internalisation of externalities associated with the operation of that enterprise by those responsible, thus ensuring that costs and benefits associate with the standard of operation are borne by those responsible. It is intended therefore that the interests of the enterprise become purely commercial, with the political and personal interests purportedly inherent to the public sector bureaucrat absent from the incentive to act (Vickers & Wright, 1989). Thus inefficiency following from the alternative, non-commercial, incentives of the public sector is removed. permitting the more efficient and productive utilisation of resources within the concern of the enterprise (ibid.; Parker, 1993). Costs associated with the monitoring of public agencies are removed, with transaction costs associated with market provision and resolution of externalities proposed to reduced and subsequently contributing further to the improved efficiency under this mode of economic organisation.

In turn, this shift from public to private sector and the associated alteration of incentives, is intended to remove further aspects of the mode of operation of public sector agencies. Further efficiencies are proposed to be realised through the change in culture, associated with the change in incentives, to that of enterprise, not restricted by bureaucratic red tape (Vickers & Wright, 1989; Healey, 1993). In parallel the mode of operation as determined by the, typically unionised, labour force of the public sector, is to be modified through the change to the private sector, with the removal of the purportedly inflexible nature of modes of operation of unionised labour – a further inhibition to enterprise and improved efficiency (ibid.; Heald, 1989; Florio, 2004).

The various aspects of the rationalising theoretical framework may therefore be formulated in a policy programme that is designed to bring about the efficiency that is the central concern of this framework. Competition, the establishment of sufficiently well defined property rights, the introduction of flexibility in operation, as well as the parallel reduction in the role of the public sector and its associated non-commercial mode of operation are all aspects contained within a privatisation policy programme.

These particular factors which contribute to the formulation of privatisation policy and associated objectives may further be component to a broader programme, the objectives of which are coherent with and aid those of the particular privatisation programme. Thus, just as the specific objectives of a privatisation programme may incorporate the revision of the mode of operation of an enterprise to remove the inefficiencies associated with a bureaucracy, the broader environment within which privatisation is implemented may be the site of further consequential objectives of such a programme. Central to the conceptual basis underlying the theoretical rationale for privatisation is the consideration of the individual as best judge of their needs, against the determination of need by the state, and as such the concept of public good may be contradictory. The introduction of the private sector therefore has the further intention of the revision of what is conceptualised as a common good, and therefore subject to subsidisation: costs should be recovered within the operation of that enterprise (Vickers & Wright, 1989; Florio, 2004).

Just as the underlying concepts associated with the rationalising theoretical framework are evident in the potential realisation of individual responsibility and consumer choice, it may further be effected through a privatisation programme and its consequential impact on the mode of operation of the public sector. Thus, individualism may further be evident in the effect on the nature of the workforce and prior unionisation thereof as noted above. Broader effects deriving from such a policy may be considered as a process of the deconstruction of the state – the revision of conceptions of common good, of the role of the public sector in the provision of such goods, and the extension of the primacy of the market, of commercial operation and the role of the state in the administration of such a system (Florio, 2004).

Summary

The above discussion describes the theoretical basis for the promotion of a privatisation programme, from the initial conceptual basis, to the particular theories describing the purported operation of public and private sectors, and the subsequent realisation in the form of policy. The basis for the component theories of public choice and property rights, is found in, firstly, the conception of the individual as self-interested and utility maximising. The form of state following from the conception of the individual with bounded rationality is that of limited intervention. The limitation of state intervention is furthered where consideration of externalities is made, and while costs of each mode of organisation should be considered relative to gains, there is a basis for the proposed inherent advantages of property rights and costs of public administration. These conceptions and propositions may be formulated in policy that implements competition, the definition of property rights for the private sector, flexibility in operation for the private sector and the parallel reduction in scope of the public sector. The central explicit concern of the theoretical framework, that of improved efficiency and optimised utilisation of resources, is therefore promoted. Beyond the particular aspects of the policy programme, privatisation may have further effects in the broader impact on the political, social and institutional of its environment, with such effects being coherent with a broader ideological programme aligned with the conceptions of the underlying theoretical rationale.

2.2 Weaknesses and inconsistencies in the theoretical rationale, in general terms

The purpose of the following discussion is to assess the validity of the above theoretical framework where basic assumptions are relaxed, where application to real world economic and social conditions is considered, and where other theoretical inconsistencies are revealed. It will be maintained here that the theoretical framework rationalising privatisation, consequent of some of those central assumptions, offers an over-simplified conception of economic organisation and transaction therein. Where complexities of exchange, and in particular the failure of transfer of property rights to the private sector, are introduced, propositions of the rationalising theory may be undermined.

Public choice theory

The consequence of the employment of the self-interested individual in the public sector is the diversion of resources from productive use. This happens both in the overproduction that follows from the budget-maximising bureaucrat conceptualised in the theory of Niskanen (1968), and in the rent-seeking developed by Krueger (1974). The theory regarding bureaucrats proposed by Niskanen has drawn numerous criticisms, notably regarding assumptions concerning maximisation of bureau budget as a necessary consequence of the utility maximising behaviour of the individual, and the supposed bilateral relationship of bureau and sponsor, amongst other issues. The conception of

bureaucrats as rent-seekers is also subject to criticism concerning the necessary consideration of the social impact of each rent-seeking activity and the subjectivism inherent therein.

The main criticisms made of Niskanen's (1968; 1975) theory relate to the two central assumptions: firstly, that the maximisation of the bureaus budget follows from utility maximisation of the individual:

"The central motivational hypothesis of Niskanen's model is that bureaucrats maximize the size of the budget under their control. This is justified on two main grounds: first, on utility-maximizing ground, since it is asserted that income, prestige, power, emoluments, and other amenities are a positive monotonic function of budget size; and second on survival ground, since pressure from subordinates for larger budgets on the one hand and from executive and legislative committees on the other is said to ensure the survival of budget-maximizing bureaucrats only in the same way that competition among firms dictates the survival of profit maximisers only." (Breton & Wintrobe, 1975: 196)

The second assumption regarding the bilateral monopoly relationship of bureau and sponsor can in fact be better characterised as a monopoly position held by the bureau – as the agent holds information advantages (Breton & Wintrobe, 1975; Conybeare, 1984).

It follows from the power of the bureau relative to the sponsor that Niskanen considers the latter to be effectively impotent, and thus the potential for government to limit the budget maximising of the bureau is considered to be limited. The passivity of the government can be questioned however, as the government inherently has an interest in the performance of bureaus tasked to carry out services and will implement monitoring of bureaus for this purpose (Breton & Wintrobe, 1975). Furthermore, considering the interest in efficient operation of the government, it follows that bureaucrats may in fact have an interest in the minimisation of bureau budgets. As Sigelman (1986) notes, for the self-interested bureaucrat, the maximising of bureau budget may in fact be self-defeating, and "counterproductive ... for the bureaucrat, since it undermines the credibility of his budget requests" (ibid.: 53). Thus 'doing a good job' may result in budget minimisation, and further demonstrates the notion of 'public service' and commitment to duty (ibid.). Thus the transposition of a model which considers the objective utility to encompass only profit to the analysis of the public sector comes to be problematic, as Margolis observes:

"My unease with the utility-reward function is compounded by the dimensions of the bureau which are used in the analysis: variables like quantity of output, minimum costs, marginal valuation functions, and so on which are borrowed from the analytical concepts of a private market system. Output in the market economy is what economists try to explain, and costs and valuations are major variables. But output may not be the most interesting aspect of government and costs and values may not explain

government behaviour, except as very broad surrogates for demand and supply." (Margolis, 1975: 650)

Application of self-interest and utility maximisation as the motivation of action may not be applicable in the public sector.

The validity of Niskanen's propositions may be further disputed where they are applied to the actual process of implementation of privatisation. Dunleavy (e.g. 1985; 1986), with reference to privatisation in the UK, maintains that the propositions encompassed within the public choice model are at odds with the actual experience in this context. This is true firstly in the sense that, if bureaucrats enjoyed the degree of control over budgets that Niskanen proposes and have an interest in their maximisation, then resistance to privatisation of their bureaus activities is likely to be significant (especially with the transfer of high level bureaucrats to the private sector being unlikely). The capacity of the public choice model to explain the privatisation 'boom' in the UK in the 1980s may therefore be questioned, as this boom "has taken off so fast and met with such low-level resistance from the public service bureaucracies" (Dunleavy, 1986: 17). Secondly, the propositions of the public choice model regarding bureaucratic structures and budgets are far removed from the actual experience in the UK. Rather than a bureaucratic 'hierarchical line agency', bureaucracies in the UK take a more fragmented and interwoven structure (ibid.). Dunleavy maintains that it is typical that a multitude of individual bureaucrats influence budgetary decisions, with consequent collective action problems:

"There is likely to be a collective action problem in policy level officials collaborating to advocate budgetary expansion, since the net utilities accruing to senior bureaucrats will be small, and discounted by the probability that their involvement will be decisive in securing extra funding. Unless this side of the equation exceeds their probably substantial personal advocacy costs, rational officials would do best to free-ride on other bureaucrats' efforts rather than to actively budget-maximize." (Dunleavy, 1986: 19)

The work of Dunleavy presents therefore further evidence that the public choice model provides an over-simplified account of the connection between bureaucrats' self-interest and the supposed growth of bureau budgets, with little regard for the other avenues in which self-interest may be served.

Public choice literature is further developed through the concept of the rent-seeking public official (Krueger 1974). The central assumption underlying the rent-seeking case as presented by Krueger is that rent-seeking is inherently undesirable – that it necessarily results in an obstruction to the maximisation of social welfare. This may be challenged, firstly, by the contention that rent-seeking may contribute to greater social welfare when considering long-term economic development (Khan 2000a & 2000b). Technological advancement, for example, is important for long-term improved efficiency, and patents may be necessary for the incentivising of investment in such advancement. The necessarily static analysis of the neo-classical model cannot incorporate such

long-term factors, and thus, while rent-seeking in this case produces a potentially beneficial outcome (in welfare maximisation terms), it would not be considered so under Krueger's conception of rent-seeking (ibid.). Rent-seeking as a process necessitates that any analysis of such activity incorporates the factors which influence the particular individual active in rent-seeking.

A second challenge to rent-seeking considers the theoretical consistency of the literature underlying the rationale for privatisation, and whether this can be questioned through the reassessment of the implicit centrality of the subjective interpretation (Hindmoor, 1999). The rent-seeking argument developed by Krueger centres on the conception of rent-seeking as inherently undesirable, as an obstruction to maximised social welfare. Rent-seeking is necessarily behavioural therefore, yet considering the existence of patents, for example, there is implicitly a judgement regarding the desirability of individual cases of rent-seeking. Hindmoor maintains that judgements made regarding rent-seeking inherently involves a subjective consideration of the social value of that activity - in the case of patents a positive social value judgement is made and the rent-seeking permitted. However, subjective judgements regarding the social value of rent-seeking may only be made retrospectively, and the abandonment of subjectivism contradicts the underlying tenet of neo-classical economic approach - an "apparent intellectual inconsistency" (ibid.: 440). Hindmoor concludes:

"Only by abandoning subjectivism is it possible to identify instances of rent seeking prospectively. Yet abandoning subjectivism is not costless. It reduces the theory of rent seeking to the expression of personal preference." (Hindmoor, 1999: 451)

Property rights theory

For the propositions of the property rights theorists to be realised, there requires to be a complete transfer of rights, and various assumptions are made in the modelling of this process. Included here are completeness of information and subsequently contracts, together with a basic conception of the principal-agent relation and subsequently ease of transfer of interests and objectives. In practice however, such assumptions may easily be undermined and shown to be an abstraction of real world process and contractual relations. Various factors follow from this information condition which undermine propositions of the rationalising theory, including those of adverse selection and moral hazard, and consequent principal-agent problems. Transaction costs associated with these factors, together with those resultant of externalities, further contribute to the divergence of real economic conditions to those envisaged within the rationalising theory.

Much of the critique applicable to property rights theory finds a basis in the distribution of information between contract parties. Where this distribution is asymmetrical, and is typical, the potential for contracts to be complete, for monitoring to be possible, for objectives to be transferred between principal and agent, is undermined. Subsequently, efficiency is diminished and increased costs are introduced. The propositions of traditional economic analyses may be undermined where these factors are taken into consideration (Rothschild & Stiglitz, 1976; Stiglitz & Weiss, 1981; Stiglitz, 2000).

Where information is incomplete, the price system fails in the communication of all relevant information for those involved in the transaction (Akerlof, 1970; Stiglitz, 2000). This is recognised initially by Akerlof (1970) with reference to the used car market, where buyers may be exposed to uncertainty regarding the quality of the product – and price is determined by the typical market rate rather than quality. Thus whereas traditional analysis considers price to represent all information required for the buyer's decision, in this case price fails to distinguish between products of good or poor quality. A further example concerns the loan market: where there is an increased demand for loans, traditional analysis would propose those seeking loans would be prepared to pay a higher rate. However, to the bank offering the loan, this would be perceived as a higher risk loan, where those individuals willing to pay more do not intend to repay (Stiglitz & Weiss, 1981). In this case the price system provides a mechanism which results in the undersupply of loans, with perceived risk not necessarily aligning with actual risk due to information asymmetry.

This initial analysis is taken further by authors seeking to expand upon what actions may be taken to counter the impact of asymmetric information. Asymmetric information plays a role in the identification of characteristics of those involved in transactions - the adverse selection problem, and the subsequent monitoring of individuals involved in the transaction - the moral hazard problem. Regarding the adverse selection problem, it is proposed that screening is utilised by the principal to determine the characteristics of the agent (Stiglitz, 1975b; Stiglitz & Weiss, 1981), and signalling is, in turn, utilised by the agent to confer those characteristics (Spence, 1973). Concerning the latter, Spence (1973) uses the context of the labour market to demonstrate signalling by the agent, in this case the prospective employee, to the principal, in this case The characteristics of the potential employee may not be the employer. absolutely observable and calculable by the employer ex-ante, with the hiring decision being made under a degree of uncertainty. It is in the interests of the potential employee to signal to the employer their characteristics, for example through qualifications, to improve differentiation between candidates (Spence, 1973; Stiglitz, 1975b). Resources utilised in the process of signalling are not necessarily productive, with certain candidates remaining unemployed, while those similarly qualified are employed (Stiglitz, 2000). Similar resources are expended by the employer in the screening of potential employees - which concerns the mechanisms by which the principal may distinguish between agents (education institutions, employment agencies, appearance, background etc.) (Stiglitz, 1975b).

Regarding the moral hazard problem, asymmetric information determines that actions of the agent cannot be completely contracted, and subsequently that contracted actions cannot be assumed. As Stiglitz (1974) notes, regarding labour contracts, labour input is characterised by both time and effort, and while the former is easy to contract and monitor, effort may comprise

pace of work, thoroughness, efficiency and inventiveness of the individual, with these various aspects being difficult to measure and monitor. Contracts may be designed in such a way as to induce effort from the agent: risk may be distributed more evenly between principal and agent (for example in the form of sharecropping with investment from the agent) (Stiglitz, 1974); or, effort may be induced through a combination of time and piece rates (Stiglitz, 1975a). The particular form of contract and remuneration in turn affects the likelihood and requirement for monitoring of the agent. Supervision or monitoring has associated costs however, and should be evaluated relative to results (Stiglitz, 1975a).

The consequences of adverse selection and moral hazard problems, and the various mechanisms that may be employed to counter their effects, may be seen in increased transaction costs, multiple equilibria with varying degrees of efficiency, and the importance of institutions in countering these issues. Where costs are expended in the resolution of such issues, and such costs outweigh benefits, resolution may not occur:

"[W]henever information is imperfect or markets [...] are incomplete – that is, essentially almost always – competitive markets are not constrained Pareto efficient. Taking into account the costs of improving information or creating markets, some individuals could, in principle, be made better off without making anyone else worse off." (Stiglitz, 2000: 1458)

Information asymmetry thus underlies a significant contribution to the explanation of real economic phenomena, as "[t]he usual result of economic theorizing: that prices clear markets, is model specific and is not a general property of markets – unemployment and credit rationing are not phantasms" (Stiglitz & Weiss, 1981: 409). Furthermore, the resolution and administration of such phenomena resulting from imperfect and asymmetric information demonstrated the importance of institutions – beyond the assumed efficiencies of the market (Stiglitz, 2000).

The identification of imperfect and asymmetric information as critical to the study of real economic phenomena provides a basis for the subsequent analysis of the propositions of property rights theory. The potential principal-agent problems which follow from asymmetric information, and the transaction costs which may be associated with these problems contribute to the undermining of propositions of this body of theory. Within principal-agent and transaction cost economics literature, incomplete knowledge and the subsequent implications for the completeness of contracts underlies the problematic transfer of interest and liability, and the potential for opportunism where information gaps exist (Klein et al, 1978). If there is complete information, then transfer of interest from principal to agent may be possible in any organisational mode (Schmidt, 1996). Thus where incomplete information and contracts exist, there are consequences for the potential alignment of interest of principal and agent, with potential for opportunism on the part of either party (Williamson, 1979). Consequently, whichever non-contracted aspects of the transaction exist, the

party with 'residual control rights' may determine the outcome with respect those aspects:

"One of the insights of the recent literature on the firm is that, if the only imperfections are those arising from moral hazard or asymmetric information, organisational form - including ownership and firm boundaries - does not matter: an owner has no special power or rights since everything is specified in an initial contract (at least among the things that can ever be specified). In contrast, ownership does matter when contracts are incomplete: the owner of an asset or firm can then make all decisions concerning the asset or firm that are not included in an initial contract (the owner has 'residual control rights')." (Hart, 2003: C70)

The existence of incomplete contracts and the potential for opportunism creates particular problems for the principal in the transfer of objectives to the agent. This could be in the form of a failure to exert the agreed upon effort in their duties, with the principal being unable to monitor such a possibility (moral hazard), or the ex-ante misrepresentation on the part of the agent of their ability and capacity to engage in the contracted obligations (adverse selection) (Eisenhardt, 1989; Grossman & Hart, 1981). In each case the opportunism exhibited by the agent is consequent of their knowledge of incomplete contracts, of their residual right of control with respect those aspects of the transaction. For example, an agent may be cognisant of the potential for ex-post renegotiation of terms, or of other forms of opportunism, they may ex-ante 'low-ball' their contract bid (Williamson, 1971; Hart & Moore, 2006).

Opportunism as a mechanism by which transfer of interest and objective from principal to agent is distorted is mirrored elsewhere by factors such as limitation of liability and risk. In practice, in order to attract the agent to take on the contract, the degree of risk transferred may be limited, with the principal retaining some element of risk. The resultant outcome may not therefore align with the principal's goals:

"Risk sharing between principal and agent can also act as a form of insurance for the agent. When he is effectively insured against bad outcomes under the optimal contract, the agent will exert less effort to avoid these bad outcomes." (Sappington, 1991: 49-50)

Furthermore, where the agent has to bear risk, a premium may be paid to the agent to compensate them for the risk they bear. As Sappington and Stiglitz (1987) note, when the sub-optimal performance of the agent is combined with the risk premium which may be paid, the costs to the principal may be significant (ibid.).

In addition, the environment within which the contract exists may impact on the likelihood of opportunism, with factors such as trust, reputation, identity and potential future business offering implicit mechanisms of control (Williamson, 1979; Arrow, 1969; Klein et al, 1978; Hart & Moore, 2006). Where risk is high there is greater potential for integration of tasks within the firm, to

avoid contract opportunism – "one would expect, accordingly, that vertical integration would be more complete in a low – trust rather than high trust culture" (Williamson, 1971: 122). Or, as Arrow (1969: 14) speculates:

"Nonmarket action might take the form of a mutual agreement. But the arrangement of these agreements and especially their continued extension to new individuals entering the social fabric can be costly. As an alternative, society may proceed by internalization of these norms to the achievement of the desired agreement on an unconscious level. There is a whole set of customs and norms which might be similarly interpreted as agreements to improve the efficiency of the economic system (in the broad sense of satisfaction of individual values) by providing commodities to which the price system is inapplicable."

Williamson and Arrow here indicate the potential role of the social and institutional environment within which contracts are executed, and their determination of the impact of opportunistic behaviour. The specificity, frequency and degree of uncertainty determine the nature of governance structures and their associated costs (Williamson, 1979).

A final component of the principal-agent relation that is relevant to the analysis of the validity of property rights theory for rationalisation of privatisation is the potential complexity introduced through multiple principals. Where multiple principals exist, the subsequent negative effect on the proposed benefits of private ownership is increased where the principal cannot be defined as a singular entity. Multiple principals exist, firstly, in the form of shareholders, in the case of joint stock companies, where the short term interests in profit may contradict those long term interests of the management and the future prosperity of the firm. Secondly, where the government exists as a principal, it should not necessarily be considered as a singular entity. As Laffont & Tirole (1991: 103) note, "the formalization of the government as a single principal is an oversimplification. In practice, the executive, legislative, and judiciary, as well as the interest groups that lean on them, act (or do not act) on behalf of the electorate". Where the private manager is exposed to multiple principals, whether private shareholders or various government entities (or both), a differentiation in the goals of these principals negates the inherent efficiency, following from the singular goal of profit, claimed under property rights theory.

Summary

It has been demonstrated that in the case of both property rights and public choice theories that the relaxation of assumptions and the introduction of additional layers of complexity undermine the propositions of the rationalising framework. In the case of property rights theory, assumptions regarding complete information and contracts are shown to be problematic, with limited transfer of objectives, risk and liability from principal to agent as a consequence. Costs associated with contractual relations are further aspects contradictory to the propositions of the theory, including those of the institutional environment within with economic transactions are executed. Regarding public choice theory,

inconsistencies are shown to exist, with inherent bureaucratic budget maximisation being questionable – on the grounds of self-interest of the bureaucrat, who is interested in career advancement for example, and on the grounds of public service motivations contradictory to the assumed interest associated with the neo-classical model. Propositions of rent-seeking theorists may be questioned when considering positive rent-seeking such as patents, and the subjective judgements associated with such instances. It is therefore evident that there is substantive work that contradicts the proposed benefits of a move from public to private production and service provision. Increased complexity necessary for the application of models to real world social and economic conditions undermines these propositions.

2.3 Critique of the underlying assumptions of the neo-classical model

In addition to the problems associated with the specific theories as described above, there remain further broader assumptions underlying the theoretical framework of privatisation. These assumptions relate to the conception of the individual, and to the judgement of need for services remaining with the individual. The conception of the self-interested utility maximising individual underlies the subsequent consideration of their being best judge of their own needs with the market as a means of expressing such preferences. However, in practice normative objective judgements are frequently made regarding minimum human needs. This is particularly true for services and water provision in particular, where market prices may determine provision may not be universal.

It has been noted above that the limited information and knowledge of the individual necessarily limit their scope for decision-making. While bounded rationality thus underlies the conception of the individual-state relation which is counterpart to the rationalising model, Simon (1978 & 1986) also maintains that the limited rationality is problematic where economic theory is applied beyond the traditional sphere of abstract economic modelling. While the concept of rationality exists in other social sciences, and is in fact critical to their operation, there is significant deviation in the understanding of the concept outside neoclassical economics:

"In its treatment of rationality, neoclassical economics differs from other social sciences in three main respects: (a) in its silence about the content of goals and values; (b) in its postulating global consistency of behaviour; and (c) in its postulating 'one world' – that behaviour is objectively rational in relation to its total environment, including both present and future environment as the actor moves through time." (Simon, 1986: S210)

Consequently, where applied in differential contexts, the approach encounters differential conditions that require a modification of the approach:

"As economics expands beyond its central core of price theory, and its central concern with quantities of commodities and money, we observe in it

this same shift from a highly quantitative analysis, in which equilibrium at the margin plays a central role, to a much more qualitative analysis, in which discrete structural alternative are compared." (Simon, 1978: 6)

Simon (1978 & 1986) further maintains that the necessary modification of economic theory, where applied in qualitative analysis, is a move from substantive to procedural rationality. The latter conceptualisation incorporates a shift toward the approach of other social sciences that focus not on the choices resultant from rationality, but the processes employed in rational decision-making.

In contrast to this theorising within the economic framework, other authors offer a broader critique. The accuracy and validity of the numerous theories offered as support for privatisation can be called into question by a critical assessment of their common underlying assumption regarding the motivations of individual action. The conception of the individual as self-interested and utility-maximising may aid the theorising of abstract economic problems, but its application to the real world may be limited. As Sen (1977: 318) asks: "why would one choose an assumption which [is] believed to be not merely inaccurate in detail but fundamentally mistaken?" Economists operating with this assumption, necessarily limiting the scope of their work to the abstract questions which they propose to answer:

"The primary concern here is not with the relation of postulated models to the real economic world, but with the accuracy of answers to well-defined questions posed with preselected assumptions which severely constrain the nature of the models that can be admitted into the analysis. A specific concept of man is ingrained in the question itself, and there is no freedom to depart from this conception so long as one is engaged in answering this question. The nature of man in these current economic models continues, then, to reflect the particular formulation of certain general philosophical questions posed in the past. The realism of the chosen conception of man is simply not a part of this inquiry." (Sen, 1977: 322)

While the assumption of the self-interested, utility-maximising individual is acknowledged by those theorists working within the neo-classical framework, the consequent limited application of the results of their theory is perhaps less explicit. Buchanan & Tullock (1962) admit the limitation of his work in this sense: "... only if the economic motivation is sufficiently pervasive over the behaviour of all participants in market activity can economic theory claim to have operational meaning". The implicit acceptance here, therefore, is that economic theory cannot incorporate in this form the factors that are necessary for an accurate analysis of social reality. The admittance of problematic assumptions underlying neo-classical economic is however frequently absent where theory is utilised (e.g. Shirley & Walsh, 2001).

In furthering his critique of neo-classical economic theory, Sen (1977) goes on to assess an instance of 'non-egoistic' individual action which demonstrates the inadequacy of the theory. In demonstrating this, Sen

distinguishes between sympathy and commitment based action. The former does not impact individual utility while total welfare improves: empathetic action which remains to be egoistic. Contrasting with this however, is the individual that has a preference for an alternative that results in a lower personal utility than another alternative. In this circumstance, the individual anticipates that total welfare will be increased through their preference for lower personal utility. Action such as this on the part of the individual indicate the assumption underlying neo-classical economic theory is inadequate:

"On the other hand, commitment does involve, in a very real sense, counterpreferential choice, destroying the crucial assumption that a chosen alternative must be better than (or at least as good as) the others for the person choosing it, and this would certainly require that models be formulated in an essentially different way." (Sen, 1977: 328)

Sen's concept of commitment therefore "drives a wedge between personal choice and personal welfare, and much of traditional economic theory relies on the identity of the two" (ibid.: 329). Sen proposes that the while concept of commitment may not enter many day-to-day interactions of individuals, it is particularly important when considering, for example, voting decisions or decisions regarding public goods.

In the individual-state relationship noted previously, the individual remains the determinant of their action, with the state acting not as the enforcer of predetermined, centrally defined laws, but as the facilitator of freedom under the law (Hayek, 1976). Objective or normative conceptions of need are thus theoretically incompatible with the neo-classical economic model. As Doyal & Gough (1991: 3) note, "we are thus faced with the paradox that an idea which is still regularly used in the practice of social policy and in much political discourse is regularly rejected in the domain of theory". Thus, theoretical framework underlying privatisation in fact lacks the theoretical framework for the incorporation of normative judgements regarding, for example, public or merit goods. Furthermore, where rationality is accepted as being limited then the judgement of the individual as being the best in determining their needs may be Thus, the measurement of the individual want-satisfaction by reference to individual preferences may never be adequate due to incomplete subjective knowledge. Where an objective measure of want-satisfaction is introduced, the premise of subjective determination is shown to be problematic. Doyal & Gough go on to assess potential characteristics of objective needs, noting that a limited number of physiological needs may be considered as objectively definable needs. A particular case is that of water, whereby a minimum amount of water can be determined as a 'need' for which provision may be determined to be necessary. The objectivity of such a need is aided by the common crosscultural understanding, developed through interaction, of basic needs of a human being. Water can be conceived of as a basic precondition for individual action, and as such the provision of such a resource can be linked to the avoidance of harm to the individual (Doyal & Gough, 1991). Physiological need for water may be objectively definable and therefore implemented through state

policy, rather than subjectively defined with the potential for harm against the individual without access to the resource.

The concerns regarding the capacity of the neo-classical economic framework to encompass differential conditions in analysis of real world contexts is echoed by Udehn (1996). Udehn emphasises the conceptions of *homo oeconomicus* and *homo sociologicus*, with the former focusing on rationality oriented to outcome, the latter on norms which "tell us what is right to do, or not to do, in a certain situation, irrespective of outcome" (ibid.: 7). For the former, "[e]conomic man is one, and constant; human nature and humanity consequently a homogeneous population" (ibid.). It follows that the potential for each approach to social science, deriving from *homo oeconomicus* and *homo sociologicus*, to provide a valid and useful analysis of real world social events and processes diverges.

Despite the concerns regarding the concept of the individual outside abstract modelling, the strength of the approach still derives from its notional universality and objectivity. However, the assumptions and idealised conditions central to the neo-classical approach have taken on a particular potency deriving from its supposed qualities, and that what was proposed as a positive approach with an inherent advantage over normative welfare economics, has itself taken on normative characteristics. As Udehn notes citing Weber, "theoretical ideal types easily turn into normative ideal types" (1996: 174):

"Public choice, we recall, started as a movement against welfare economics. The latter was accused of being normative, and, above all, of lacking in realism. Public choice, on the contrary, was launched as uncompromising realism, depicting man as the selfish creature he really is. Today public choice itself appears no less 'idealistic', both descriptively and normatively." (Udehn, 1996: 181)

Considering this development of neo-classical economics, property rights and public choice theory take on a meaning and power in their reception and utilisation in broader social analysis and beyond which is not explicit in the theoretical detail. This development has broader social repercussions, with the neo-classical approach having a status not as an objective and positive theoretical basis, but as an ideological force. Citing Mannheim's concepts of ideology, Udehn describes the economic approach (what he terms public choice):

"Ideology may be defined as a 'system of values and beliefs about the good society', an ideal to be realised. Ideology may be defined as a 'misrepresentation of social reality, biased in a certain way to serve the interests of a social class, or social group'. Public choice is an ideology in both these senses. [...] I discussed public choice theory as a normative theory, or ideology, based on the value of individualism and the belief that this value is maximised by voluntary exchange – the market as utopia. In this section, I suggest that certain elements of public choice make it into an ideology also in the Marxist sense: a theory that misrepresents reality and introduces bias in order to justify a free market society." (Udehn, 1996: 189)

2.4 Practical implementation of privatisation: policy assumptions, particularities of the water sector and correlations with theory

Where assessing the implementation of privatisation it is necessary to consider the nature of the policy as formulated in practice and the environment in which implementation is made, which subsequently provides a basis for the assessment of their contribution to the divergence between proposed and actual performance and operation. This may be performed in relation to more general assumptions made where policy is formulated, and furthermore where particular conditions of the water sector are considered. The following discussion considers the general assumptions made in the formulation of policy, and subsequently focuses on the particular conditions found in the sector, the implications of these conditions in terms of the necessary operation of a regulator, and how this structuring of the sector relates to the conditions assumed within the rationalising theory.

General assumptions in the formulation of privatisation

In the formulation of a privatisation policy various assumptions may be necessary for the alignment with idealised conditions central to the underlying theoretical framework for the programme, and subsequently for the potential realisation of proposed outcomes. These assumptions derive from the conceptions basic to this underlying framework, with implications for the form of economic organisation necessary, and furthermore the specificity of policy for diverse conditions.

The formulation of privatisation policy is significantly determined by the presumption of idealised conditions, as deriving from underlying theory, regarding the conditions of market, of goods, and of environmental conditions. This may be seen primarily in the assumptions regarding the existence of perfect market conditions, include competition, information, and the utilisation of the price mechanism as the determinant of transactions. Transfer to the private sector is intended to realise efficiency through the allocation of property rights, with subsequent improved interest of those enterprises in the improved of their utility through efficient operation and associated profit. This assumes a competitive market structure, both in terms of product competition and capital market competition. It further assumes the sufficient definition of property rights, necessary for the transfer of interest to the enterprise with the subsequent internalisation of externalities associated with their operation.

Concomitant to this is the condition of information necessary for the operation of privatised enterprises as proposed. For the propositions of the rationalising theory to hold true where policy is formulated, information should be sufficiently complete and symmetrical so as to be uninhibitive to the operation of the enterprise and the transfer of interest from the principal. Subsequently it is assumed that contracts are sufficiently complete in their determination of agent behaviour in the interest of the principal. Incorporated

within this assumption are several further significant implications that may affect the operation of such a programme. This may firstly include the transfer of risk from the principal to the agent, and where this is absent or insufficient the consequence is the introduction of further incentive structures for the agent beyond those which would exist ordinarily in the market. What may secondly be included is the monitoring of agent where information and contracts are incomplete, contrary to the assumed exercising of principal interests by the agent.

The conceptualisation of the individual as best judge of their need, and the consequent rejection of the concept of objectively definable human need - of which public and merit goods are typical, leads to further assumptions in the basis for policy. The failure to incorporate a basis for public and merit goods in the underlying theory may contribute to a failure to consider the inevitable continued role of political agencies in the provision of such goods. Thus, the assumption regarding reduced political intervention where privatisation is introduced may undermine the proposition which follow from this proposition. What follows from this is the responsibilities of the agent where engaged in such enterprises, which may incorporate non-market and non-commercial factors in their operation. This further may affect the degree of risk willing to be taken on by the private sector. Such distortions thus result from assumptions regarding the conditions of implementation of privatisation. The intervention of political agencies in enterprises engaged in the production of public and merit goods indicates a further assumption - that of the coherence of the institutional environment of privatisation, which is implicit in the rationalising theory.

Wherever such assumptions are incorporated in the formulation of privatisation policy, the consequences are transaction costs that are not incorporated in the underlying rationalising framework for the programme, thus contributing to the divergence in performance and operation from that proposed. The central motivating proposition associated with the privatisation programme, that which concerns the improved efficiency of operation with subsequent contribution to the maximisation of total utility, may therefore be undermined. These various factors in policy formulation, which derive from those aspects of theoretical rationale and its critique as described above, are therefore likely to impact on the performance and operation of the programme where implemented. The nature of their likely appearance in the water sector is now considered.

Particularities of the water sector

The water sector is characterised by conditions and qualities which entail that the privatisation of service provision takes a form which deviates from that proposed in the theoretical rationale for privatisation, with potential effects on performance and operation. The reasons for this deviation can be found in the two characteristics of the water sector: conditions of natural monopoly; and conceptions of water as a public and merit good, and as a human right. The following review considers each of these particularities in turn, providing a

background to the necessary intervention of a regulatory agency as discussed below.

"Natural monopolies exist where there are sufficient economies of scale or scope in production so that competition raises supply costs. This is most likely where there are important sunk costs in the form of networks, pipelines and similar high-cost infrastructure." (Parker, 2002: 496)

The water services provision sector is characterised by conditions of natural monopoly, low cost of sourcing together with high cost of the development of supply networks. Consequently the initial construction of supply networks is a significant cost relative to the subsequent supply of water through the established network. The provision of water services is thus typically characterised by monopoly suppliers of either a public or private nature: the high cost of development of rival supply networks proves restrictive to market entry (ibid.). Economies of scale are significant in water services provision, and, considering technological advances are unlikely to have a significant impact on supply networks (Littlechild, 1988), it is likely to remain a natural monopoly sector across varied global contexts.

Parallel to the condition of water service provision as a sector of natural monopoly, is the conception of water as basic human need – with associated qualities of merit good, public good and human right. Regarding merit good status, the provision of clean water to each individual within a population improves the health of the whole – provision has positive externalities (Parker, 2002) – and the role of the state in ensuring provision of water is consequently in the public interest. The nature of water as a public good is dependent on its non-rivalry and non-excludability in consumption – although these qualities are subject to alteration subject to the nature of the provider, as the marketisation of resource provision threatens potential exclusion of those without means to purchase (Kaul et al, 1999). The state therefore has a significant role to play to secure the provision of water in this eventuality.

Considering the characteristics of water as a resource, access to water services are typically incorporated in various levels of legislation and international declarations in an attempt to ensure the continued provision of basic levels of water provision to those without the means to pay. Such assurances may be seen in international declarations on human rights, such as those of the UN, of which access to clean water is part. Countries which have ratified this declaration are required to "take the necessary steps towards the progressive achievement of the right of everyone to an adequate standard of living, including access to water and sanitation" (UN Economic & Social Council, cited in Budds & McGranahan, 2003: 94). Thus basic access to water supply outlined in UN declarations on human rights, supposedly, limits the possibility denial of supply through privatisation. International declarations may be mirrored in national level legislation, such as that in the UK where the Water Act 1998 outlawed the disconnection of water provision to non-paying consumers (Lobina & Hall, 2001). The state thus has a role in the provision of the service at a universal level, with provision either free, or at a cost which does not preclude

its availability (Komives et al, 2005; Al Jayyousi, 2007). Water is thus typically a right encompassed by citizenship of a given state, which thus mitigates economic inequality with respect scarce resources that have the quality of human right, and this process becomes institutionalised, as "citizenship controls the access of individuals and groups to scarce resources in society. These legal rights and obligations, once they are institutionalised as formal status positions, give people formal entitlements to scarce resources in society" (Turner, 1997: 6). Where changes threaten access rights and entitlements associated with citizenship rights, there is the potential for public opposition to those changes. Public opposition to the privatisation of water services may be particularly strong (Lobina & Hall, 2001), reflecting the distinctiveness of the resource. Decisions regarding the pricing of water provision are therefore made with consideration of what is socially and politically acceptable within that particular environment.

Necessity and forms of regulation

Considering the particularities of the water sector, regulation of privatised service providers has accompanied the implementation of the policy. As a natural monopoly, the sector requires regulation to better align conditions to those assumed in the theoretical rationale for privatisation. The regulator is important in effecting competition which would otherwise be absent, with the proposed benefits of the private sector potentially realised (Parker, 2002). Regulation is further necessary for reasons relating to the nature of water access as human right, as a public and merit good, and therefore ensuring provision to the population (Parker, 2002). Where regulation has been implemented, it takes a form which most closely aligns to the ideals of the theoretical rationale for privatisation: independence from potential governmental intervention and discretion.

The various theories which underlie the rationale for privatisation assume the introduction of competition to accompany that of the private sector in service provision. They conclude that "state ownership is inherently inferior to private ownership, especially where there is a competitive capital market [and] this is supported by reference to the efficiency attributes of competitive product markets" (Parker, 1998). However, according to Bakker (2005). although there are five potential types of competition available in the water services industry, most of these are restricted because of the nature of the sector. Firstly, water service provision is characterised by natural monopoly due to the vertical integration of supply networks, and thus direct competition is restricted. This is limited further by the guarantees against competition written into contracts at the time of privatisation to improve initial commercial viability, restricting one potential type of competition. Second, while procurement competition is a possible area for competition, this is typically restricted to "a limited proportion of companies' overall costs and activities" (ibid.: 553). Third, the competition for corporate control is restricted, as noted by Bakker with reference to England & Wales:

"[M]ergers and acquisitions resulted in a concentration of the industry and mergers reduced the original thirty-nine companies down to twenty-two by

2004. As a result, all water companies are now large enough that any proposed merger would result in an automatic referral to the Competition Commission." (Bakker, 2005: 554)

The fourth potential avenue is competition for the market, through the competitive tendering for PSP contracts. However, considering the length of contracts for the privatised enterprises (initially twenty-five years in England & Wales), franchise tendering is infrequent and this form of competition is therefore restricted. Finally therefore, the primary means for the realisation of competition is through regulation by comparison of franchise performance, effectively "surrogate competition" (ibid.).

Considering the role of the regulator, its form in implementation is one which derives from the theoretical rationale underlying the privatisation model. The form of regulation is therefore one which attempts to address issues of political intervention deemed problematic in public choice theory, and further seeks to

"establish a policy environment that sustains market incentives and investor confidence. For this to be achieved, the regulator needs to be shielded from political interference, and the government needs to support a regulatory environment that is transparent, consistent and accountable." (Kirkpatrick et al, 2006: 152)

The emphasis is on the execution of rule enforcement by an independent agency working within an institutional and legal environment which provides suitable methods of judicial recourse should these rules be contravened. Where an independent regulatory agency operates within a supporting institutional framework, the private operation of services is further assisted as it provides credibility of intended regulatory outcomes, and commitment of the regulator to regulatory rules, therefore providing stability and predictability which investors seek (Kirkpatrick et al, 2006).

Privatisation in the water sector: implications for theory

The conditions found in the water sector provide an environment significantly inconsistent with those assumed within the underlying theoretical rationale for privatisation. Such conditions and the necessary intervention of a regulator undermine the assumptions central to the rationalising theory, and are coherent with the critical assessment of this rationale as described above. As will be noted here, market failure as is typical in the water sector makes various aspects of this critical assessment relevant.

The conditions typically found in the water sector may be seen to align with those conditions anticipated within the critical assessment of property rights theory, with associated propositions potentially undermined. Assumptions regarding complete information and contracts are likely to be undermined in the water sector: this can be seen with respect to water pricing, which is likely to be amended ex-post subject to performance and political

sensitivity. In this sense, contracts may be designed with known gaps in information, but with procedural contingencies incorporated – in the form of regulation and associated legislation. This provides a degree of understanding of ex-post behaviour of each party, but does not exclude the possibility of opportunistic behaviour resulting from incomplete information and contracts. Because of the potential for changes in government, with the potential consequence of changes in approach to service provision in a politically sensitive area such as water provision, and because of the potential for public opposition, commitment on the part of the principal cannot be assumed.

Opportunism on the part of the principal may be mirrored by that on the part of the agent. Considering the limited potential for competition which exists in the sector, the most likely being surrogate competition effected by a regulator, the disciplining effect of the market cannot be assumed. Thus, where contracts are incomplete and leave the possibility for opportunism, the private sector may engage in this opportunistic behaviour – a moral hazard problem thus exists for the principal. The failure to internalise externalities on the part of the agent impacts social welfare maximisation proposed to derive from private property rights (Demsetz, 1967; Coase, 1960; Alchian & Demsetz, 1973). Furthermore, the predictability of moral hazard within water sector contracts may contribute to adverse selection ex-ante. Where the private sector predicts the likelihood of opportunistic behaviour is significant, there is the potential for 'low-balling' in the process of selection of private sector contract partners. Thus, the private sector submits contractual terms which underplay ex-ante their predicted expost costs, in the knowledge that, due to contractual incompleteness, they can recoup these costs through non-contracted processes.

The existence of possibilities of opportunism of each party, of moral hazard and adverse selection, increases the importance of the administration of the contract to ensure alignment with proposed performance improvements. As has been noted above, transaction cost economics provides a mechanism by which to understand this process. Administration may incorporate the government role in the establishment of the contract ex-ante, including the selection of the private sector contract partner, and the ex-post regulation and monitoring of performance of the private sector. The necessary intervention of the regulator for reasons of effecting competition and administering price adjustments entails not only costs of the operation of such an agency, but also potential costs deriving from deviation of operation from such an idealised role. This can be seen firstly in the supposed independence of the regulatory agency: considering the nature of water as a citizen and human right, as a public and merit good, the regulatory agency is subject to possible capture (political or private) (Stigler, 1971; Kirkpatrick & Parker, 2005). While the establishment of an 'independent' agency is an attempt to pre-empt such capture, with the inevitability of government intervention for the purposes of adjustment of prices, for example, the goals of the regulatory agency are realigned to more closely resemble those of the government (Kirkpatrick & Parker, 2005).

Furthermore, the introduction of a regulatory agency is demonstrative of the potential for the intervention of multiple principals in the principal-agent relation, thus obfuscating the transference of objectives to the agent. The regulator has potentially conflicting objectives, including acting to maintain affordable service provision – and therefore political pressure, or alternatively pressure from service providers for improved revenue and profit margins. The agent is thus faced with a regulator whose objectives may differ from the government, in addition to pressure from shareholders of the firm (Parker, 2002).

As a counter-tendency to the negative effects of these various aspects of the principal-agent problem in the context of the water sector, it is noted above that there may be implicit control mechanisms – alongside those explicit control mechanisms of regulation or monitoring – providing a disincentive for the agent to act opportunistically. In the case of the water sector this may present in the form of an interest on the part of the agent for a long-term contractual relationship, with contractual renewal where this is possible. It should be noted that due to the high sunk costs typical in the sector, this is likely to provide a basis for this implicit control mechanism – effectively locking the agent into a long term relationship. This is of course dependent on the transference of responsibility for investment from principal to agent. Where contracts exist that deviate from effecting transference of ownership to the agent, and where there is reduced transference of ownership as a means of reducing risk transfer and thus attracting private sector partners, the presence and effect of this implicit control mechanism will be reduced.

Summary

It has been attempted here to provide a review of the factors which may impact the formulation of privatisation policy, and the derivation of these factors from particular aspects of the theoretical rationale and its critique. Considering the nature of the assumptions made where policy is developed for application in the water sector, it is likely that various aspects of these assumed conditions, and the implications which follow, are to be present in the water sector. Natural monopoly, and the nature of water as a public and merit good and as a human right, entail market failure and the divergence of conditions in the sector from those assumed within the rationale. The introduction of a regulatory agency as a means of countering this divergence - effecting competition and securing politically appropriate pricing – presents a complexity which undermines the propositions of improved performance associated with privatisation. undermining of property rights theory in particular is apparent where principalagent problems are present, and significant transaction costs further diminish any proposed advantages. Conceptions of water as a public and merit good, and as a human right also appear contradictory to the underlying theoretical framework associated with privatisation - universal service provision being contradictory to conceptions of limited state intervention and individual selfdetermination.

The review provided here establishes a means by which to assess the performance of privatisation: principal-agent problems and significant transaction costs, deriving from the market structure, appear to undermine

assumed performance of the private sector, and may therefore indicate a basis for the divergence of performance where the programme has been implemented. Furthermore, where institutional coherence and capacity is assumed, though at cost, where this is absent in practice operation of private provision may be undermined. Thus, the factors noted above may be utilised in an assessment of the performance and operation of privatisation of water services in developing countries. Where these factors are manifest in practice, the validity of the programme and its rationalising theoretical framework may be questioned.

Conclusions and discussion

The assessment of privatisation in developing countries, and the understanding of the reasons behind its apparent poor performance relative to the assertions of proponents of the programme, requires an initial consideration of the rationalising theory and its critical appraisal. It has been the purpose of this chapter to provide such an assessment, with an appraisal of theory within itself, the basic conceptual framework queried, and the correlation of the aspects of this critique with conditions found in the water sector. The implications for the theoretical framework follow from the (ideological) power of a particular conception of the individual with regard the development of social policy. The inherent characteristics of the individual as presented within the concept, of selfinterest, rationality and maximisation of personal utility, have implications for total social utility dependent on the location of the individual in public or private sphere. Where located in the private sector such characteristics avail efficiency of operation and internalisation of externalities associated with individual activity. Where located in the public sector such characteristics present the possibility of maximisation of public spending and of personal utility that may include corruption or political patronage. Associated with these propositions is the conceptualisation of the individual-state relation, whereby, with the additional characteristic of bounded rationality, the state should be limited in its capacity and intervention. The basic conclusion of such a theoretical framework is therefore: economic organisation is inherently better where there is an increased role for the private sector, the public sector is inherently inefficient and should be restricted in its capacity for intervention.

It has also been demonstrated in this chapter, however, that where an assessment is made of the theoretical rationale and propositions thereof, and where general economic and social conditions are introduced, the oversimplification which is characteristic of this theoretical framework is made obvious. This is most apparent in relation to property rights theory, where assumptions of complete information and contracts are necessary for its theoretical consistency and validity. Where such assumptions are relaxed, and complexities of real world economic and social conditions are introduced, the propositions of the theory become questionable. Information economics and principal-agent theory provide mechanisms by which to reveal the implications of such assumptions. The limited transfer of property rights as a result of incomplete information and contracts establishes the possibility for opportunist behaviour, and of problems of moral hazard and adverse selection for the

principal. The costs associated with these possibilities are supplemented by the costs of institutional administration and arbitration. Theoretical inconsistency is continued when considering public choice theory. Assumptions regarding the manifestations of bureaucrat self-interest have been shown to be problematic, limited control over budgets contradicts their assumed increase, and public-spirited operation remains a possibility that would counter tendencies assumed within the theory. The assumed inherent negative consequences of rent-seeking are further problematic, as is the apparent subjective judgement necessary for the implementation of rent-seeking in the form of, for example, patents. There is, therefore a variety of inconsistencies, weaknesses and assumptions which, where analysed beyond abstract modelling are shown to be problematic for the validity of propositions of the underlying theoretical rationale for privatisation.

It has further been established that underlying conceptions essential to the neo-classical framework providing a basis for privatisation theory may be questioned - this includes the inherent self-interest and maximisation of personal utility necessary for further propositions to be valid. The founding of social policy on such abstract economic theory appears inconsistent with conditions and practice that are typical. How can individual self-interest and maximisation of personal utility be coherent with social policy which typically involves sacrifice on the part of some individuals for greater total welfare? Personal welfare may not always coincide with personal choice. Similarly, how can such social policy, as based on objectively defined human need, correspond with subjective determination of need inherent to the neo-classical economic model? The adequacy of homo economicus as a foundation for social analysis beyond abstract economic modelling may therefore be questioned. Subsequent questions may be made of the commitment of those proponents of the privatisation programme to this apparently inconsistent theoretical basis, with Udehn (1996) suggesting that the rhetorical power of the property rights and public choice theories means they acquire ideological potency beyond their capacity for valid social analysis.

Considering the various aspects of critical analysis identified, this chapter has further provided an assessment of the correlation of conditions found in the water sector with these factors. It has been established that there appears to be several aspects of the water sector, its typical structure and the nature of the resource itself, which correlate with the various weaknesses, inconsistencies and undermined assumptions as previously noted. Conditions in the sector are characterised by market failure, in terms of both natural monopoly and the nature of the resource as public and merit good, and human right. Thus, propositions regarding transfer of property rights, and the associated benefits therein, are undermined where there is the necessary intervention of a regulatory agency. The operation of the regulator as effecting surrogate competition, and as mediating and administering socially and politically acceptable access, introduces significant principal-agent problems and Propositions associated with public choice theory, in transaction costs. particular rent-seeking, thus become applicable to the private sector where market discipline is absent and monitoring is costly or impractical. Conceptions of universal service provision further undermine the propositions of public choice theory, contradicting proposed motivations for those operating within public service.

It is apparent that a central observation can be taken from the preceding discussion: the rationalising theoretical framework of privatisation offers an over-simplified conceptualisation of economic and social conditions, and where evaluation relative to the water sector is made, such simplifications are made apparent. Assumptions central to these theories are undermined where applied in the water sector. This is particularly true for property rights theory, with market failure providing a basis for the distortion of transfer of rights, consequent principal-agent problems and transaction costs. Assumptions of public choice theory are undermined where understandings of individual motivation are found to be contradictory in practice in the water sector. Questions regarding the implications for the performance and operation of privatisation in the water sector in developing countries may therefore be raised. How does the application of such an apparently deficient theoretical framework manifest itself in practice? In what ways does this contribute to the divergence of performance and operation from that proposed, and in particular to the process of dispute, renegotiation and cancellation typical in water sector PSP? Does the apparent ideological commitment to the intended objectives of privatisation affect the mode of implementation?

The assessment of the correlation of the theoretical rationale for privatisation with conditions typically found in the water sector therefore provides a basis upon which to institute an analysis of the performance and operation of the programme in developing countries. The various aspects of the critical assessment of this theoretical framework and their apparent manifestation in the structure of the water sector provide a number of points of reference by which to conduct this analysis. The apparent contradiction between the nature of (universal) service provision and the underlying conceptions and motivations of the individual further provide a theme by which to approach analysis of the implementation of privatisation. Such aspects will thus be taken up in subsequent chapters. Initially, and taken up in the following chapter, is the need to provide a review of the general performance of privatisation where applied in the sector, as a means of acquiring general trends by which to further shape subsequent research.

Chapter Three:

The privatisation of water services in developing countries

The theoretical rationale for privatisation incorporates various assumptions regarding the context and conditions in which it operates, and these assumptions impact on the potential performance of the model in contrasting environments. It is purpose of this chapter to consider the implementation of the model in such environments, and the focus here will be a general review of the privatisation of water services in developing countries, the performance in this context and the implications for the theoretical rationale underlying the PSP model. Such a review provides a contextualising account for the subsequent development of a framework for analysing performance and operation relative to the rationalising theory.

The performance of PSP in developing countries can be characterised by consistently poor performance, by a decrease in investor interest in the sector, and by frequent disputes, renegotiations and cancellations of contracts. This performance is associated with an implementation of the PSP model that consistently disregards the importance of the contextual environment in which it is employed. Initial phases of privatisation incorporated a significant disregard for institutional framework - even the independent regulatory agency deemed necessary in developed countries. While PSP model has more recently been accompanied by an increasing acknowledgement of the importance of the institutional environment in which it is implemented, there remains an incapacity for the model to incorporate such factors in the determination of the performance of privatised water service providers. This is demonstrative of the limitations of the theoretical rationale described in the previous chapter. Where implemented in developing countries, the model typically encounters environments that contain contradictory institutional capacities, and may further incorporate differing conceptions of water as a resource, with the potential resistance to privatisation.

The chapter will be structured as follows. The initial section provides a broad overview of the implementation of the PSP model in developing countries, by reference to three phases of implementation. The second section here considers in more depth the political economy of water pricing, and the impact of commercial motives on the conceptions of water in the developing country context. The third section considers the process of dispute, renegotiation and cancellation that is frequently typical of the water sector PSP contract, impacting significantly on the performance of the sector.

3.1 Privatisation, regulation and investment in developing countries

The privatisation of water services in developing countries can be assessed by reference to three phases, each encompassing a modification of the policy of international financial institutions (IFIs) in an attempt to address previous

problems. First to be reviewed here will be the initial phase of PSP in this context, typically taking a crude form of implementation of privatisation without regard for institutions and regulation. Significant numbers of failed PSP contracts instigated a shift to a second phase that can be characterised by an improved recognition of the importance of institutional framework, and concurrent with a rhetorical concern for improved governance. The continuation in the failure of contracts instigates a further modification of IFI policy, with rejection, at least rhetorically, of the 'one-size-fits-all' approach, which will be reviewed lastly. The focus here remains primarily on countries in sub-Saharan Africa, which typically demonstrate the most acute problems in service provision.

Early privatisation: minimal regulation and initial investor confidence

The eagerness for extensive privatisation, characteristic of the early stage of PSP, relied on the assumption that efficiencies brought about through private sector involvement would outweigh potential adverse effects. Motivations underlying the fervour for privatisation derive from the powerful, yet rudimentary propositions of the rationalising theory including the inherent superiority of the private over public contained in property rights and public choice theories (Paliwala, 2000). However, the acknowledgement of institutional importance was a significant absence in the early phase of private sector involvement in water service provision in the developing country context. The appetite for deregulation was a parallel process to the general reduction in barriers to competition in previously protected markets in developing countries: the existence of domestic policies regarding regulation could potentially contradict the move to expansion of trade embodied by introduction of the General Agreement on Trade in Services (GATS). The consequences of this IFI policy framework were however damaging to the development of water service provision in developing countries, with a significant number of contracts being cancelled or renegotiated.

Supranational agencies effected the transferral of ideas regarding private efficiencies to national governments, thereby initiating privatisation in sub-Saharan Africa (SSA). With an increasing debt crisis, the circumstances faced by many SSA countries in the 1980s combined with the renewed appreciation of privatisation becoming established in IFIs, itself a reflection of the changed ideologies of, in particular, the British and American governments of the decade. Counterpart to this, World Bank confidence that the circumstances which had developed should be taken advantage of, as the pro-reform SSA governments of the time were perceived to be of a limited lifetime and thus the 'reform window' available was restricted (Fine & Bayliss, 2007). As Dolowitz & Marsh (1998) assert, the expedition of policy transfer can also be attributed to the desire of states to avoid falling behind competitors and to take advantage of the opportunity to join the international consensus; consequently, privatisation was seen to begin to "acquire a momentum of its own" (Bayliss & Cramer, 2003: 54). Enthusiasm at supranational and national levels was mirrored by private sector commitment, with potential profits encouraging investors with contracts covering periods from ten to fifty years (Hall et al., 2002; Bayliss, 2003).

The eagerness to privatise without regard for a regulatory framework is indicative of the general approach of IFIs and developed country governments toward development in this initial phase of private water service provision. Even where conditions of natural monopoly were encountered, in contrast to developed countries, regulation was deemed unnecessary:

"The rationale that certain sectors had to be regulated because they were "natural monopolies" vital to national social or strategic interests is no longer considered valid. [...] If economies of scale exist, a single firm may, in theory, be able to produce more efficiently than several competing firms, but its monopolistic power may need to be restrained through regulation. There is some justification for pursuing these objectives, but experience suggests that such rationales are often not persuasive in practice." (Guasch & Hahn, 1999: 137-138)

This is because of the potentially negative consequences of political intervention through regulation, which would imply greater costs for trade than if there were deregulation:

"When legislators rein in spending and tax levels, regulation can be a useful substitute for achieving political objectives, such as redistributing income to particular interest groups in exchange for political support. In this kind of political environment, legislators adopt regulatory requirements or mandates whose costs are not directly paid for by taxpayers; although less visible, these costs are nonetheless real." (Guasch & Hahn, 1999: 138)

Underlying the free trade approach employed here is the conception of regulation as being 'self-generating', where "as wealth grows as the result of free trade, the endogenous demand for higher standards grow as well" (Majone, 2006). However, as Majone maintains, this development of self-generating regulation is generally true only for 'club goods' – i.e. those which are excludable – and not public goods such as water. Therefore "regulation [had] not formed part, typically, of policy conditionality in structural adjustment loans" (Bayliss & Cramer, 2003: 62). Thus the absence of consideration of regulation in this initial phase of privatisation appears to align the approach taken to the underlying theoretical rationale, with the intervention of government agencies deemed undesirable.

The consequences of this strident move to privatisation, prioritising assumed efficiencies without consideration of the requisite supporting environment or adverse distributional effects (Fine, 2003b & 2007; Fine et al, 2003), were that a significant number of PSP schemes came into difficulty in the form of renegotiation of terms or contract cancellation. Of the contracts begun in 2000 and earlier in SSA, the three concessional projects have all suffered from shortfalls in investment expected from the private provider. The concession contract begun in Mali in 2000 was effectively terminated in 2005, quarter way through its intended duration. This leaves concessions begun in Gabon in 1997 and Cape Verde in 1999, both classed by Hall & Lobina (2006b) as in 'distressed'

status, primarily due to investment shortfall. The lease contracts, where investment is taken from public finances rather than private operator, fare marginally better than concessional contracts. The Cote d'Ivoire, where privatisation was begun in 1969 and has seen successful renegotiations since, and Senegal, where the 1996 lease has recently been renegotiated, are advanced as success stories for water privatisation in SSA. Three other examples provide more nuanced picture however, where contracts have been terminated due to contractual issues (Central African Republic and Gambia) or have concluded but without successful renegotiation (Guinea, where disputes hampered the project and expansion of services was not as expected) (Hall et al 2002; Hall & Lobina, 2006b).

Intermediate phase: transferral of regulatory 'best practice' and falling investor confidence

The consequences of the broad failure of initial models of privatisation instigated a shift in the approach of government – at supranational and consequently national level – and a revision in the approach toward water sector reform. The administrative or institutional problems encountered in many privatisation schemes were acknowledged in a change in the policies and activities of IFIs, especially the World Bank, relating to developing countries. The changes concerning the water sector are one element of an all-encompassing revision representing a move away from reliance on purely economic influence to wider interventionism. This is described by Fine (2003a) as a shift from the 'Washington consensus':

"In a sense, the old consensus was caught in the trap of arguing for minimal state intervention and, hence, precluding itself from addressing what the state should do. In contrast, the new consensus can be understood as strengthening and extending the scope of permissible intervention in recipient countries. For not only is economic intervention justified on the basis of market imperfections but also the success of such interventions is attached to non-economic factors. In other words the consensus rationalises intervention by the donor agencies across as wide a remit as possible. While the old consensus claimed that there was nothing wrong with its policies other than they were not implemented, the new consensus is able to push for its command over what the state does and how it should do it. [...] What the new consensus does analytically is to strengthen and widen the scope for discretionary intervention under the guise of good governance and the imperative to moderate both market and non-market imperfections, and wrap it up in the guise of local ownership." (Fine, 2003b: 15)

Thus, where the Washington consensus promoted the ideal of the 'nightwatchman state', with little direct economic or social role, the post-Washington consensus promotes the ideal of 'good governance': the facilitation of the market and private enterprise (Paliwala, 2000; Shirley, 2003). The primary role of the state under this conception is the enabling of the market (Phillips, 2006). This can be seen in the emphasis, for example in the policy of the UK's Department for International Development (DFID), on good governance

(Minogue et al, 1998) which concerns primarily a concern for "contracts and contract enforcement mechanisms, commercial norms and rules" (Shirley, 2003: 3).

The practical implementation of this modified policy was assisted through the imposition in developing countries of independent bodies through which the tenets of governance could be applied (Whitfield, 2006; Grimsey & Lewis, 2004; Dolowitz & Marsh, 1998). According to Paliwala, this reflects an "underlying mistrust of the state" on the part of IFIs, with the proliferation of channels through which 'expert' or 'technical' – and apparently neutral – advice can be administered. The process involved the

"creation of legally and politically powerful privatisation quangos which are insulated from government interference. In practice, these quangos become more accountable to global agencies at whose initiative and with whose assistance they are created." (Paliwala, 2000: 9)

While the reaction of IFIs to the broad failure of initial forms of PSP contracts in the initial phase was to introduce 'independent' regulatory bodies, the reaction of the private sector to the was to reduce the degree of risk exposure. This can be seen in the nature of contracts undertaken. Firstly, there was a move away from concessional contracts where investment was required of the private sector, towards lease and primarily management contracts. Secondly the duration of contracts was significantly reduced from the ten to fifty years typical in early privatisation, to contracts generally between two and ten years (Hall et al 2002; Hall & Lobina, 2006b; PPI, 2008). Furthermore, popularity of BOT-type schemes had increased relative to broader water supply projects (Bayliss & Fine, 2007). This demonstrates rejection of risk associated with water service provision and the political intervention inherent therein. Infrastructure projects do not, however, address wider structural problems, such as expansion of access (Grimsey & Lewis, 2004).

Concurrent with the trend for 'good governance' and reduced investment was, however, a continuation of termination and renegotiation of contracts. From 200 onwards, two lease contracts had been implemented, with one still operational (in Niger, though with disputes regarding tariff increases) and one terminated (in Tanzania, terminated after two years of a ten year contract due to poor performance and shortfall of investment). Of the five management contracts, two remain ongoing (Burkina Faso & Ghana, although with problems), one ended without renewal (Uganda, two year contract), one is in 'distressed' status (Rwanda, several disease outbreaks) and one has been terminated (Chad) (Hall et al 2002; Hall & Lobina, 2006b; PPI, 2008; Mustapha, 2008).

It should be noted that where contracts become encounter difficulties the state is often in a weak position relative to the private operator, for two reasons. Firstly, where the private company fails in its obligations, the costs associated with a legal challenge to end the contract and the retendering of a new contract are considerable (Lobina, 2005; Bayliss & Cramer, 2003). Secondly, because of a reluctance to invest, the threat of re-tendering, which could otherwise be used by

the state as leverage against a private operator, is unavailable (Bayliss, 2003). The issues surrounding the contract dispute-renegotiation-cancellation process will be discussed in more detail below.

Recent privatisation: country specific policy and absence of investors

The most recent phase of privatisation can be identified by a revision, at least at the rhetorical level, of IFI policy regarding the administration of water service privatisation in developing countries. Whereas previously there was an emphasis on good governance, the concern has broadened to encompass other aspects. This is summarised by Shirley:

"To meet the challenge of development countries need two distinct and not necessarily complementary sets of institutions: (i) those that foster exchange by lowering transaction costs and encouraging trust, and (ii) those that influence the state to protect private property rather than expropriate it. The first set of institutions includes contracts and contract enforcement mechanisms, commercial norms and rules, and habits and beliefs favouring shared values and the accumulation of human capital. Among the second set of institutions are constitutions, electoral rules, laws governing speech and education, and legal and civic norms." (Shirley, 2003: 3-4)

Thus, the PSP contract and associated regulation needs to be "consonant with legal and administrative traditions" of the country (Groom et al, 2006: 30), and set in a wider government policy environment which supports that regulation (Ehrhardt et al, 2007). This is in contrast to previous attempts to introduce "international best practice" (ibid.: 3):

"Regulatory design never actually starts with a blank slate. Regulation is generally introduced in an environment where some sector organizations already exist; legal and political systems are well developed; some measures for consumer protection have already been introduced; and relationships between politicians, providers, and the public have been established. The resulting complexity of structures and incentives is not a backdrop that regulation should seek to overcome or be imposed on top of. Rather, it provides a framework for regulation to work within." (ibid.: 16)

In recognising the importance of existing legal and political systems, World Bank literature cites contradictory regulatory and legal or institutional frameworks, and this is demonstrated by contrasting Francophone and 'Anglo-American' forms which have resulted in disputes and renegotiations of contracts. Where contract-based PSP is implemented in Francophone countries, their contractual origins are to be found in French civil legal architecture, and there is therefore consonance between contract regulation and institutional framework. This framework assumes a contractual agreement between equals where the contract terms define the relationship. Problems arose where 'Anglo-American' models of regulation were 'imposed on top of' the contractual agreement. The 'Anglo-American' model, based in common law architecture, assumes unilateral power is attributed to the public representative, i.e. the regulator. Where

intervention occurs the contractual agreement is broken. The resultant unpredictability threatens contract completion, and has wider repercussions for private sector confidence (Groom et al, 2006).

Examples which demonstrate the importance of regulation being "consonant with legal and administrative traditions" (Groom et al, 2006: 38) of the country, include Senegal and Burkina Faso. These ex-French colonies have seen relatively successful PSP contracts (for example the Senegalese contract being renewed in 2006), and their legal architecture ensures that the regulation model employed was "well understood and respected by the government and sector participants" (Ehrhardt et al, 2007: 15). Success in the case of Senegal is attributed to improved monitoring and the involvement of an intermediary body:

"[A] combination of dedicated contract monitoring units, ongoing performance monitoring by the government-owned asset holding company, and timely, independent mediation on disputed issues by an outside conciliator provided the necessary support for regulation by contract to operate successfully." (ibid.: 15)

The intervention of IFIs in the form of intermediary bodies to improve private sector confidence and generate investor interest in water service provision is confirmed when assessing broader IFI policy instruments, which includes the activities of various 'advisory' bodies active in promoting the virtues of the private sector in service provision. The 'Public-Private Infrastructure Advisory Facility' (PPIAF), subsidiary to the World Bank, provides 'technical assistance' and 'disseminates best practice' regarding PSP, with the aim of priming a country for private sector involvement, including assistance to "design and implement policy, regulatory, and institutional reforms" (PPI, 2008b). The PPIAF is complemented by other similar organisations such as 'Public-Private Partnerships for the Urban Environment' (PPPUE) and the 'Private Infrastructure Development Group' (PIDG), each endeavouring to further develop a suitable framework within which PSP may develop. In particular, the PIDG is concerned to "create a climate in which the private sector can have confidence in the long-term stability of the programmes in which it is investing" (PIDG, 2008).

Furthermore, various 'funding instruments' are in place to mitigate, or provide guarantees against, risks which may otherwise discourage private investment in projects. The World Bank affiliated body is the 'Multilateral Investment Guarantee Agency' (MIGA), which, as well as working in an advisory capacity for PSP advancement, provides risk insurance against breach of contract and war or civil disturbance, amongst other issues (MIGA, 2008a). It is indicative of investor confidence regarding water service PSP in SSA that while the MIGA website notes that "billions of people live without access to safe drinking water or sewage treatment", the website shows no active or complete projects relating to the sector (MIGA, 2008b). Foreign exchange insurance schemes are also available to minimise risk through currency devaluations (Baietti & Raymond, 2005). Together with guarantees available through other funds such as the

African Development Bank (AfDB) and the Islamic Development Bank (IDB), the involvement of these various bodies "gives a 'seal of approval' to the projects concerned because of the additional monitoring and project evaluation" (Grimsey & Lewis, 2004: 230).

Public versus private utilities: comparative performance

Considering the above discussion regarding the progression of privatisation in developing countries, and considering the particularities of the water sector, it is necessary to note whether evidence suggests improved performance under private operation, as claimed in the theoretical rationale for the programme. The various factors reviewed in the preceding chapter regarding the conditions found in the water sector suggest that where competition is typically absent and private firms require regulation, the proposed benefits of private operation do not necessarily follow. The above discussion demonstrates that the conditions found in the water sector, together with the institutional forms found in the developing world, do in fact impact on the performance of privatised utilities and proposed benefits should not be assumed. The comparison of public and private performance in service provision is made more complex by the differential measures of performance attached to each ownership structure (e.g. efficiency versus universal provision), by the absence of counterfactual performance, and by a lack of data.

As could be expected considering the conditions encountered in the water sector in developing world, the performance of utilities pre- and post-privatisation are heavily dependent on factors other than a simple change in ownership. Studies that consider the performance of utilities pre- and post-privatisation thus highlight the importance of the presence of competition, the quality of regulation, management incentives and capital market conditions, and the performance of service provision prior to privatisation (e.g. Bayliss, 2003; Kirkpatrick et al, 2004; Willner & Parker, 2002). Considering the problems encountered, it is not surprising that studies show ambiguity in the comparative pre- and post-privatisation performance (Kirkpatrick et al, 2004). Of course, the terms by which performance is judged vary across the proposed benefits of privatisation.

The first purported benefit concerned the means, through privatisation, to provide an increase in the amount of investment made in the water sector – sourced primarily from donor agencies although conditional on the involvement of private firms which also provided a smaller proportion of investment in their particular ventures (Kirkpatrick et al, 2004). It has been noted above that there has been decreasing private interest in providing financial contribution to PSP projects, based on the risk to which they are exposed. The tendency both for risk to be reduced and private financial commitment to be reduced demonstrates an increasing failure for private sector to match claimed performance in these terms. The counterfactual, where public utilities would have benefited from the massive investment from donor agencies, has never been demonstrated as this funding remains conditional on privatisation or commercialisation (Bayliss, 2003).

The second claim regards the potential efficiency gains made available through the introduction of private firms in the provision of water services. This may be gauged by either pre-versus post-privatisation performance of a particular utility, or by private performance compared to contemporary public counterpart utilities. Kirkpatrick et al (2004) provide a study taking the latter form, comparing public and private utilities at a given time in the African context. Initially, their evidence suggests that private utilities operate more efficiently in terms of labour productivity, operating costs and capital utilisation, although this is at the cost of higher tariffs (ibid.). They consider however, firstly, that this may in fact be derived from the larger scale operation of private firms vis-à-vis public ones (this may in turn be attributable to the tendency to privatise the most attractive utilities). Secondly, the deviation in the data suggests a high degree of variance in the performance of each form of utility. Subsequent performance measures demonstrate that in fact there is no statistically significant difference in the performance of each ownership form, and that efficiency was comparable across public and private operations (ibid.). The results shown in the study by Kirkpatrick et al (2004) are representative of broader studies that attempt to compare public and private. As Willner & Parker (2002) note, it is often factors other than a simple change of ownership impact on the performance of utilities (including institutional or competitive conditions for example).

Summary

The three phases of PSP in the water sector in developing countries as described above demonstrate that, even where revision has been made to the PSP model, implementation has been consistently problematic and performance worse than that proposed in IFI rhetoric. Because the PSP model has been transferred from the developed to developing country context, the assumptions which underlie the model become explicit where the existent conditions contradict those necessary for the operation of the model. This can be seen primarily in the assumption of a complementary and supporting legal and institutional framework within which privatised firms operate. Where the regulation of privatised water providers was absent from the initial phases of PSP, it was assumed that such a body would develop alongside privatisation. Through the second phase of PSP the resolution of the regulatory problems was counteracted through the attempted establishment of independent regulatory agencies. The assumption of supporting legal and institutional environment therefore remained until the most recent phase when the importance of this framework was at least acknowledged. The conceptualisation of the variation in institutions. and the local historical development of these institutions, remains severely limited however. Despite the apparent problems of the PSP model, as seen by the recurrent disputes and cancellations of contracts, the policy has remained central to the IFI approach to water service provision in developing countries. Attempts have been made by IFIs to reduce risks to which the private sector is exposed. This can be seen in the efforts to establish regulatory agencies which provide stable and predictable conditions for the private operators, and it is further evident in the endeavours to reduce risks through the structures of guarantees provided to investors. However, the risks associated with investment in the water sector in developing countries have led to a decrease in the instances of PSP over recent years. The proportion of contracts entering some form of dispute, renegotiation or cancellation is significant, and contributes to the declining interest of the private sector.

3.2 Political economy of water pricing: commercial viability and the expansion of access

Alongside regulation and associated difficulties, concern for the commercial viability of water service enterprises provides a secondary impediment to the successful operation of private sector involvement. The primary concern in many SSA countries is the expansion of services outside the existing network, and this requires a particular arrangement of tariffs and subsidies to encourage the private sector, where involved, to satisfy this requirement. The existent water provision system is often characterised by urban infrastructure networks, with peri-urban and rural areas served by alternative service providers (ASPs). The tradition in SSA countries, typical of a global trend, is for water provision from the main network to be underpriced, and therefore the funding of expansion of networks to replace ASPs requires considerable subsidy. Full cost recovery, as preferred by the private sector, is impractical and governmental intervention in the form of subsidy or cross-subsidy is inevitable. The variety of forms of subsidy available to the state is considerable, but each has adverse effects and tariffs or subsidies for expansion of access are therefore not inevitable or straightforward. Following a review of the tariffs and subsidies employed in an attempt to expand connections, there will be a discussion of the implications of these and PSP more generally for the conceptions of water in host countries.

Water service networks in SSA countries are generally concentrated in major urban centres and capital cities, with peri-urban and rural areas served typically by alternative service providers (ASPs). The reasons for this distribution are multiple, but the overwhelming restriction on expansion is the inherent and considerable cost of infrastructure development. A secondary factor is the refusal of state and local administrators to recognise the peri-urban or slum developments on the periphery of conurbations as legal developments. The residents of these developments therefore have no legal tenure for the land which they occupy, and consequently services cannot be provided (Trémolet & Hunt, 2006). Where distribution networks are in place, the choice of tariff and subsidy has often proved restrictive to the potential expansion of the network. Firstly, general underpricing of water provision, with the requisite general subsidy to fund services, is a global norm, and SSA is typical in this respect. The provision of a general subsidy to lower water prices is politically popular and socially acceptable, as conceptions of water being a human or inalienable right are ubiquitous (Komives, 2005). Secondly, quantity-based tariffs to penalise excess consumption are ineffective due to patterns of consumption being similar across all income groups - consumption of water is generally inelastic. Thirdly, where cross-subsidies are employed, they do not target the poor, who are

invariably not connected to the network, but rather middle or lower-middle income groups (ibid.).

The tariffs and subsidies employed in the past were therefore primarily concerned with a redistribution of resources within the population already connected to the network, consequently excluding those who were most in need of assistance in access to services. Where a lack of subsidisation for expansion of connection combined with the PSP contractual requirement of such expansion, there was an inevitable tendency for the private enterprise to attempt full cost recovery from the customer base. This is impractical even in developed countries where subsidies are often provided for capital investment (ibid.), and is especially true for SSA. Komives et al (2005) suggest that 35 per cent of households in SSA would be unable to pay full cost for water, whether measured by affordability – water costs exceeding five per cent of household income, or 'willingness to pay'. The popularity of PSP contracts that necessitated expansion of services inevitably decreased, as is indicated by the frank observations of company representatives:

"[F]rom a social point of view, these kinds of projects are viable but unfortunately from a private sector point of view they are not." (Richard Whiting, Biwater country manager for Zimbabwe, quoted in Bayliss, 2003: 514)

"The scale of the need far out-reaches the financial and risk-taking capacities of the private sector. [...] Water pays for water is no longer realistic in developing countries. [...] Service users can't pay for the levels of investments required, nor for social projects." (J.F. Talbot, CEO SAUR, quoted in Lobina, 2005: 77)

However, even supranational forums representing pro-privatisation interests – the World Water Council – reject the concept of full cost recovery from the poor in favour of greater equity through cross-subsidisation (Hall, 2001; Whitfield, 2006). The requirement of governmental subsidy expand access was thus inevitable, with finance typically found through international donor agencies.

The decisions made by state or regulatory bodies concerning tariff rates and subsidies, are made with consideration of what is socially and politically acceptable within that particular environment. As described in chapter two, the common conception of water provision is that it should be either free, or provided at rates which do not preclude its availability to any individual (Komives et al, 2005). Thus, access to water forms not only a human right but a right encompassed by citizenship of a given state, whose government has the responsibility for the allocation of such scarce resources within the population. Where PSP projects threaten the conditions of citizenship with which the population concerned is familiar, for example by attempting full cost recovery, the legitimacy of both the government and the PSP is threatened. As the UN and American Chamber of Commerce recognise, the pre-conditions for successful PSP projects include the need for "public trust to be established", and "public

acceptance is required at the local political level" (cited in Grimsey & Lewis, 2004: 235).

Summary

The requirement in the developing countries for the expansion of water utility networks entails that the PSP model as transferred from developed countries encounters problems and requires modification for contrasting conditions. The combination of private sector desire for full cost recovery and the ineffectiveness of conventional tariff structures, has resulted in a reliance on donor funding and the continued decline of interest of investors in apparently 'unprofitable' consumers. The attempt to introduce private water service provision in developing countries threatens a potential modification of the state-citizen relationship. Where there is an attempt for full cost recovery by private firms, this may contradict existent citizenship rights (not to mention human rights), and there is the potential for public opposition. In addition to the incoherence at an institutional level, this redefinition of the social contract in developing countries is further evidence of the problematic transfer of the PSP model based in property rights and public choice theory.

3.3 PSP contract disputes, renegotiations and cancellations

Contracts may enter a process of dispute, renegotiation and cancellation for various reasons, and these may be classified by reference to exogenous and endogenous factors - those originating from outside the water sector and those which have a basis in the water sector PSP contractual process itself. The factors originating outside the sector, such as macro-economic shocks (e.g. currency devaluation or recession), political instability (e.g. military coups) or contraction of service demand through fall in real wages, will not be considered here. although their reification in the form of, for example, public opposition to price increases through PSP, are significant where contracts do not provide a mechanism for this to be expressed without resort to disputes. The factors instigating dispute, renegotiation or cancellation specific to PSP contracts themselves will provide the focus here, and these include problems in the initial tender and bidding process, water sector contracts, weak or inappropriate regulation, public opposition, corruption and unilateral redefinition of contractual terms on the part of one contract party. These issues will be discussed here by reference to stages of PSP contract advancement - from exante phases of contract design and the tendering process, to the ex-post phase of administration of the PSP contract.

Contract design and the influence of PSP theory

The PSP model as implemented in developing countries through the policies of IFIs shows an obvious derivation from the rationalising theoretical framework. The model therefore places great emphasis on the reduction of state intervention in service provision, promoting the benefits of private management. However, those conditions inherent to the water sector – natural monopoly and the human

right nature of the resource – necessitate regulation, and dilute the purported benefits of the private sector where competition is reduced. Where implemented in developing countries, PSP has frequently taken a form which increases the likelihood of disputes and renegotiations of contracts. Firstly, there must be transfer of risk to private firms for them to operate efficiently, but this has been limited in an effort to attract investors into the sector. Secondly, competition – limited to that for the market and surrogate through regulation – has been restricted due to institutional incapacity and power asymmetry. Finally, consumer participation has generally been absent from the process, contributing to potential resistance.

Where PSP contracts are implemented there is an assumption that the attributes of the private sector will be utilised to achieve the efficiencies claimed in the substantiating theories. This necessitates a transfer of risk from public to private, such that the private sector has an incentive to function in an efficient manner. The inadequate transfer of performance risk from public to private, distorted risk allocation, has important consequences for renegotiations and cancellations. Firstly, there is increasing implementation of currency risk reduction through the tying of tariff rates to the US Dollar. This becomes problematic when the national currency of the host country is devalued vis-à-vis the dollar and the prices of water services consequently increase, often resulting in public concern and protest, and may ultimately lead to the renegotiation of contract terms for political reasons (Lobina, 2005; Lobina & Hall, 2003). Secondly, where a renegotiation process is entered into, asymmetry of capacity and power relations determines that the private sector often yields further risk (Estache, 2005), with further potential consequences for the supposed efficiencies gained through assumption of performance risk.

The limited potential avenues to introduce competition into the sector place greater import on the tendering and regulation of contracts. The forms of competition available in the sector have consequences for the potential for disputes, renegotiation and cancellations. The former, competition for the market (Kirkpatrick & Parker, 2005), places greater import on the tendering and bidding process as the means by which to achieve optimum terms of service suitable for the lifetime of the contract. The second, surrogate competition (Harris, 2003), places greater import on the role of the regulator in ensuring compliance with contract conditions by each contract private operator. Where either the initial tendering process or the regulatory agency is performs inadequately this may have negative consequences in the form of disputes or renegotiations.

Because the model of PSP employed relies for success on the adherence by each party to their respective contractual terms it ignores the importance of mechanisms through which accountability and transparency of procedure of contractual completion is ensured, and through which public or consumer participation is possible. Where corruption has been characteristic of public service and government procedure, public opposition to PSP finds a basis in the assumption that the privatisation of services is a further means by which corrupt government officials may profit further. Mechanisms of transparency and

accountability are therefore important as a means by which this residual opposition to PSP may be assuaged (Harris, 2003). Similar mechanisms provide a means by which public participation may be incorporated into the PSP process, and the completion of the PSP contract (Lobina & Hall, 2003; Groom et al, 2006). Where price increases or other public concerns create opposition to PSP, this opposition is necessarily expressed outside the system of service provision. Because these mechanisms are not incorporated into the model of PSP, the likelihood of renegotiation is increased.

The contract tendering process

So, the PSP contracts together with framework within which are implemented, are predisposed, subject to the right conditions, to problems of disputes and renegotiations. When these contracts are implemented, the process of tendering and bidding further accentuates this predisposition, and contributes further factors which may increase the likelihood of problems ex-post privatisation. The highly concentrated global private water sector, conditional aid or debt restructuring, and the risky nature of investment combine to create a contract tendering process which is asymmetrical in the balance of power between host government and bidding contractors. The means by which the tendering process accentuates the possibility of dispute and renegotiation is 'strategic misrepresentation' or 'low-balling' – unrealistic bids by private companies, and corruption embedded in contracts – resulting in substandard infrastructure and public opposition. When these factors combine to create sub-optimal contracts from the outset the potential for dispute and renegotiation is increased.

The tendering process for PSP projects in developing countries is often a lengthy process, with associated costs representing a significant proportion of total project cost. For example, the tendering process in Tanzania proceeded for six years, with the tendered scheme undergoing repeated modifications in this period, before a suitable bid was found (Bayliss, 2002; PPI 2008a). The questionable appeal of contracts as profitable investments, together with the highly concentrated global private water sector and the development of complex contracts combine to produce this extended process. This protracted contract tendering contributes a significant addition to the transaction costs for PSP projects. Transaction costs here include the arranging of agreements, the organising of the bidding process and various other legal, consulting and public relations costs (Kirkpatrick et al, 2004). A World Bank study estimates that these costs can amount to five to ten per cent of the total value of PSP projects (cited in Lobina & Hall, 2003), and their substantial extent is mirrored, at least to a degree, through frequent renegotiation procedures (Harris, 2003).

The potential for disputes and renegotiations is increased in the tendering process by strategic misrepresentation and the development of suboptimal contracts. Potential investors in the water sector in developing countries are limited by the significant investment and technical capacity required, and the highly concentrated nature of the global private water sector (Lobina & Hall, 2003). The nature of investment and the dominance of multinational companies entails that market entry is severely restricted, with

few firms bidding for water sector PSP contracts. A consequence of this market structure is that, where tenders have multiple bidders, there is significant potential for collusion between firms – negating benefits through 'competition for the market'. A further consequence is the shift in power between the contracted parties. The pressure to instigate PSP contracts – through loan conditions or basic need for investment – and technical incapacity to interpret collusion entail a weakening of state position vis-à-vis private firms. Where there are instances of concessions being commenced after only a single bid was made, the conditions resulting from bidder collusion are replicated, with an associated shift of power toward the private sector.

Where the power balance between host government and private sector companies shifts in this way, the bidding process is subject to distortion in the form of sub-optimal bids and opportunistic behaviour on the part of the private company. According to Kirkpatrick et al (2004: 19),

"The result can be both adverse selection and moral hazard. Adverse selection takes the form of sub-optimal contracts at the outset, resulting from one of the contracting parties acting opportunistically to arrange especially favourable terms; while moral hazard occurs when one of the contracting parties renegotiates the terms of the contract in their favour during its lifetime."

Thus, where the private sector is aware of the asymmetric power relation with the host government, they "might 'low ball' bids in the hope of successfully renegotiating more advantageous terms once they had been awarded the contract" (Harris, 2003: 19). The potential for renegotiation favouring the private partner is increased because the financial cost to the government of cancellation is significant – both in the form of compensation to the company and the transaction costs including the legal and administration fees accruing should they choose to take this route (Nickson & Vargas, 2002). The capacity of the government to take the route of cancelling PSP contracts is further restricted by the loss of technical capability – in terms of labour for example – having surrendered the enterprise to the private sector. The government is therefore reluctant to terminate contracts without the means by which to ensure the continuation of service provision (Kirkpatrick et al, 2004).

PSP contracts in developing countries provide multiple opportunities for corruption on both a grand and petty scale. Evidence from various studies shows that these opportunities for corruption are being utilised by government officials with the collusion of private sector representatives, and this is widespread practice (Kenny, 2006). Hobbs (2005: 23) notes, based on interview evidence with private actors in infrastructure projects, that the private sector is well versed in the corruption process: "All experienced bidders know that they must offer bribes in order not just to win the contract, but to successfully implement it". The implication of this level of entrenched corruption for the potential for disputes and renegotiations of contracts is the significant level of public opposition which it generates. This is recognised by Guasch & Straub (2006), referring to Latin American public opinion surveys of PSP:

"Although a number of explanations have been put forward to explain such a public distrust, one major reason seems to be the perception that the process fostered corrupt deals at the expense of customers, in particular through numerous renegotiations of the initial contracts (Martimort and Straub, 2006)." (Guasch & Straub, 2006: 483)

In addition to the implications for public opposition to PSP, corruption may constitute between five and ten per cent of the total value of PSP projects (Kenny, 2006). When combined with the significant transaction costs associated with PSP in developing countries, which are repeated through the process of renegotiation which the existence of corruption makes more likely, the impact of these costs on the productive value of PSP projects is significant.

So, the market structure of the private water sector and the power imbalance between private and public partners, together with the frequency and scale of corruption, increases the likelihood of public opposition to PSP projects and the probability of dispute and renegotiation ex-post privatisation. This likelihood is increased further by the status of the regulatory framework at the time of the designing and inception of PSP contracts. The review by Guasch & Straub (2006) of studies of renegotiation of Latin American PSP infrastructure projects undertaken by Guasch et al (2003 & 2006), provides evidence that where a regulatory agency was not in place at the time of the contract being signed, the likelihood of subsequent renegotiation increased significantly (fig. 3.1). While the information shown concerns cross-industry performance, they note an example of the water sector in Argentina where the model employed suggests that the probability of renegotiation would have been reduced from 9.9 per cent to 0.3 per cent had a regulatory agency been present at contract inception.

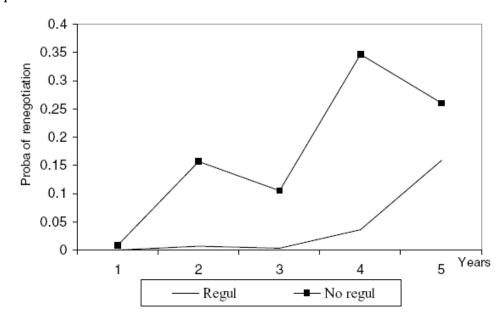


Figure 3.1: Hazard rate (government led renegotiation) by existence of regulator at time of signing of contract

Source: reproduced from Guasch & Straub (2006)

Data such as that reviewed by Guasch & Straub has prompted the World Bank to invest heavily in institutional reform and the creation of independent regulatory agencies mirroring those in place where PSP has been implemented in developed countries, with 20 per cent of World Bank funding now being devoted to such reform (Hobbs, 2005). The reform programme employed by the World Bank can however be problematic where form of regulatory agency implemented contradicts the form of legal or institutional framework of the host country, as discussed elsewhere.

Ex-post administration and functioning of PSP contracts: factors contributing to renegotiations

Overwhelmingly, where the PSP model is transferred to developing countries it incorporates, implicitly or explicitly, an idealised form of independent regulatory agency. Independence intends to minimise potential discretion or opportunism on the part of the government, and provide stability and predictability for investment. However, where these models of regulation are implemented in developing countries, their form and operation often contrasts with the existent legal and institutional framework, such that the outcomes regulation should not be predicted and may contrast with those intended (Ogus, 2004 & 2005). As has been the case in Cochabamba, Bolivia, the independence of the regulator was breached when rising prices threatened significant public opposition:

"Negotiations and decisions over tariff-setting were dealt with by central government and not by the water regulator. The February 2000 decision to reduce the tariff increase by 11 per cent was taken by the cabinet (La Opinión, 2000). Renegotiation of the contract and tariff freezes were also agreed between the central government and the Civic Committee. The cancellation of the concession itself was a product of political pressure to halt the growing social conflict and the decision was taken without reference to the termination clauses and procedures established in the contract." (Nickson & Vargas, 2002: 145)

The example of the Cochabamba concession highlights the importance of the continuation water service provision at affordable prices, due to the nature of the product as both merit good and human right, to host governments where PSP is employed. The government in this case considered it necessary to override the regulatory mechanisms in place in order to salvage its own position. Transparency and accountability of processes associated with PSP are also highlighted, without such mechanisms public resentment and opposition to the PSP scheme further escalated:

"The lack of consumer participation in the regulatory process was another factor that emasculated the legitimacy of decisions by [the regulator]. As most regulatory decisions were determined by government pressure, consumers did not feel that their interests were being safeguarded by the regulator." (Nickson & Vargas, 2002:145)

Without transparency and accountability there is thus a significant risk that the development of public opposition through the period of operation of the PSP contract will contribute to the possibility of dispute, renegotiation or cancellation (Harris et al, 2003).

Opportunism on the part of the government, as in the case of Cochabamba, may be mirrored by that of the private sector which asserts its advantage in asymmetrical power relations ex-post privatisation. Where contracts are developed that provide a degree of imprecision regarding the contractual obligations of the private operator, the latter may in effect 'redefine' its obligations following commencement of the contract contrary to what was intended in the preliminary negotiations. According to Lobina & Hall, the private operator attempts to

"... redefine the boundaries of the service to be provided. So in Cartagena, Colombia, for example the shanty town areas are treated as not covered by the contract because they are not in the city area. In La Paz, Bolivia, where the contract said unequivocally that 100%, including the major shanty town of El Alto had to be connected, Suez subsidiary Aguas de Illimani argues that "connection" does not mean a piped connection but may just mean access to a standpipe or tanker." (Lobina & Hall, 2003: 57)

In addition to opportunistic behaviour, corruption evident in the operation of PSP contracts affects the potential for disputes and renegotiations. Just as corruption contributes to public opposition, the quality of services may be affected also. The process of auditing the output of PSP contracts invariably remains with the host government and its officials, and this places substantial power in the hands of these officials particularly where contract payment is released on completion of work. There is considerable opportunity and incentive therefore, as a cost-reduction measure, for the private operator to bribe the official to 'sign off' construction which is of substandard quality or incomplete. The consequences of this form of corruption are the reduced standard of service or infrastructure being produced under PSP contracts:

"For example, across countries, high perceived general levels of corruption are associated with lower spending on proxies for operations and maintenance. Related to this, general perceptions of corruption have been associated with lower quality infrastructure (a lower percentage of roads in good condition and more frequent power outages for example)." (Kenny, 2006: 5)

Where standards of service drop as a consequence of substandard construction, non-compliance with contractual terms provides grounds for the instigation of a process of renegotiation.

Summary

It has been shown that the various factors originating in both ex-ante and expost privatisation design and processes have real consequences in the incidence

and frequency of disputes and renegotiation. Renegotiation frequently results in further distortion of risk allocation, service disruption, non-compliance with targets, and rising prices. These factors have consequences for investment in the sector, including an increasing tendency to be selective both in terms of the consumers serviced within developing countries, and the regional choice for investment. The form of PSP introduced in developing countries correlates closely to the model which has evolved in developed countries. A central element of this is the assumption of competent system of governance and concept of the role of a regulatory agency independent from the government and other institutions. However, where this is introduced in developing countries. the potential for contractual dispute and renegotiation is increased both ex-ante and ex-post privatisation. Prior to privatisation, asymmetry in capacity results in sub-optimal contracts through 'strategic misrepresentation' on the part of the private sector bidders. Ex-post, it has been shown that the possibility of opportunism in the form of political and governmental intervention remains to be significant, and frequently produces disputes and renegotiations. These are accentuated by ex-post factors including unilateral redefinition of contract terms by private operators, and corrupt auditing of contracted services. The contract design and tendering process as it is resolved in developing countries therefore contributes significantly to the reduced likelihood of contract completion.

Conclusion and discussion

It has been shown here that the property rights and public choice privatisation model encounters significant problems where implemented in developing countries, with performance of privatised enterprises frequently diverging from rhetoric which accompanies IFI policy. The performance of the privatisation model and its development through the phases described here, demonstrate the importance of the differential environment within which the model is implemented for the success of the policy in its intentions. Contract design, the institutional framework of the host country and the potential public opposition all have a significant role in the determination of operation and performance. These factors further impact the likelihood of the contract entering a process of dispute, renegotiation and possible cancellation. It has been shown that the rationalising theory contributes to the form of PSP established, with an underlying distrust of the public sector and institutions, and a failure to account for and incorporate local variations in such institutions where they are determinant in differential performance of privatised water service provision.

The three phases of privatisation of water services in developing countries, as described here, demonstrate the attempts to account for and alter the poor performance of PSP in this context. The shift from a crude implementation of the PSP model to increasing acknowledgement of institutional factors reveals the implicit acceptance of the shortcomings of the rationalising theoretical model. The assumed coherent conditions, which are existent in the developed country context within which the model originates, are acknowledged as playing a significant role in determining privatisation performance. The attempt to incorporate the modelling of institutional factors in a theoretical

framework which necessarily excludes such factors appears flawed. promotion at first of the 'good governance' model encompasses only the conceptualisation of the state as performing to facilitate the operation of the private sector; it necessarily ignores the analysis of the historical, social and political character of such institutions which impact on their potential to perform such a role. The subsequent acknowledgement of the derivation of institutional form from 'Anglo-American' or 'Francophone' countries remains limited in its capacity to account for local variation. Through privatisation there is a potential redefinition of social rights to water access, and this redefinition may be ungrounded in local economic and cultural development, with subsequent opposition possible. This opposition, combined with the asymmetrical power relations of state and international capital in the PSP contract process, contribute to the likelihood of the development of dispute, with subsequent renegotiation or cancellations that has typified much of the water sector PSP.

In addition to those aspects raised in the preceding chapter, the privatisation in the water sector in developing countries, as reviewed here, suggests that the market failures typical of the sector play a role in the divergence performance and operation from that proposed. Further to those aspects which support the typical conditions in the water sector, the above discussion highlights the particular problems presented in the developing country context. This includes the importance of institutional capacity in the determination of performance and operation, which appears to be frequently deficient or incoherent in developing countries. Furthermore, commercial modes of operation are undermined where there are significant pressures for the expansion of service provision. Taking the evidence presented in the previous chapter regarding typical conditions and deviation from those assumed, together with the performance and operation of the programme where implemented in practice in developing countries, it is possible to establish a more detailed framework by which to analyse the divergence of operation and performance in more detail. Thus, the various elements of the critical assessment, together with their manifestation in practice and the additional aspects of service provision noted above with respect to developing countries, provides a basis for this development. These various aspects will be taken together in the following chapter, where a consideration of requisite methodology will be made.

Chapter Four:

Research design: nature and scope of investigation, appropriate methodology and quality criteria

To this point, it has been established that the performance and operation of privatisation where implemented in the water sector in developing countries typically diverges from that proposed within the theoretical rationale for the programme and its associated propositions. Inconsistencies, weaknesses and problematic assumptions, and their alignment with conditions typical in the water sector, are paralleled by the performance and operation of the programme where implemented: many contracts are characterised by dispute, renegotiation and cancellation, risk and liability increasingly remains with the government, and there is a decrease in private investment in the sector. The divergence in practical implementation from that proposed within the theoretical rationale, and that utilised by proponents of the programme, thus provides a phenomenon and a contradiction which motivates the research of this thesis. This chapter describes the scope of required research, the particular research questions that follow from this phenomenon, and the means by which research may be implemented, in terms of methodology and scope.

The scope for the exploration of the grounds for such divergence can be derived from the preceding chapters. As will be described in the first section, it is apparent that the two broad areas of study are those relating to the contract itself, the specificity and terms thereof, and the environment within which the contract is implemented, incorporating the political, social and institutional framework determining performance and operation where information and contracts are incomplete. It will be proposed here that as these areas therefore broadly align with, firstly, technical factors determining performance and operation of privatisation, and secondly extra-economic factors (political, social and institutional), such a bifurcation provides a mode by which to execute study of the phenomenon. Following from the scope of study required, the range and extent of research questions by which to guide exploration of these issues, and which describe the possible connections between theory, and its failings, and problematic implementation. Beyond the over-arching motivating question regarding the divergence of performance and operation from that proposed, these questions consider: the particular aspects of theory and their contribution to this divergence; the particular aspects of the water sector in developing countries and their undermining of propositions of theory; the impact of the local social, political and institutional conditions, norms and capacities on performance and operation; and subsequently the potential impact of commitment to an apparently flawed theoretical foundation and the manifestation in problematic implementation in the sector.

Thus appropriate methodology for the undertaking of study, within the scope described and with regard these questions, is to be considered, and forms the second section here. Coherent with the scope of privatisation and its contextual implementation, and with the intended aims and objectives

established in the research questions, it will be maintained here that the most appropriate approach for exploration is the case study. Implementation takes place typically at the national scale, and investigation considers a range of actors, agencies and institutions at this national scale, thus within the practical limitations of the present thesis a case study corresponds. Particular methodologies are consistent with the range of sites and actors to be studied, and thus incorporates qualitative methodologies including interview and document analysis. Further to these considerations, the practical execution, and the ethical principles to be applied, are noted here. Details regarding the particular process of research undertaken, the data sources and actors engaged, can be found in Appendix A.

4.1 Nature and scope of investigation: ontological and epistemological approach, and research questions

The discussion of theory and its critique, and programme implementation, determines the appropriate nature and scope of investigation of the divergence of performance and operation of privatisation from that proposed within the rationalising theory. This is true both in terms of the nature of research employed, in epistemological and ontological terms, and the scope of investigation, determined by the research questions formulated.

Ontological and epistemological considerations

The nature of the problem, and the phenomena to be explained, provides a definite basis upon which considerations of ontological and epistemological can be made. The apparent disconnect between intended programme operation and that which is manifest in reality in developing countries, suggests the requirement for the construction of the case of privatisation in the water sector with a focus on the interpretation and mutation of the policy at the local level. The divergence in performance and operation from that proposed may be researched by, for example, the observation of requisite institutions for the administration of privatisation. However, the existence of such institutions does not guarantee their presumed functioning: where individuals operate within such institutions, their commitment and capacity to function affects outcomes. Therefore, it is necessary not only to look at the concrete objectively observable characteristics of conditions in the water sector, but also the actions and conceptions of those operating therein.

In this sense the nature of enquiry has greater coherence with a constructivist ontological position, and subsequently an interpretivist epistemological position. The enquiry necessarily involves therefore the scope for the incorporation of these actions, conceptions and opinions of those working in the sector, and the potential impact on performance and operation. Considering the need for such openness in the nature of enquiry, it would be inconsistent and inappropriate to employ an ontological and epistemological position which does not permit such space. The necessary incorporation of the interpretation of individuals is therefore contradictory to a purely objectivist

approach. Such an ontology determines a positivist epistemology, further contrary to the requirement for the incorporation of subjective interpretations at the local level (Guba & Lincoln, 1994; Flick, 2002; Bryman, 2004). The employing of the constructivist ontology entails the potential for the incorporation of such subjective interpretations, providing the conceptual framework for the research enquiry to reconstruct the case of privatisation as is experienced by those operating in the sector in developing countries. In turn, the coherent epistemological position is that of interpretivism: the incorporation of meaning and purpose being essential in order to understand behaviour of those operating within the sector, going beyond objectively observable data (ibid.).

In terms of the research design process consequent to this, typically associated with the constructivist and interpretivist ontological and epistemological approach is the theory generating, inductive design (Meinefeld, 2004; Flick, 2002). In this sense the interpretive approach is utilised in the generation of new theoretical development, the research design therefore having a significant degree of openness. Accordingly, the research process may follow a circular strategy, with each aspect of researching informing the next in turn. While this may be appropriate for an alternate study of more significant scale and with intentions for theoretical development, it may not be appropriate within this context. It has been established in the preceding chapters that the performance and operation of privatisation has frequently encountered problems where implemented and these contribute to a divergence from propositions contained within the rationalising theory. It has further been established that the rationalising theory has various weaknesses, inconsistencies and problematic assumptions which may align with conditions and problems encountered in practice. This indicates therefore a linear, hypothesis testing, research design process. While this may be contrary to common conceptions of the design which follows from the constructivist ontology, it is broadly acknowledged that a hypothesis testing model may be equally valid (e.g. Flick, 2002 & 2004a; Meinefeld, 2004). What is necessary however, is the maintenance of a degree openness within the hypothesis for the incorporation of subjective definitions and interpretations within the research process and analysis. In this sense, while the extent of prior knowledge permits the development of hypotheses, it should be coherent with the ontological and epistemological framework (ibid.).

Research questions

It has been established in the preceding chapters that the underlying theoretical rationale for privatisation has various associated assumptions, inconsistencies and weaknesses, and where applied in the water sector in developing countries it is apparent that these various aspects may be contributory factors in the divergence of performance and operation from that proposed under this rationale. It is subsequently necessary to determine, considering these correlations, the scope of the research required to provide a greater insight into the potential impact on performance and operation, and consequently the validity of the theoretical rationale as a basis for sector policy. The following

discussion reviews the parameters of research and the particular aspects of privatisation and service provision that require examination. The scope of analysis as noted here should consider: the nature and form of the contract, the degree of risk and liability transfer, the specificity of terms and the potential for opportunism that exists in non-contracted terms; the capacity, extent and form of regulation in a dual role of monitoring the private sector and as instituting socially and politically acceptable pricing; the broader institutional environment, its capacity, coherence with the privatisation programme, local commitment or resistance to the programme, and measures acknowledging institutional importance included in the programme; and, coherence with expectations of service provision within the country, including conceptions of water and universal service provision. Broader themes of exploration should incorporate the implications of ideological commitment to the tenets of the theoretical rationale for implementation.

Considering the preceding chapters, it is obvious that the contractual relationship between principal and agent is of critical importance to the performance and operation of privatisation. It is apparent from the privatisation where implemented in developing countries, as reviewed in chapter three, that the specificity (or lack of) terms of contracts have been shown to be critical factors in determining the likelihood of progression to dispute or renegotiation. Where contractual terms lack specificity, opportunism on the part of the private sector has been evident – for example in the ex-post 'reinterpretation' of contractual language. This may in turn result in ex-ante opportunism in the form of adverse selection.

The issues noted here provide an indication of the scope of investigation with regards the contractual relationship of the principal and agent, necessary in the determination of the transfer of property rights and subsequent validity of this theory in the sector. Exploration of this particular aspect of privatisation should therefore incorporate: an understanding of the specificity of contractual terms; performance and operation, and compliance with contract terms; the potential for opportunism, ex-post and thus possible ex-ante; capacity (technical, financial, human resources) for administration of contract; aspects of provision where information is incomplete, or deficient, and therefore subject to dispute; means, and extent, of transfer of risk and liability - including distortions incorporated as a means of attracting private sector investment; incorporation of means by which to reconcile commercial operation (full cost recovery) with social objectives (service expansion), thus the consideration of public opposition. Exploring such issues contributes to the intended aims of assessing the validity of the underlying theoretical rationale for application in the sector, most particularly in terms here of property rights and transfer thereof, and subsequently associated propositions. But it will further be indicated here the existence of opportunism on the part of the public sector, and thus validity of certain aspects of public choice theory.

Subsequent to the consideration of the contract itself is the assessment of the institutional environment within which privatisation is located – a significant determining factor in the performance and operation of any privatisation

programme. As is necessary in the water sector, intervention by a regulatory agency constitutes the first obvious form of institutional importance. It is apparent from the implementation of privatisation in the water sector in various developing countries the form of the regulator, in terms of attributed authority and capacity, varies across dependent on the interests of privatisation sponsors. Where distrust of the national state is most apparent in early forms of privatisation, as is coherent with the underlying theoretical framework and associated limitations on state intervention, regulation was deemed to be of secondary importance to the introduction of the private sector. Subsequent programme failures, demonstrated the implications of market failure and the role of the regulator in the counteracting of this, brings about the greater attribution of responsibility and import to such an agency in later programmes. The institution of 'best-practice' regulation as typical of this revised approach maintains this apparent distrust of the national state, as contradictory to the idealised role of the state integral to the rationalising framework. The capacity, extent and form of regulation may therefore have altered through the history of privatisation in the water sector in developing countries. The nature of intervention remains fundamental to the operation and performance of the programme.

Beyond the regulatory agency, the broader institutional environment is clearly integral to the operation of privatisation contracts in the water sector in developing countries. The capacity of the host state in the administration of the contract is significant in the operation and performance of the privatisation programme, and where capacity has been deficient, the likelihood of dispute and renegotiation or cancellation may increase. For example, where ex-post moral hazard is likely due to non-contracted items, the capacity of the host government to recognise these ex-ante may be limited and thus adverse selection is possible. Furthermore, the capacity of the institutional framework determines the likelihood of enforcement of penalties where contracted terms are not met expost - where the legal system fails to enforce such measures. Equally, the conditions found in developing countries, and the requirement for investment in service provision, disadvantages the national government where other sources of funding are lacking - as a disincentive to enforce penalties against the investor. Alternatively, the commitment of national actors to the privatisation programme may affect the implementation and operation: where privatisation is seen as a means of acquiring necessary finance, associated measures and modes of operation may be agreed to only at a superficial level. Such factors provide a contradictory environment to that assumed, where the institutional framework is assumed to be coherent and with adequate capacity. The deficiency in the capacity for administration, monitoring and enforcement of contracts thus impacts on their operation and performance, in terms of both contracted and non-contracted items.

Thus, in addition to the considerations noted above regarding the contract, institutional capacity and coherence forms an integral and essential part of any exploration of the performance and operation of privatisation relative to those propositions associated with the underlying theoretical rationale. The aspects of privatisation to be considered here are thus: the

establishment of a regulatory agency; the incorporation of the regulator as component to the privatisation programme, and the prioritisation made thereof; the capacity of the regulator in its monitoring and price setting role; the potential for regulatory capture, political or commercial; the legal and legislative framework enabling regulatory decisions to be implemented; commitment or otherwise of actors in the national state institutional framework to privatisation and its mode of implementation; the extent and nature of transaction costs associated with the administration and monitoring of privatisation; the incorporation of public consultation in the privatisation process and the impact of public opposition; evidence and impact of contradictory motives for action: public service and universal service provision; the impact of contradictory tendencies of commercial operation and universal service provision or expansion of services. This proposed scope of exploration of performance and operation correlates with the weaknesses, inconsistencies and problematic assumptions described in the critical assessment, their manifestation in the water sector, and the more substantial problematic assumptions of neo-classical economic modelling more generally as noted in chapter two.

Having outlined the particular aspects describing the scope of exploration necessary for assessing performance and operation of privatisation in the water sector in developing countries, the structure of this assessment should also be The above factors may be considered by reference to their specificity, their inclusion in or exclusion from contracted terms, their capacity to be assessed by reference to technical considerations - specified targets, contractual terms or compliance with legislative requirements for example. Beyond this there are a multitude of extra-economic factors that may impact performance and operation. Thus where technical requirements end, or are not specified, extra-economic factors play a more significant role in the determination of outcome - opportunism, degree of ideological alignment with privatisation, political patronage etc. It is beneficial in this sense to consider these two aspects in separation. Final evaluation, following the consideration of these two spheres of analysis, should however be made to the original aspects of critical assessment of the theoretical rationale for privatisation. endeavour, the performance and operation in the context of the water sector in developing countries may be analysed relative to the theoretical weaknesses, inconsistencies and problematic assumptions outlined, including those broader criticisms relating to the underlying conception of the individual. Thus the validity of the theoretical framework as a basis for policy in the sector may be better assessed, and the commitment to such theory outwith its theoretical capacity questioned.

Consequent to the scope of research outlined here, and the establishment in the preceding chapters of the theoretical rationale for privatisation, its critique and the practical implementation in the water sector in developing countries, it is possible now to formalise a hypothesis and the particular questions that are intended to be answered within this research: the weaknesses, inconsistencies and problematic assumptions of the rationalising theory of privatisation provide a foundation for the divergence in performance and operation of the programme from that proposed within this rationale, and,

subsequently, the validity of this rationale for application in the water sector in developing countries should be questioned. In investigating this hypothesis various research questions may be developed, and the above considerations are integral to the answers sought:

- The over-arching question motivating this research is as follows: Why is there a divergence in the propositions associated with the theoretical rationale and actual performance and operation of the programme where implemented in the water sector in developing countries?
- Subsequently, considering the particular aspects of this rationale: *To what extent, and in what ways, do the component theories of this rationale, and their weaknesses, inconsistencies and problematic assumptions, contribute to this divergence?*
- Relating to the contextual implementation: *In what respects do the conditions typically found in the water sector in developing countries undermine the validity of the theoretical framework for application in this context?*
- Regarding the implementation of the programme: To what extent are local conditions social, political and institutional norms and capacities recognised in the form and mode of implementation of the privatisation programme?
- More speculatively then: Does ideological commitment to the programme, founded on an inherently flawed theoretical model and applied in contradictory conditions, negatively affect the likelihood of coherence with local environmental conditions and thus more successful operation?
- Finally: Does the theoretical framework rationalising privatisation provide a valid basis for application in the water sector in developing countries?

Following from these questions, and the further aspects of study as noted above, it is necessary now to consider the mode of their implementation, the methodology by which requisite data may be sought, and in what context this should be applied.

4.2 Appropriate methodology and case construction

Following from the above identification of the appropriate ontological and epistemological framework, and subsequently the development of research questions and hypotheses, it is necessary to develop a coherent methodological approach. It will be maintained here that the most appropriate mode of research is that of the case study, considering the various institutions under focus, the national-scale of implementation and as a context to evaluate validity of theory. The assessment of social, political and institutional factors as necessary to the exploration of extra-economic foundations of divergence of performance and operation from that proposed, infers qualitative research, and interviewing, of those actors involved in programme implementation. Such interviews may also inform the nature of technical performance and operation, though it is likely that this area of research is to be fulfilled more comprehensively be statistical and

documentary evidence. Such documentary analysis provides a substantial evidentiary framework for the analysis of performance and operation.

Case study as a research framework

The utilisation of a case study approach provides specific advantages when attempting to assess the privatisation programme in developing countries. Because the proposed benefits of privatisation differ so significantly from the outcomes evident in many cases, the disparity cannot be judged from assessment The reception, interpretation and mutation of at a supra-national level. privatisation in developing countries contribute to its differential performance. Similarly, the activities associated with privatisation – those which derive from the ideological commitment to the programme in contradictory conditions – are implicit within the policy framework, yet also contribute to its performance. These factors are only evident within the national context, and as such require study at this level. Differential national contexts determine differential reception and mutations, together with different processes to ease privatisation Considering these issues, a case study implementation in these contexts. approach appears to offer beneficial method to the assessment of privatisation in developing countries. However, for the very same reasons generalisability of results becomes problematic - although replication of method and theory remains possible.

Interpretations of case study research, its nature and its potential value show some variation between those who have utilised the approach particularly across disciplines. Case studies are commonly employed in the social sciences by those using an anthropological or ethnographic approach, and in this sense they provide an opportunity for inductive research. While a case study might find favour in these instances, it does not correlate with the present work (Burgess, 2000). With a focus on the implementation of a privatisation agenda based on predefined theory, the approach here is primarily deductive. The approach however retains the interpretative appeal of the case study approach, essential for the understanding of the implementation of privatisation in the national context of the developing country. The opportunity that is afforded by the case study for the contextualised appreciation of a broad programme, such as privatisation, is important. It is the intention for the case study to be an instructive example of a more general phenomena (Flick, 2002). This aspect of the case study is highlighted by Yin (2009: 18), in his definition of the approach: "1: A case study is an empirical enquiry that: investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident". Yin further maintains, "... you would use the case study method because you wanted to understand a real-life phenomenon in depth, but such understanding encompassed important contextual conditions ..." (2009: 18). This appears to be evident for the case of privatisation, with such a disparity between proposed benefits and actual outcomes - a disparity not explained by the theoretical rationale or the theoretical concepts made available within. The privatisation of water services is, furthermore, an instance of a particular transaction, as described within the critical economic literature, and as such the focus on one

such particular transaction correlates with the inquiry of theoretical validity based on such critical literature (Adams et al, 2007; Stark & Torrance, 2005).

Furthermore, the implementation of privatisation in its broad ideological form encompasses a multitude of social arena within which the programme is carried out. The case study in this sense further provides an opportunity for the aggregation of data from these various arenas, but which ultimately relate to the same attempted implementation of privatisation. This 'triangulation' is component to Yin's further definition of the case study: "2: The case study inquiry: copes with the technically difficult situation in which there will be many more variables of interest than data points; and as one result relies on multiple sources of evidence, with data needing to converge in a triangulating fashion; and as another result benefits from the prior development of theoretical propositions to guide data collection and analysis" (Yin, 2009: 18). utilisation of a case study as a component of research methodology thus provides the opportunity to examine the processes by which the privatisation programme is transferred to the national context. It permits the cross examination of the same process of transfer by reference to various agencies within the same country active in the same transfer, establishing a rich description of the process of implementation. The consequent representation of the phenomenon of privatisation from the perspective of the participants allows the possibility for the understanding of local reception, mutation and transformation of policy and theory, and subsequently the undermining of associated propositions (Stark & Torrance, 2005).

Particular methodologies utilised

The particular methodologies to be utilised are determined by the nature of the research design and questions established, and the associated ontological and The research design and questions entail the epistemological approach. requirement for the investigation of privatisation in developing countries to incorporate the reception and interpretations of the policy programme by those working within the sector. This necessary evaluation as a means to explain divergence in performance and operation from that proposed within the theoretical rationale in turn entails a constructivist ontology and associated interpretivist epistemology. Furthermore the research design takes a linear, hypothesis testing form. The development of this form of research design determines the utilisation of methodology which permits appropriate data collection. In this sense the research design should incorporate qualitative methodology, permitting the exploration of subjective experiences and interpretations of the implementation of privatisation, in order to satisfy the ontological and epistemological concerns. The linear, hypothesis testing model does not contradict this methodology. While conventionally such a model may be associated with positivist research aligning with the natural science model (Stark & Torrance, 2005; Adams et al, 2007), and as such would utilise primarily quantitative methodology, the utilisation of qualitative methodology as a means to construct a case against which hypotheses are tested remains a valid approach (Flick, 2002 & 2004a; Meinefeld, 2004).

The construction of privatisation within the case study context requires therefore the incorporation of data provided by sources active in the sector, as a means by which to establish the local interpretation and reception of the programme. Additionally to this however, it is necessary to incorporate broader forms of data in order to contextualise and provide a framework within which such subjective interpretations may be located. Such is the nature of the case study, and indeed its benefit in providing a coherent representation of a particular instance of a broader phenomenon. The utilisation of multiple methods in constructing the case of privatisation within a particular developing country is coherent with the technique of 'triangulation', providing breadth and depth of data collection (Flick, 2002 & 2004b).

In constructing the case study and utilising the triangulation of data sources in the field, the use of interviews and documentary evidence provides the primary means of data collection. It has been identified above the means of analysis of performance and operation of privatisation by reference to, firstly, technical, and secondly, social, political and institutional factors. The former considers the identifiable, and quantifiable, aspects of performance and operation, primarily relating to those factors appearing in contract terms. The latter considers the social, political and institutional factors which frequently determine privatisation outcomes where contracts are incomplete, and where there is necessary intervention in the administration of privatisation. Inevitably, the latter provides the most significant arena within which subjective reception and interpretation provides a determining factor, with interviews being the appropriate methodology. Correspondingly, technical aspects are more likely appropriated through documentation. While this is the inevitable correlation, each aspect of methodology impacts on each sphere of investigation.

Interviews of those actors within the field offers a significant means by which subjective opinion, reception and interpretation of policy implementation may be acquired. The particular form of interview established is, once again, determined by the nature of enquiry and research questions. It is appropriate to utilise semi-structured interviewing, with a significant degree of prior knowledge of the topic, and the focus of questioning set accordingly, but retaining the requisite flexibility and openness to incorporate participant meaning. (Flick, 2002; Hopf, 2004; Bryman, 2004; Adams et al, 2007). The utilisation of interviewing as a methodology is furthermore appropriate to the scale of study. The number of agencies active in the sector is not significant: considering the evidence from chapter three, government, international sponsors (normally the World Bank), a regulatory agency, civil service, the public service provider where applicable, and NGOs where active, represent the typical range.

Triangulating the data acquired from the interviewing of actors within the sector, documentary evidence provides not only contextualising evidence broadening and deepening understanding of the implementation of privatisation, it is of significance in establishing technical aspects of performance and operation. Documentation provides the most likely form of evidence for the understanding of privatisation within the developing country context,

particularly when considering the technical aspects of performance and operation. This is particularly true in the case of a donor sponsored programme such as the privatisation of water, where accountability of those in the national arena is typically required by those sponsors. As such, the analysis of documentary evidence of the performance and operation of privatisation provides a legitimate institutional trace, from where to draw conclusions on decision making and activity (Wolff, 2004). It is further necessary where access to data regarding historical phenomena is required, where the research and phenomena are not contemporaneous (Scott, 1990). Just as documentation of privatisation provides a significant source of data regarding performance and operation, consideration of access rights is required: where official documentation exists, there is potential for restricted access (ibid.).

Within the context of case study research, the utilisation of these particular forms of methodology involves a particular mode of selection and sampling of data sources. Selection and sampling in the context of this research is purposive and goal-oriented (Steinke, 2004; Merkens, 2004). The selection of the particular country for study is itself a selection decision based on factors that entail the case being of particular interest: for example the occurrence of privatisation, the qualification of the case as being a developing country, or the novelty of study and the revelation of data previously un- or under-studied. Equally the selection of case study should have relevance for the broader phenomenon of privatisation in the water sector (although each instance being inevitably unique). The selection of the location of study is therefore purposive, determined by prior knowledge of the general conditions of privatisation (as noted in chapter three) and the particular instances which meet these criteria. Beyond the selection of the location of study, purposive sampling is continued in the selection of data sources. In constructing the experience of privatisation in the case study, those actors and agencies involved in the process of implementation are the subjects of interest (Flick, 2002). Therefore, in contrast to representative sampling as may be typical in quantitative methodology, the generalisability of results is maintained through replicability of sampling and selection (Merkens, 2004). In addition, in the case study context, while the population is generally known in advance - and sampling may thus generally be determined in advance - there remains a requirement for flexibility and openness for additional sources to be incorporated where encountered in the field (Flick, 2002). The sampling and selection of data sources is therefore purposive and goal-oriented - coherent with the linear hypothesis testing model, yet incorporates flexibility in the field – coherent with the requirement for the inclusion of subjective meaning and further sources where this follows.

Ethical considerations

Following the determination of the methodological framework, it is necessary to consider the execution of the research in the case study context, and in particular the ethical responsibility in respect to the participants of this research. Research in the context of the water sector in developing countries, as any social research, requires the consideration of the four ethical principles, as noted by Bryman (2004): the potential harm to participants; the lack of informed consent; the

potential for invasion of privacy; and, the potential for deception. The scope of concern for each principle in the context of this research is determined both by the requirements of methodology, and the code of ethics established by the University of Hertfordshire. The extent to which the principles are applicable in this context are thus limited by these factors. As will be described here, the requirements of the research do not extend to the deception of participants, and those individuals participating are doing so in their professional function and thus considerations of personal privacy are not of primary concern. Thus while unintentional deception should be a consideration, the primary focus in terms of ethical principles in this research should be potential harm and consent.

The potential harm to the participants incorporates the consideration of the requirements being made of those invited to partake in the research. The nature of the study entails that participants are required only to provide insight into the privatisation programme within the national context and their interpretation of this implementation, together with any information regarding performance and operation beyond that which may be acquired through documentary and quantitative data available elsewhere. In this sense the nature of potential harm is not conceptualised as physical, but more likely professional or personal in the nature and extent of information that is revealed, and the potential repercussions thereafter. The consequent approach involves the assurance of maintaining confidentiality and anonymity in records of research. While these procedures are to be upheld and observe as strictly as possible, the nature of research entails the possibility of context revealing identity. Thus where description of participant is recorded, and their position within the sector, specificity is limited (Bryman, 2004; Piper & Simons, 2005; Adams et al, 2007).

The required confidentiality and anonymity forms part of a further aspect of ethical principles to be applied in this research, as part of the process of informed consent of participants. The primary concern when considering the consent of participants relates to research conducted in a covert or disguised observation (Bryman, 2004). Such methodology does not form part of this research and as such the associated lack of consent is not applicable here. Thus, where actors engaged in the research process, informed consent is acquired – with consent letters indicating: the extent, scope and nature of research is indicated to those individuals; the confidentiality and anonymity in recording is noted; those undertaking and financing the research; and, compliance with University ethical guidelines.

Appropriate quality criteria

The research design established above, incorporating qualitative research in a case study context, requires a consideration of the means by which quality of research is to be maintained and evaluated. The utilisation of this particular approach and methodology entails appropriate criteria should be applied. It will be noted here that criteria appropriate for qualitative research are less definitive than those for quantitative approaches, with various proposed criteria – although with common themes. The primary contrast between quantitative and qualitative criteria concerns the proximation to the natural science mode in the

case of the former, or the validation and development of theory in the case of the latter. As is noted by various authors, criteria for each form of research differs in accordance with the associated ontological and epistemological approach (Flick, 2002; Guba & Lincoln, 2001; Steinke, 2004).

The value of transferring quality criteria deriving from those utilised within positivist research to qualitative methodology is questioned (Guba & Lincoln 2001; Flick, 2002; Steinke, 2004). Within the field of qualitative research, and the various authors writing on criteria to be applied, there are various propositions as to the appropriate form. Contrary to the postmodernist rejection of quality criteria for qualitative research, most authors provide a framework for the maintenance and evaluation within this methodological field which may be considered to be parallel to equivalent criteria in the positivist field (Guba & Lincoln 2001; Flick, 2002; Steinke, 2004). Rather than a transposition of criteria, appropriate concepts should be developed and applied: those focusing on procedure to facilitate reliability, coherence of representation with facts to facilitate validity, and analytical consistency with broader theory to facilitate generalisation.

Regarding reliability, or associated equivalent for qualitative research, this typically is composed of a concern for procedural soundness. According to Flick (2002), this should incorporate the adequate recording and documentation of data, and this in turn should ensure the distinction of subject data and researcher interpretation. Equivalent criteria proposed by Guba & Lincoln (2001), the 'dependability' of research, entail the potential for external examination of the research process, the record of enquiry, methodology and decision making. This includes the process by which selection and sampling decisions are made (Merkens, 2004). Regarding validity, or associated equivalent for qualitative research, this typically is composed of the requirement for consistency between the representation offered by the researcher and the data in the field. As Flick (2002) describes, this is the question of whether the researcher sees what they propose to see. Threats to validity of research may be seen where the researcher sees a relation or principle to exist where it is unsubstantiated, or to overlook them where they exist (ibid.).

Where the generalisation of qualitative research is concerned, criteria follow from the above criteria: what is typically the concern here is the quality of selection and sampling decisions, and the more general research design and implementation, and the subsequent consistency and analysis relative to broader theory (Flick, 2002). This is frequently the greatest concern within qualitative research, where there is a greater interest in depth rather than breadth, and with particular cases or small samples (Bryman, 2004). Selecting one case of a more general phenomenon entails the potential implications and conclusions drawn from the case may not be applicable in more general terms. The particularities of the case may determine the extent of generalisability, but it is also possible to infer elements of common trends or reveal new approaches of those proponents of the programme (Yin, 2009; Stark & Torrance, 2005; Adams et al, 2007). Yin considers the purported problematic external validity of case study research:

"Critics typically state that single cases offer a poor basis for generalising. However, such critics are implicitly contrasting the situation to survey research, in which a sample is intended to generalise to a larger universe. This analogy to samples and universes is incorrect when dealing with case studies. Survey research relies on statistical generalisation, whereas case studies (as with experiments) rely on analytical generalisation. In analytical generalisation, the investigator is striving to generalise a particular set of results to some broader theory." (Yin, 2009: 43, emphasis original)

Thus, considering the generalised trends that are apparent across the history of privatisation in the sector, as noted in chapter three, the exposure of evidence for a particular case may reveal the underlying causes for divergence in performance from that proposed in the rationalising theory.

Regarding other aspects of the selected research design and methodology outlined above, consideration should be made of the utilisation of triangulation and documents as data sources. Triangulation has been criticised where utilised as a means of validating data (e.g. Blaikie, 1991). While the employment of multiple sources through triangulation provides the basis for improved breadth and depth of understanding of phenomena, its utilisation as a means of crossvalidation of those multiple sources should be limited (Flick 2002 & 2004b). The utilisation of documentation as a data source provides potential issues of quality assurance, as the researcher infers historical actuality through these documents: there is mediate or indirect access, contrasting to immediately observable where the observer and source are contemporaneous. phenomena Consideration should therefore be made of the authenticity (e.g. errors in copies, forgeries), credibility (e.g. motivations for bias or distortion), representativeness (to what degree is the document representative of the totality) and meaning (potential different meanings of author, audience and researcher) of the document (Scott, 1990). Content of documents in this sense should not be detached from production and publication (ibid.; Steinke, 2004).

Application of methodology: case study selection and overview of fieldwork process

Having established the scope and appropriate methodology by which to conduct research, the selection of a case study is necessary. The location of the case study research is limited by various factors: the instance and form of privatisation; the potential novelty of data to be revealed; practical considerations including the availability and language of documentation. It is noted in the preceding chapter that the frequency of privatisation is decreasing, a consequence of previous failed programmes, and an associated reduction in interest in investing in the sector on the part of private firms. The trend associated with this process of failure and reduced investment is that of a shift in form of privatisation from long term contracts with significant investment requirements, to shorter term management contracts with inherent limited transfer for of risk. It is evident from the extent of data reviewed in chapter three that, as is inevitable, more recent forms of privatisation and those contracts more recently instigated have been less intensively studied. Considering this, and the need and aspiration to contribute to the expansion of

such a field of knowledge, the more recent privatisation contracts provide an obvious starting point from which to select an appropriate case study.

The potential locations for case study are thus limited to those countries where privatisation has been implemented in service provision more recently. The World Bank Private Participation in Infrastructure demonstrates this reduced frequency, with six provision programmes having been initiated from 2003 onwards (PPI, 2010). Of those initiated, one (Tanzania) has been cancelled thus limiting the potential for research into operation and performance. Other practicalities impinge on the choice of case studies: language of official and agency documentation, and those active in the sector, entails selection of Cameroon, Ivory Coast, and Senegal would prove to be problematic. South African privatisation is that at a municipal level, and thus not typical of privatisation projects more generally. The remaining programme, in Ghana, is thus appropriate in the scale of implementation, and practical considerations including language and documentary analysis.

Fieldwork was undertaken in Ghana in August and September 2009, in the fourth year of the five year management contract. The data sources utilised comprise a broad framework encompassing relevant actors and agencies responsible for the design, implementation and administration of the privatisation programme. This covers all relevant parties, including the service provider, the sponsoring agency, sector institutions, political representation, labour representation, and the representation of NGOs and community groups. In this sense they are coherent with the scope of research determined above, and subsequently the theoretical framework to which results may be generalised. Actors engaged in interviews include: two representatives of the regulator; two representatives of the World Bank; a representative of the labour union; a representative of a coalition of concerned community groups; a member of parliament previously associated with the development and implementation of the programme; two representatives an NGO concerned with transparency and accountability in governance; a representative of consultants engaged in the development and design of the programme and sector institutions; a minister responsible for the implementation of the programme; a representative of an NGO coalition; and, a representative of a further coalition of NGOs concerned with the water sector. (Repeat interviews were undertaken in some cases, see Appendix a for full details regarding data selection and collection.) Further secondary data was acquired from: the state company; the regulator; the private company; the auditor of the contract; the World Bank; NGOs concerned with governance; coalitions of NGOs concerned with the water sector; the Ministry responsible for the sector; parliamentary records; press accounts; the sector management unit for the programme; and procurement authorities (see Appendix a for full details regarding data selection and collection).

Considering the nature of provision of water services, its nature as public and merit good, combined with the history of failure in implementation, the process of research and the engagement of actors within the sector inevitably entails potential resistance. As has been described in chapter three the history of privatisation in the water sector in developing countries has been the subject of

public controversy where attempted, primarily due to the nature of the resource, and the qualities which contribute to the characterisation as a public and merit good. Subsequently the history of attempted implementation contributes further to potential controversy, where the record of the programme demonstrates significant divergence from proposed improvements, as is the subject of this thesis. Therefore, where attempted these two factors play a role in the process of implementation, and this has certainly been the case for this research. This was most evident where the research of executors of the programme were concerned, with some resistance from state and private companies, although representation was achieved from other sponsors of the programme (including the World Bank, representative of the Ministry and Government). Data sources are further affected, with availability of data from these agencies incomplete in some respects, although through triangulation from other data sources in the sector this is overcome to some extent. Sensitivity regarding the performance of the service provider is replicated elsewhere in this context, and this is associated with the concern for broader revisions in the mode of governance. These issues impact the data production and transfer between sector agencies and subsequently affect the totality of information found in the sector, as representative of the research process wherever implemented in the developing country context.

Details regarding the particular process of research undertaken, the data sources and actors engaged, can be found in Appendix A.

Conclusion and discussion

It has been the purpose of this chapter to form a framework of research, the intended objectives of that research and a strategy by which to approach this study and exploration. Drawing together the evidence from the preceding chapters, the scope and nature of research has been defined here by reference to this evidence and the particular correlations between theory, its critique, and implementation of privatisation in the water sector in developing countries. In ontological and epistemological terms this scope of research is coherent constructivist and interpretivist research: necessary for the incorporation of local reception of policy implementation, and the subjective interpretation of those within the sector. It has been maintained there that the scope of exploration of privatisation, its performance and operation, can be studied within two broad spheres of enquiry – that relating to the contract and the terms specified therein, and that relating to the non-contracted items, and the extraeconomic factors determining outcomes here. Coherent with this scope of enquiry and providing research objectives are research questions outlined here. Beyond the over-arching motivating question regarding the divergence of performance and operation from that proposed, these questions consider: the particular aspects of theory and their contribution to this divergence; the particular aspects of the water sector in developing countries and their undermining of propositions of theory; the impact of the local social, political and institutional conditions, norms and capacities on performance and operation; and subsequently the potential impact of commitment to an

apparently flawed theoretical foundation and the manifestation in problematic implementation in the sector.

Following from the establishment of research questions, objectives, and the scope of enquiry, it has been outlined here the form and means of study consistent with these aims. This first consideration made here is the scale of exploration of those aspects of the operation and performance of privatisation, and, it has been maintained, considering the national scale of implementation typical of such programmes and the associated institutions and agencies involved in their administration, the national scale is appropriate as a scale of study. Thus, and considering the practical limitations of the present thesis in terms of space, time and resources, a case study of a particular national context host to privatisation is appropriate. Within the context of a case study, the variety of institutions and agencies active in the sector, and the range of technical and social, political and institutional aspects of performance and operation to be researched, determines that a triangulation of sources is beneficial.

The execution of research in the form of a case study, with the particular methodologies described here, and within the scope of enquiry of the research design described requires a particular national context. The various alternatives available which are consistent with the requirements of research are noted above, with the most appropriate being Ghana. Ghana provides practical ease for exploration of these issues in terms of the official language used, the country has implemented a national scale privatisation programme within service provision, and is the site of one of the most recent programmes of privatisation, thus allowing the exposure of original data and material in the field of privatisation implementation. Details regarding the particular process of research undertaken, the data sources and actors engaged, can be found in Appendix A. Consequent to the selection of methodology and context of enquiry, and the scope and objectives for research, the following chapters undertake the execution of this study: the history of privatisation in Ghana as a means of contextualising the subsequent chapters (chapter five); the technical aspects of performance and operation, primarily relating to contracted terms and conditions of operation (chapter six); the political, social and institutional factors which impinge on performance and operation (chapter seven); an analysis of the evidence and correlating findings with rationalising theoretical (chapter eight).

The value of this particular approach is realised through the utilisation of rationalising theory and the various associated critiques as an explanatory framework, with the analysis of the contract design and implementation, and its coherence or otherwise with the institutional environment, as a means of elucidating the process of dispute, renegotiation and cancellation typical of PSP in the water sector. Through this process it is possible to identify the origins of divergence in performance and operation, with particular emphasis on contract design and administration, the defining characteristic of PSP in the sector and that which underlies the broader concern for revised approaches to water service provision as expressed more generally. It is further possible through this

process, and evidence revealed, to assess the implications of the (in)coherence of theory and sector conditions for the likely future viability of the programme.

Chapter Five:

Privatisation in Ghana: background to, and form of, implementation in the water sector

This chapter reviews the history of reform in Ghana, of which PSP is a more recent incarnation as component to a broad reform agenda sponsored by IFIs, as a means of contextualising subsequent analysis. It describes the contracted and non-contracted factors, evident in existing studies, which determine the operation and performance of PSP in Ghana. It is maintained here that within these contracted and, in particular, non-contracted factors, there exist apparent connections with the weaknesses and contradictions of the rationalising theory. The connections established here substantiate a potential causality between weaknesses in rationalising theory and problematic implementation, and provide a framework for data analysis in subsequent chapters.

Having established the mode of research requisite for this endeavour, as noted in the previous chapter, this chapter considers the implementation of PSP in the case study country of Ghana. Initially undertaken here is a brief review of the history of reform programmes within Ghana, of which PSP is a more recent incarnation. The chapter subsequently considers the particular aspects of PSP in the water sector in Ghana, and highlights those that are coherent with the central premise that weaknesses and inconsistencies in the theoretical rationale for privatisation contribute to poor performance and operation. The framework established here provides a basis for the subsequent analysis of the Ghanaian case with particular exposition of the factors which contribute to the manifestation of dispute, renegotiation and cancellation which characterises the PSP programme established in the water sector more generally in the developing countries.

In establishing the scope of PSP in the Ghanaian water sector, this chapter initially provides a review of the history to reform in Ghana, and the increasing intervention through financial agreements of IFIs in policy development within the country. The subsequent section describes the form of PSP implemented in the water sector in Ghana, the contract established and the intended operation and performance following from this contract. The third section considers the particular aspects of the PSP programme and its implementation that undermine performance and operation as intended. A concluding discussion considers the potential implications those factors impacting performance and operation for the underlying theoretical rationale.

5.1 Ghana's reform era: institutional reform and progressive liberalisation

The recent history of Ghana follows a trend that is not uncommon to other developing countries, particularly those of sub-Saharan Africa, as described in chapter three. The reform era in Ghana has been characterised by two distinct

periods, initially under military appointed government and more recently under democratic government. The recent democratic era has been subject to the increasing influence of IFIs in the policy programme of the country, with liberalisation policies being pursued generally. Associated with liberalisation policies, IFIs envisage institution and governance reform which will aid the process of liberalisation. The following discussion considers initially the reform era leading up to the more recent IFI-inspired reform agenda, which follows.

History of reform in Ghana

The post-independence era in Ghana follows a course which is not untypical for developing countries particularly in sub-Saharan. Following independence from the UK in 1957, state-led development incorporating large-scale projects was aligned with an economy principally reliant on the production of primary materials for export, notably gold and cocoa. Political and economic instability became increasingly marked through the 1970s, with a military coup in 1972 and an economic crisis in 1978 triggered by global conditions including oil price increases and accelerated by Ghanaian reliance on few export products, the prices of which decreased in this period. The contribution of economic and political instability to the increasing problems in Ghana in the late 1970s and early 1980s was complemented by an increasing burden on the government budget of the extensive public services and civil services. To this point, the determination of Ghanaian government policy remained however primarily within the national sphere (Bayliss & Amenga-Etego, 2007; IMF, 2006; Yeboah, 2006).

The economic conditions present in Ghana in the early 1980s instigated the first phase of the reform period that has characterised Ghana in the near three decades since. At a governance level, the reform period has taken the course of an initial phase of administration government established by the military regime in 1983, the Provisional National Defence Council (PNDC), and a latter period of democratic government from 1992 onwards. While the explicit form of governance has thus changed over the reform period, the actors present in the former military administration phase carried over to the initial phase of democratic government and subsequently determined in part the nature of this phase: JJ Rawlings provided the leadership of both the PNDC government and the subsequent initial two terms of democratic government from 1992 to 2000 (Aryeetey, 2002; Handley, 2008).

The reform programme undertaken by the PNDC from 1983 provided the first instance of the reorientation of Ghanaian national policy toward the wishes of IFIs, an orientation which remains current in the contemporary period (Yeboah, 2006). The Economic Recovery Programme (ERP) instigated the reform of the Ghanaian economy and state structure in such a way that aligns with the typical themes associated with IFI policy programmes, incorporating reduction of the size of government, the withdrawal of state from the economy and the liberalisation of the economy, particularly oriented to global capital:

"The ERP included many of the common features of a structural adjustment programme such as the removal of price, exchange rate and interest rate controls as well as regulatory reform. It was the urgent need to obtain financial support from donors that precipitated the adoption of the ERP (Aryeetey and Fosu, 2002). With the rubber stamp of approval from the Bretton Woods Institutions, substantial amounts of aid began to flow into Ghana. Under the ERP, management of the public sector budget came under scrutiny as did the state's involvement in over 300 parastatals." (Bayliss & Amenga-Etego, 2007: 126-127)

The reform programme thus incorporated various measures to invigorate the Ghanaian economy. The reduction in the scale of the public sector budget included reduction in the scale of SOEs, and cuts in health and education budgets. SOEs were subject to restructuring, through both the divestiture of some enterprises, and the introduction of performance-based contracts for staff in other SOEs (ibid.; Amenga-Etego & Grusky, 2005). This was accompanied by financial sector reform in 1987 with the liberalisation of import and foreign exchange markets (Yeboah, 2006; Guder, 2008). The operation of the public and civil services were furthermore the object of attempted reform, with corruption being seen as inhibitive of economic development in Ghana (Aryeetey, 2002).

Despite such reform attempts, the underlying structure of the Ghanaian economy remained, as in the previous post-independence period, reliant on export of primary materials. Furthermore, despite the apparent reorientation of policy towards a neo-liberal agenda dictated by the World Bank and IMF, the political commitment to such a reorientation may be questioned. As Yeboah (2006) maintains, the PNDC government under Rawlings had little option, considering the economic situation in Ghana, but to accept aid and associated conditions from IFIs, "despite Rawlings' initial political orientation towards socialism" (ibid.: 52). The reform program was thus increasingly at odds with the governmental leadership and authoritarian methods of governance:

"With the increased level of economic activity and associated economic independence for various agents, the sense of empowerment that evolved was one that appeared incompatible with the authoritarian political structures. In a sense, economic liberalization and diversification were perceived to be increasingly incompatible with autocratic rule." (Aryeetey, 2002: 5)

The consequent pressure for political reform to accompany the loans and associated economic reforms toward the latter years of the period of the PNDC administration, together with external events including the collapse of the Soviet Union, instigated the inception of the democratic period of government from 1992 (ibid.).

The second period of reform, under democratic government has taken a path of increasing liberalisation of the economy, with associated institutional reforms, with these developments having been influenced significantly by the conditionality of loans made available to Ghana by IFIs. While Ghana has become

increasingly committed, through various reform programmes, to neo-liberal ideals promoted by IFIs, the nature of governance has retained elements of previous structures – with authoritarian practices, corruption and political patronage remaining a constant adjunct to whichever liberalising policies may be introduced through reform programmes. The degree to which these governance tendencies are evident has, it is argued by some (for example Handley, 2008), reduced over the latter democratic government under Kufour, from 2000 onwards. What has been constant, however, through each formulation of democratic government – both the Rawlings (1992-2000) and Kufour governments – is that there has been general consensus on the direction of the reform agenda. The commitment to the various reform programmes associated with IFI aid has thus been constant – attributable to the levels of debt accrued by Ghana.

While the democratic reform period has seen a level of stability in government commitment to a particular reform path, increased liberalisation has failed to structurally revise the Ghanaian economy has resulted in what has been termed an economy with a "missing middle": a service sector exists alongside primary commodity production and agriculture, with a lack of a middle stratum of manufacturers and industrialists (Handley, 2008; Guder, 2008). Such an economic structure can be seen to be consequential of the approach of government, particularly that of the Rawlings era, towards business. The Rawlings era, both autocratic and democratic, has been described as using "an array of non-democratic and authoritarian political practices in combination with neo-corporatist arrangements to gird its rule" (Gyimah-Boadi cited in Amenga-Etego & Grusky, 2005: 276). The approach of the Rawlings government to business had been typically neo-patrimonial, and with a general regard for liberal business as a 'political enemy' (Handley, 2008). Where economic liberalisation was implemented, rather than remove control from the state as its intended consequence, in the case of Ghana divestitures typically benefited an elite affiliated with the government (ibid.). The reform programme did not therefore align with the neo-liberal ideals of the international sponsors:

"The result was a state-driven reform program, dominated by rent-seeking and patronage despite the efforts of business to shape policy. Some fifteen years after the start of the economic reform program, far from the state's involvement in the economy decreasing, almost the reverse had occurred. [...] Throughout the decade, far from the state being reformed in a neoliberal direction, the economic reform program confirmed the neopatrimonial nature of the Ghanaian state." (Handley, 2008: 199&200)

Where the neo-liberal ideals are evident are those areas of the economy that have been subject to the conditionality associated with IFI aid. In particular, former SOEs have been subject to conditional divestiture, particularly services including telecoms, energy and water. Loan conditionality instigated policy revision so that by the mid-1990s 'consultation' had begun to determine the nature of water service provision in Ghana, and more specifically the form of PSP contract to be established (Fuest et al, 2005).

The activities of the Ghanaian state and private sector remain subject to the greater influence of IFI policy programmes by virtue of the financial power of the latter (Handley, 2008). The influence of IFIs can be seen especially from the mid-1990s, with loan conditionality being associated not only with this restructuring of the economy, but furthermore the restructuring of the institutional environment in Ghana - including the legal framework, forms of regulation, parliamentary activity and broader activity of civil society - and subsequently modes of governance existent. The institutional reforms made conditional through loans to Ghana have as their central concern the establishment of an 'enabling' environment: the role of government and associated institutions being primarily the enabling of the private sector to operate with as little hindrance as practical. Incorporated within such a programme is the establishment of institutions which ensure predictable and stable conditions for private operation, with the minimisation of potential political intervention. Consequently, IMF and World Bank documents show the prioritisation of decentralisation of control to local authorities and the establishment of (superficially) independent agencies such as the Public Utilities Regulatory Commission (PURC) (IMF, 2000, 2003 & 2006; World Bank, 2004a&b). However, despite the attempted institutional reform through loan conditionality, the degree of control exercised by central government remains high, with nepotism, patronage and corruption typical (Aryeetey, 2002; ODI, 2007). Parallel to this attempted reform and resistance in central government, the broader processes of democratic society are evident in press freedom and increased activity of civil society (Aryeetey, 2002; DFID, 2003).

The role and influence of IFIs in Ghana through the latter reform period

Through the liberalising reform period, IFIs have had an increasing influence on the nature and formation of institutions and governance in Ghana. This influence takes the form of various attempts to alter the nature of public institutions, from technical assistance to specific agencies to more comprehensive modifications of the conception of governance and the role of the state. Specific policies have been pursued which seek to streamline the operations of agencies within the public sector or civil service, both through retrenchment and technical and managerial assistance for the more efficient operation of these agencies. More recently, IFIs have sought to further such influence, extending policies to cover more comprehensive attempts to change the culture of governance within Ghana, recognition of continued impact of nepotism, patronage and corruption. The nature of influence has progressed from individual programmes to the conditional implementation of comprehensive programmes associated with the Heavily Indebted Poor Country (HIPC) status Ghana attained in 2000 (DFID, 2003; IMF, 2006).

Initial attempts at institutional revision came within the National Institutional Renewal Programme (NIRP) begun in 1994, which focused on the better and more efficient operation of public institutions and the civil service. Alongside the general retrenchment of workforces in these areas, the NIRP encompassed the Public Sector Management Reform Programme, the Public Finance Management Reform Programme and the Civil Service Performance

Improvement Programme (Fuest et al, 2005). Corresponding to these various measures for the reform of the operation of the public administration, further programmes have subsequently been implemented to improve the capacity of the public institutions and separate their operations from the interests of the central government in Ghana. As the IMF (2003) recognised, the previous implementations alone do not provide significant momentum in the reform of the public administration, with continued: "lack of sustained political commitment to the reforms and to the institutions responsible for carrying out the reforms; lack of strong leadership in the public service; failure to enforce rules, regulations and instructions [...]; dysfunctional relationship between political and public service decision makers; [and an] apparent lack of institutional ownership of reforms" (IMF, 2003: 120).

This appraisal of the Ghanaian public service by the IFIs provides a rationale for the revision of their approach to reform, and the more comprehensive, and the implementation of a more comprehensive and coercive programme. This revised programme focuses on the capacity of the central government to exercise power throughout the public administration, and furthermore accountability of those within the administration (IMF, 2003 & 2006; DFID, 2003; ODI, 2007). The central concerns of the revised approach of IFIs are therefore the independence of institutions of public administration, the reduced influence of nepotism, patronage and corruption, the improved mechanisms of accountability and transparency, and the improved political commitment to the reform agenda proposed by IFIs. The programme thus comprises a shift to a comprehensive programme of attempted modification of governance within Ghana:

"Ghana must redefine the role of the state as the policy manager for development and the economy, enforcer of law, rules and regulations and a provider of public utilities and services. Public sector reform involving the right-sizing of the public service, restoring competitive conditions of service and SOE reform is a sine qua non for provision of an enabling environment for private sector development and the effective provision of public services." (IMF, 2003: 40-41)

The IMF here hints at the scope of the revised reform programme which they wish to be implemented. A revised mode of governance encompasses not only the performance of public administrative bodies and their separation from the political leadership of the country, but it further describes the relationship of the broader population with the institutions of the state. The integration into the programme proposed by the IMF of civil society demonstrates a recognition of the importance of the coherence of a reform programme with its broader environment. The intended increase in the role of civil society and the public more generally in the reform programme is rationalised on the desire of the IMF for the reduction in the degree of control exercised by central government. Increasing activity of civil society firstly provides a mechanism by which accountability of state institutions, and their performance in stated goals of reform, may be improved. The integration of civil society and the broader public in the reform programme furthermore, the IMF rationalises, will provide a

mechanism by which national 'ownership' of the programme will increase – thus improving the consensus for reform (IMF, 2000, 2003 & 2006).

The implementation of the revised programme of reform which the IMF envisages is aided by the accession of Ghana to HIPC status and the transferral of aid support to one central fund. This process provides IFIs with a greater degree of influence over the domestic policy of Ghana. This is true firstly through the tying of HIPC aid to the MDGs adopted by the UN, thus transforming them into a "mandatory framework of domestic economic policy in return for the grant of debt relief" (IMF, 2006: iv). Secondly, the move, in 2003, by the main aid donors to Ghana to pool resources into a fund under the moniker Multi-Donor Budget Support (MDBS) programme, provides increased control of Ghana's performance with regards the Growth and Poverty Reduction Strategy (GPRS) (ODI, 2007). The GPRS covers the broad reform programme that the IMF intends to be implemented, and from which the above citations regarding governance are taken. Where progress towards the goals of the GPRS is sufficient, funds from the MDBS are released. Funds were partially withheld for the first time in 2006 (ibid.).

The policies of the IMF and related donor agencies would appear here to be at least partly contradictory. At one level the strategy of the reform programme is to increase the integration of the broader population in the programme, with a corresponding reduction in central government control, in the interests of improving the performance of the programme and providing a degree of national 'ownership' of the programme. At the same time however, the primary concern of the MDBS strategy is to ensure the compliance of the Ghanaian government with the GPRS programme. The balance, and contrast, between national 'ownership' and compliance with externally derived reform programme cannot be assumed:

"The MDBS encouraged the creation of the new Ministry and its PAF [Performance Assessment Framework] provisions were helpful in translating general objectives into specific actions. Beyond this, donors have been careful to avoid attempting to exert undue influence. This has created a dilemma because the Government is reluctant to grasp the nettle of the overall size of the public service. Because of concerns over policy ownership, it has not been possible to address this issue through MDBS, and illustration of its limitations." (ODI, 2007: 2)

The attempt to influence the broader mode of governance in Ghana, in particular by the incorporation of civil society and the broader population as a means of curbing the actions of the Government, is necessarily restricted by the potential appearance, to these very bodies, of excessive IFI influence. This describes the general condition of the IFI approach to reform in Ghana, of which divestiture and PSP are an integral part.

The broader reform programme, as part of what may be considered the 'post-Washington consensus' (section 3.1), thus indicates a recognition of systems of governance that determine the institutional environment within

which privatisation is implemented. However, as is noted in chapter three, the post-Washington consensus remains inherently limited as a programme of reform, with a focus on the imposition of externally derived conceptions of governance within host countries. Two consequences follow: the reform programme contains little or no specificity for the particular country where implemented; and, there is potential resistance to the programme within the host country, due to the lack of self-determination of policy agenda. As is noted above in the case of Ghana, the reform programme applies a generic conception of the state as enabler of the private sector, with associated component features (as is common to the post-Washington consensus). As a consequence of this, it further entails a reaction of either resistance to implementation or lack of commitment ('ownership'), inhibiting the operation of the programme.

5.2 PSP in Ghana: contracted and non-contracted factors, and potential connections with underlying theory

The reform agenda is thus established, together with the economic and political environment in which privatisation is located. Within this context, the following section reviews the particular form of privatisation in Ghana, the contract and terms, and the various factors establishing the framework for the programme.

Privatisation in Ghana: contract development

The introduction of PSP in the water sector in Ghana follows a period of attempted reform in the sector through restructuring of the public provider. The Ghana Water and Sewerage Corporation (GWSC), originally established in 1965, was responsible for the provision of water supply and sewerage services in Ghana, in both rural and urban locations. The performance of GWSC prior to reforms had "deteriorated rapidly during the economic crisis of the late 1970s and early 1980s when Government's ability to adequately operate and maintain essential services was severely constrained" (World Bank, 1998: 1).

"While GWSC performed reasonably well in terms of engineering and technical effectiveness, revenue management was not so successful. The company made persistent losses and accumulated large debts over the years despite several attempts at reform. GWSC suffered from numerous institutional deficiencies including weak billing systems, poor state of infrastructure and overstaffing." (Bayliss & Amenga-Etego, 2007: 138)

Considering the performance of GWSC in operating water services, together with the economic environment in which the public operator was situated, reforms of service provision were encompassed within the aid packages made available through IFIs. Through the early reform period under the PNDC government, restructuring was attempted through the commercialisation of GWSC operations. Government subsidies were restricted and improvements in cost recovery were implemented to reduce reliance of the supplier on government debt. Such restructuring in the early reform period had little effect on the performance (Bayliss & Amenga-Etego, 2007).

Subsequent reforms in the early period of democratic government further restructured the GWSC, and provided a basis for the subsequent proposed transferral to the private sector. Firstly there was retrenchment of staff in the GWSC. Secondly, there was a division of responsibility for urban and rural services. In rural areas the Community Water and Sanitation Agency (CWSA) assumed responsibility for both water supply and sanitation, with responsibility for management and operation decentralised to District Authorities. In urban areas, water supply responsibilities were transferred to the Ghana Water Company Limited (GWCL), with sanitation responsibilities deferring to the public authorities (Aryeetey & Ahene, 2005; Fuest & Haffner, 2007). Despite these, and previous, attempts at reform of the water sector, the persistent condition of GWSC and performance in operating water services in Ghana provided the World Bank with sufficient grounds to press for the introduction of private operators in service provision:

"Over the period 1973 to 1998, the IDA invested US\$152.4 million to improve Ghana's urban water supply infrastructure. The results over 25 years of public sector management have been disappointing, and the urban water sector remains in a poor condition with the trend in service and sustainability currently worsening. Thus, the continuing with a public sector only regime for a new project was not recommended by IDA, nor was it chosen by the Government of Ghana." (World Bank, 2004b: 7)

Indeed, the latter forms of restructuring of GWSC were an obvious precursor, under the influence of IFIs, to the proposed involvement of the private sector (Aryeetey & Ahene, 2005; Fuest & Haffner, 2007). The division of rural and urban provided the basis for commercial operation in the latter, with the former typically not being profitable for a private operator. The same motivation is true for the division of water supply and sanitation in the urban GWCL, with cost recovery typically being more difficult to establish for sanitation. Retrenchment of staff in public utilities prior to privatisation has typically been used as a mechanism for improving the appeal of the enterprise to private investors (Amenga-Etego & Grusky, 2005).

The latter restructuring of the Ghanaian water supply sector demonstrates the influence of IFIs in the policy development process within the Ghanaian national sphere. Such influence was formalised institutionally in the establishment of the Water Sector Restructuring Secretariat (WSRS), which had support from both the World Bank and DFID (Fuest et al, 2005). This influence of foreign donors and associated agencies was further evident in the policy development process:

"Improvement of the urban water sector by means of a lease contract had been envisaged since 1994. In 1994/95 foreign consultants had been commissioned by the World Bank to deliberate on several combinations of PPP contract options (Halcrow & Partners, 1995). After "stakeholder consultations" a "consensus" was reached in 1995 to adopt the lease option (MWH, 1999). A review of the organisational framework of GWSC aimed to

strengthen management at the top level and the regional level, thereby giving more autonomy to the regions. Two lease packages, designed to promote competition in urban water supply, were opened for bids in 1999. The conversion of the GWSC, including a programme of staff rationalisation, was expected to be completed in 2000 (IMF, 1999)." (Fuest & Haffner, 2007: 176)

The nature of policy development and implementation is thus subject to a significant degree of influence by those donor agencies that sponsor the WSRS. This influence is furthered by the consultants engaged to develop the PSP contract, which, according to Whitfield (2006), have a record of pro-privatisation policy development in alliance with the World Bank:

"... the 1995 workshop to consider the Halcrow Report did not represent public participation (contrary to claims by the Secretariat [WSRS]), because it included a selected group of 'stakeholders'. The findings of the study were not reported publicly, precluding public discussion on restructuring options. Second, the consultancy studies that formed an integral part of the restructuring process and the selection of the lease arrangement were commissioned and funded by the World Bank, Japan and the UK. The six consultancy firms employed are foreign and known to be favourable to privatisation, with some possessing a history of working with the transnational water corporations or for the World Bank on privatisation projects." (Whitfield, 2006: 435)

The degree of participation in the policy development process was thus restricted, with incorporation of both the domestic Ghanaian water sector agents and the public and civil society more generally apparently excluded from the process.

The result of the policy development process described here was the initial preference for a lease contract to be split geographically across the country. The original contract, for 20 years in each region, was further designed to shift responsibility for investment for rehabilitation and renewal to the private operator. This division of responsibility for investment entailed the more costly undertaking of the expansion of the network remained with the Ghanaian authorities. Considering the minimal risk transfer, and when considering the urban/rural and water/sanitation separations, there is evidence on multiple counts that shows the restructuring of water services in Ghana in such a way that improves their potential commercial profitability. The appeal to investors was thus improved, yet the potential operators of such contracts were restricted.

The lease contract initially proposed attracted three bidders: Azurix (an Enron subsidiary), Suez and Vivendi. Azurix was selected by the Government of Ghana, however, the history of corruption and patronage of the Rawlings regime was evident once more in the process of selection suspicions of corruption noted in media at the time (Amenga-Etego & Grusky, 2005). Following this collapse of the first attempt at the privatisation of the process of devising PSP was restarted.

However, in parallel to the development of the PSP contract and the tendering process, two processes determined a decreasing possibility of a successful tender being found. The global performance of water sector PSP contracts had typically been poor with many disputes, renegotiations and cancellations, prompting a lack of interest in contracts, or alternatively, the interest only in contracts where risk was reduced significantly. Furthermore, in Ghana, as elsewhere where PSP had been attempted in the water sector, public opposition to the process was significant and increasing (Amenga-Etego & Grusky, 2005).

Considering the conditions in the global private water sector, the desire of private firms for reduced risk exposure, and the substantial opposition to the PSP process, the form of PSP contract in Ghana was altered in 2003 in an attempt to engage the private sector in water service provision in the country. The form of the contract was altered to a five year management contract, with responsibility for all investment – including rehabilitation, renewal and expansion – remaining with Ghanaian authorities (Fuest & Haffner, 2007; Eguavoen & Spalthoff, 2008). The alteration of the form of contract reflects the revised expectations of the private sector with regard water sector divestiture contracts. The level of risk transferred to the private operator under the new management contract is minimal, with the management fee guaranteed for the first four years of the contract, with the fifth year being 75 per cent guaranteed – the remaining 25 per cent coming from increased revenues proposed to result from private operation (World Bank, 2004b).

The contract design has thus been subject to significant criticism within Ghana (e.g. NCAP, 2002). The primary concerns (in addition to those relating to the policy development process) relate to the marginalisation of the urban poor (neither the lease or management contract made special consideration for expansion of the network – the desire for the commercial viability of the contract determined that existent networks in urban areas were the subject of the contract), the minimal risk transfer, the separation of water from sanitation, and the loss of potential cross-subsidy between urban and rural (Fuest & Haffner, 2007; Eguavoen & Spalthoff, 2008).

Following the protracted and controversial development of the PSP programme in Ghana, a management contract was finalised and commenced in 2006. The trend for decreased investor interest in engagement in the sector is demonstrated with the absence of traditional private investors in Ghana. Whereas early PSP programmes globally were dominated by a limited number of multinational water companies – including those evident in tendering for the initial lease contract – the management contract has been established with nontraditional investors, with Vitens of the Netherlands and Rand Water of South Africa operating in Ghana under the moniker Aqua Vitens Rand Limited (AVRL) (ibid.). Each partner company comprising the private sector operator in Ghana is publicly owned within their country of origin: Vitens being owned by public municipal shareholders in Holland (Vitens, 2010), and Rand Water being wholly owned by the South African Government (Rand Water, 2009). However, it remains the case, as will be demonstrated below and in subsequent chapters that in the context of the Ghanaian water sector the operator is a private company

and the contract established is coherent with such. It will, furthermore, be demonstrated that the PSP programme in Ghana indicates the broad basis of diverging performance and operation from that proposed, and that the framework of contract design and administration, and political and institutional environment provide the determining dynamics of PSP.

Formulation of privatisation: realisation of intended objectives

The introduction of privatisation in this form in Ghana therefore seeks to realise the purported benefits of the operation of the private sector with a particular emphasis on the management of the service provider. The central explicit concern of the underlying theory, that of the improved efficiency of the privatised enterprise and the consequent increase in total utility, is to be realised in this instance through the improved management of the service provider, and in particular the contribution this is intended to make to the commercial viability and sustainability of operation. As noted above, frequent reference is made by analysts and sponsors of reform in the sector of the failure to operate on a commercial, sustainable footing, with significant unaccounted for water and billing and collection issues being typical of this. Subsequent to the failure to attract private sector investment in the lease form of contract and the more substantial associated risk, the chosen option for pro-privatisation sponsors is the management contract, which tackles the operation of the provider with the interest being long term sustainability. Through the improved efficiency of operation of the service provider, including reduced unaccounted for water etc., through efficient and commercial, sustainable operation, in turn the service gains in appeal to private investment in the future. The programme thus has the potential to provide a basis for the satisfaction of the other need of the sector in this context, through investment from the private sector in the long term (subsequent to the completion of this contract).

The formulation of privatisation policy in this instance implements the intended objectives through various means. It is intended that improved operation of the service provider, its improved sustainability through efficiency offered by the private sector, is to be realised through the formulation of the programme in line with the basic concepts and theoretical framework as described in earlier chapters. The first factor of such a programme here aligned to the underlying principles is the reduced role of the public sector, with the management of the service provider being transferred, thus restricting the capacity of the purportedly inefficient public sector to continue unsustainable operation. The assumption here, of course, and as identified in chapter two, is that the privatisation contract delimits such intervention of political agencies. The capacity to delimit inherent political interest in the sector is however subject to the specification, nature and extent of the contract and associated administration framework, which is subject to scrutiny in subsequent chapters.

The realisation of efficiency is further brought about by the establishment of property rights, with associated incentives and the internalisation of externalities. In this formulation of privatisation, this is brought about through the contracted performance and operation of the company, the specification of its activity and incentive structures. With the absence of competitive market structures, the regulatory agency acts to monitor and determine performance, in the implementation of surrogate competition. An additional monitoring agency is provided within the framework of this management contract, with auditing agencies established (World Bank, 2004b; GWCL, 2005). It is assumed here, and this is in line with the assessment of implementation of privatisation in this context noted in chapter two, that the contract is sufficiently specified for the establishment of property rights, and subsequently the transfer of interest from the principal to the agent. Similarly, it is assumed that the institutional and administrative environment within which the contract operates, here including for example the regulator, has sufficient capacity to function as intended and ensure the operation of the private sector in an efficient manner as contracted. The formulation of privatisation in this instance relies on these factors for the implementation of property rights and the application of incentive structures for the private sector to ensure the interests of the principal, the state company, are realised (World Bank, 2004b; GWCL, 2005).

Contracted issues determining operation and performance

The contract developed for the introduction of the private sector as operator of water services in Ghana thus took the form of a much more limited degree of privatisation than originally intended, with limited risk exposure for the operator. The underlying rationale for the introduction of the private sector, and the proposed efficiency of operation following from this, is formalised in the Ghanaian case as a contract that offers incentive to the operator for profit through efficient operation and reduced cost under a fixed management fee. The focus of the contract is therefore the improved operation of the services within the remit of the present service provider. Most significantly, these include the reduction of non-revenue water, improved collection rates, and reduced chemical and power consumption. While the contract relies on these aspects for the improved efficiency of the operator under a fixed management fee, it further allows for the private operator to engage in repair and maintenance of the network utilising revenue funds, which the operator manages. These aspects, together with requirement for data reporting and the establishment of data baselines, cover the contracted requirements of the operator (GWCL, 2005).

Whereas previously urban areas in Ghana were divided into two zones for competing operators, the contract implemented specifies one operator for all urban areas in Ghana. This single operator is responsible for the provision of water in areas serviced by 80 systems, spread across various regions in Ghana. The majority of provision occurs, however, in two areas in the capital city Accra and its neighbouring city Tema. These two urban regions compose 57 per cent of capacity of urban water service provision in the country (GoG, 2004a). The majority of the remaining systems are proportionally significantly smaller than these city water systems, with potential implications for focussing on larger and potentially more profitable systems at their cost. As noted above, responsibility for service provision lies with the Community Water and Sanitation Agency (CWSA). Expansion of service provision of the formal piped network, under the management of the private operator, remains with the public authorities. The

private operator is however responsible for the provision of 'suggested investment programmes', 'suggested capital investment reports' and market surveys, each proposing the most suitable mode of expansion given the operators knowledge and experience (GoG, 2004a; GWCL, 2005). The provision of this information comprises one aspect of the required data reporting for the private operator.

As the operator, the private company has a contract with the state holding company, as grantor of the contract. Thus, GWCL, as the state service provider, remains existent, responsible for investment for expansion of services, for provision of management funds to the operator, and as asset holder (GWCL, 2005). The structures of GWCL thus remain in place, although the vast majority of staff are seconded to the operator for the purposes of service provision, with the private company employing their own management staff. Through the period of the contract the private company are, firstly, required to establish a training programme for the seconded staff, and secondly, may suggest revision to the staffing structures of the company. The latter possibility remains however subject to the approval of the grantor (ibid.).

While the operator has day-to-day management of service provision, there exists no formal relationship with the regulator, PURC. Regulatory functions are executed by PURC subject to their relationship with the grantor GWCL. Data transfer therefore exists between the operator and grantor, and between the grantor and regulator. The operator remains however subject to the various laws and regulations established by PURC, including customer service standards, water quality and so on. One aspect of this regulation is the PURC Regulatory Social Policy, which requires the operator to consider best means of provision for low-income households within their suggested investment reports (GWCL, 2005; PURC, 2005c; GoG, 2004a). Operation of regulation is thus subject to the requisite transfer between parties.

While the contract between grantor and operator is conceptualised as one of a management form, there exists one particular aspect that means the form in fact diverges from the management contract in a strict sense. In the case of Ghana, the operator remains responsible for the investment and procurement necessary for the repair, replacement and rehabilitation of infrastructure to the degree required for the continued operation of service provision (GoG, 2004a; GWCL, 2005). Financing for this required investment is provided within the World Bank Urban Water Project (2004b) of which the PSP programme is part (the 'repair, replacement and rehabilitation' (RRR) fund). The operator is subject to World Bank procurement procedures for the acquisition of funds for repair, replacement and rehabilitation. Corollary to this, the operator is in control of revenue accounts, which are contracted to finance operation of the service provider to the extent of staff funding, administrative costs, power and chemical costs together with 'reasonable and prudent maintenance costs' (GWCL, 2005). The intention is that the performance of the operator is not inhibited by potential delay by national agencies which would otherwise be responsible for the maintenance of infrastructure in a condition required for continued service provision.

Non-contracted, political, social and cultural factors determining operation and performance

Alongside those aspects determining performance and operation of the private provider deriving from the terms and structure of the contract, there are various others which deriving from pre-existing conditions evident in the country prior to contract implementation. This includes the relationship between the grantor and operator, the existing institutional and organisational culture and environment, the persistence of political interference and management of public and civil services, the pre-existing conceptions of water as a resource, and the conceptions of privatisation both in general and in relation to the particular sector. These various aspects each provide potential to impact on the operation and performance of the privatisation programme, with potential divergence from that intended.

Due to the nature of the structuring of the contract in Ghana, the private operator works alongside its state counterpart with each having ongoing responsibilities. The nature of this relationship may be influenced by various forces, and two in particular. The first has been noted in the preceding section, regarding the nature of the contract and potential ambiguities therein. Secondly, parallel operation determines divided responsibilities for various aspects of the sector, each with different impact on performance and operation. The outcomes of service provision, and improvements or failures therein, are thus equally divisible between state and private companies. Such a structure provides the basis for potential dispute between parties where contracts are incomplete or where provision for the successful execution of responsibilities diverges.

The structuring of the contract further entails, as noted above, that the private company operates with a primarily national staff seconded form the state holding company. The degree to which the private operator may determine their organisational structuring is thus limited, with the state holding company inherently retaining a significant degree of control over the seconded staff. Furthermore, where the private company operates in an environment in which its management or organisational methods are alien, comprehension and coherence may be limited. The import of existing institutional and organisational cultures plays out not only in the sphere of the company itself, where seconded staff encounter private management, but also where private firms operate in cooperation with public and civil services, as with the grantor-operator relationship.

Further determining factors may be identified in the broader institutional environment within with the private company operates. As previously described, the nature of governance in Ghana has typically been characterised by strong central control, with power exercised through political patronage, corruption or more recently a neo-patrimonial structuring contrary to the propositions of those donor agencies interested in the shift to a state as enabler for the private sector. The manifestation of the concern of the sponsor agencies for revised governance entails therefore the requirement for coherence with

existing institutional bodies and modes of operation. It further requires the requisite and coherent institutional capacity and structure within the sector as a basis for the successful implementation of the programme with respect to this area of concern.

Conclusion and discussion

The preceding discussion provides an evaluation of the establishment of privatisation in the water sector in Ghana, together with the particular form of the privatisation and subsequently the potential factors which may inhibit performance and operation as proposed within the underlying rationale for the programme. Privatisation is the most recent component to a history of reform in the water sector following the onset of conditions of low levels of investment and degradation of services from the 1970s onwards. The long history of reforms in the sector is furthered by the protracted development of the private contract from its initial lease form in 1998 to eventual finalisation as a management contract in 2005. It is maintained here that this development and the subsequent form of contract, together with pre-existing political, social and institutional conditions in Ghana, provide various factors which may inhibit the performance and operation of privatisation as envisaged in the underlying theoretical rationale for the programme.

The factors cited here furthermore provide a framework by which the data gathered in Ghana may be assessed. The assessment of contracted and noncontracted factors allows for the consideration of data which primarily to the technical aspects of performance and operation of the private sector, that specified under contractual terms, as distinct from those aspects best characterised as political, social and institutional. Within each category, it has been demonstrated there exist various factors that impact on performance and operation, which subsequently may substantiate those critiques of the underlying rationale for privatisation. Such substantiation provides further basis for the questioning of the validity of this rationalising theory as a basis for social policy in this sector.

Within each sphere, contracted/technical and non-contracted/political, social and institutional, there exist factors which may substantiate established critique of the underlying rationale for privatisation. Assumptions regarding contract completion and perfect information as component to the abstract economic model central to the rationalising theory may be undermined. Alternatively, the grantor-operator relationship necessary to the smooth operation of the programme especially where ambiguities or deficiencies in the contract exist, may be defined by contrary responsibilities and capacity. Such factors, as intrinsically extra-economic in nature, are not considered within the framework of rationalising theory. Similarly, pre-existing cultures of political management and intervention that may impact on the performance and operation of the contract, inherently deviate from the assumptions perfect market conditions assumed within the underlying theoretical model. These examples provide a depiction of the potential connections to be made between

underlying rationale, the weaknesses and inconsistencies therein, and the performance and operation of privatisation where implemented.

Chapter Six:

Technical issues contributing to the divergence in performance of the private operator from that envisaged by the rationalising theory

The preceding chapter outlines the history of reform and privatisation in Ghana, together with the potential factors in the PSP programme in the country which contribute its operation diverging from that envisaged. These factors may be of a political, social or institutional nature, or deriving from technical issues that undermine performance and operation. It is the purpose of this chapter to consider the latter. The performance of the private company, reviewed initially here, demonstrates that while not extreme in the divergence from that proposed (when considered in relation to other cases reviewed in chapter three), there remains considerable disparity. It is further the case that the nature of implementation, in terms of the instance of dispute and renegotiation, is consistent with the causes of more extreme divergence elsewhere. In the case of Ghana, the PSP programme takes the form of a management contract, with the focus being the improved sustainability of the service provider through this management, subsequently benefiting consumers and increasing the likelihood of consequent investment. The focus on the sustainability of the provider determines that improvements in factors such as non-revenue water, revenue collection to billing ratio, reduced chemical and power consumption are central to the contract. To achieve such intentions, it is necessary to incorporate targets regarding these factors into the contracted terms of the grantor-operator relationship. As will be described in this chapter, while the contract contains references to these measures of performance, the degree of ambiguity is significant, with various essential aspects being absent. This is most notable where baseline data, from which to measure performance, has been contracted to be established after the commencement of the contract. Further technical issues contributing to the deviation of operation of PSP from that envisaged includes the attempt to establish a degree of independence for the private company, to operate without undue intervention and delay due to the grantor. Evidence demonstrates this has in fact allowed the company the opportunity to operate in an inefficient manner, to the detriment of the grantor and consumers. Further assumptions concerning the capacity of institutions to administrate the contract, and poor data transfer and reporting, contribute to the PSP programme diverging from the operation envisaged. The exposition of these various aspects of PSP in the Ghanaian water sector permits the assessment of performance and operation by reference to derivation from rationalising theory, and furthermore the contribution thereof to the dispute and renegotiation process as manifest in Ghana.

This chapter will be structured by analysis of these various technical factors which contribute to this trend. An initial section considers the performance of the private company, both in relation to contracted targets, and to the prior performance of the service provider under the guise of the state company. Subsequent sections consider technical factors affecting operation. The decision in the contract to establish baseline data, from which performance

is to be measures and penalties applied, after the commencement of the contract is the focus of the second section. Following this, the financial independence of the private company is considered, with control over revenue accounts providing a threat to the sustainability of the grantor. The fourth section looks at the capacity of the sector institutions to administer the PSP contract, in terms of their technical, financial and human resources. Subsequently, a consideration of the data transfer and reporting is made. At each stage, the connections with the critical appraisal of the underlying theoretical rationale for privatisation are noted, providing a basis for more extensive analysis in subsequent chapters.

6.1 Performance of the private company relative to the previous state company, and to contracted terms

Gauging the technical performance of the private operator of water services in Ghana is possible by two methods: by comparison with targets established in the contract between the private company and the state holding company; or by comparison with the performance of the state company prior to the introduction of the private sector. This section considers each of these potential means for determining performance of the private company. Within each of these potential means however, exist various obstacles to the absolute determination of performance, and subsequently the evaluation of the privatisation with regards these technical factors remains limited.

Following from the underlying rationale for privatisation, the programme established in Ghana focuses on the improved sustainability of the service provider through the improved efficiency of operation proposed to be inherent to the private sector. As such, the contract between private operator and state holding company highlights various aspects of service provision which provide a means by which to incentivise the operator to improve efficiency. Included here are the reduction of non-revenue water (NRW) (which itself incorporates reduced leakages and illegal connections, and improved metering and billing), the reduction of energy and chemical consumption in production, and the reduction in water consumption by public institutions (GWCL, 2005). The contract furthermore includes some financial penalties and incentives for the additional motivation of the private operator to achieve these intended improvements in operation, beyond that already inherent to the management fee (deriving from efficiencies and potential profit within this fee) (ibid.). While the contract incorporates these various aspects intended for the evaluation of performance, and subsequent payment or penalty to the operator, the design of the contract in fact undermines the potential of any of the factors to be evaluated to any sufficient degree.

The measurement of performance of the private company against intended improvements in operation is problematical due to the lack of specific targets within the contract. It is typical that the specific rate of intended improvements in operation under the private sector are absent in the contract, with the actual rates of improvement to be established ex-post by agreement between the contract parties. This is typically within three, six or twelve months

from the commencement of the contract, and covers such factors as NRW (and its component features), metering, public sector consumption, energy and chemical consumption, together with the financial penalties and incentives for the achievement of these targets (GWCL, 2005). For example, with regard to NRW, including penalty reductions for this factor:

"Schedule 4: Service Standards [...]

C. REDUCTION IN NON-REVENUE WATER

(a) Within twelve (12) months of the Commencement Date, the Operator shall submit to the Grantor for discussion and approval a plan for the systematic measurement and reduction of non-revenue water in the Service Area." (GWCL, 2005: 38)

Or, with regard the metering of treatment plant operations:

"Schedule 4: Service Standards [...]

D. TREATMENT PLANT OPERATIONS.

(a) Within sixty (60) days from the Commencement Date, the Operator will provide the Grantor with the specifications for meters and the required location thereof. Installation of new meters, rehabilitation of old meters and connections shall be payable from the Project Funds." (GWCL, 2005: 38)

Or, with regard to the incentive compensation for improved efficiency in energy and chemical consumption, and reduced public sector water consumption:

"Schedule 5: Payments to the Operator [...]

B. INCENTIVE COMPENSATION [...]

B2. Chemical usage

- (a) Within twelve (12) months from the Commencement Date, the Operator shall present a plan to the Grantor for the optimization of chemical usage while maintaining Treated Water quality standards as well as a proposal for incentive compensation for such reduction.
- (b) The Parties shall discuss and reasonably agree on such plan and corresponding incentive compensation.

B.3 Power consumption

- (a) Within twelve (12) months from the Commencement Date, the Operator shall present a plan to the Grantor for the reduction of power consumption as well as a proposal for incentive compensation for such reduction.
- (b) The Parties shall discuss and reasonably agree on such plan and corresponding incentive compensation.
- B4. Public sector water consumption
- (a) Within six (6) months from the Commencement Date the Operator shall present a plan to the Grantor for the reduction of water consumption by the public sector entities within such System by at least three (3) per cent over a baseline annual consumption to be established by the Operator pursuant to Section 3.6.1 of the Management Contract, as well as a proposal for incentive compensation for such reduction." (GWCL, 2005: 40-41)

It is obvious from the above instances that the contract and subsequent determination of performance of the operator is dependent on the ex-post establishment of baseline data demonstrating the technical performance of the service provider at the commencement of the contract. Indeed, the conditions of the service provider, facilities and infrastructure prior to the commencement of the contract were such that the incoming private operator was contracted to review the existing facilities within six months of the start of the contract:

"3. OPERATOR'S AND SUCCESSFUL BIDDER'S RIGHTS AND OBLIGATIONS [...]

3.4 Existing Facilities and Initial Review

The use of Existing Facilities is granted to the Operator "as is" with no warranty as to state of repair. Within six (6) months after the Commencement Date, the Operator will conduct a review of the Existing Facilities (the "Initial Review") to determine if such Existing Facilities need to be repaired, replaced or rehabilitated and the eventual presence of Snag Items." (GWCL, 2005: 9-10)

The baseline data from which the performance of the operator is to be assessed is therefore absent from the initial contract, with the understanding that it is to be established and agreed within a short period post-contract. This changeover period from state to private operator is anticipated in the documentation relating to the development of the contract, its inevitability accepted. Bids for the contract were to "contain a detailed plan (the 'Roll Out' plan) on how the Operator will assume operating the entire Ghana Water Company Limited system [...] within a period not to exceed 18 months" (GoG, 2004b). It is also worth noting here that the 'initial review' conducted by the private operator, as stated in the above quote, provides an opportunity for the operator to highlight 'snag items' which may prevent the achievement of intended targets. Where these items are not resolvable, the responsibility of the operator is limited (ibid. 13). This limited responsibility, together with the intended establishment of baseline data provides a basis for dispute between parties, and will be returned to in the following chapter.

While baseline data was to be established following commencement of the contract, the rate of improvement for the operator is noted within the contract with respect to some aspects of performance. These include the rate of improvement of NRW:

"Schedule 4: Service Standards [...]
C. REDUCTION IN NON-REVENUE WATER [...]

(b) The plan referred to in (a) above will specify how to calculate non-revenue water in the absence of complete metering and determine yearly targets for reduction in non-revenue water in the Service Area of at least five (5) per cent per year and shall propose relevant penalty provisions for failure to meet such yearly targets. It will also include how Operator intends to reduce leakage and illegal connections." (GWCL, 2005: 38)

The specification of the rate improvement of performance, despite the deferment of specification of baseline data, is also seen in regard to treatment plant operations:

"Schedule 5: Payments to the operator

A. BASE FEE and PENALTY REDUCTION [...]

A.2. Subject to Section 5.1.3 of this Management Contract, Operator's performance below the Service Standards as set forth in Schedule 4 will result in the decrease of the Base Fee as follows: [...]"

Table A

Section n° from Schedule 4	В	D (a) & (c)
System size (m3/day)	Penalty (USD/m3/day)	Penalty (USD/m3/month)
>100,000	0,01	0,10
25,001-100,000	0,03	0,25
10,001-25,000	0,06	0,50
5,000-10,000	USD 200 flat amount	USD 200 flat amount
<5000	USD 200 flat amount	USD 200 flat amount

(GWCL, 2005: 40-41)

So, the majority of factors by which performance of the private operator may be evaluated are not specified within the contract, but left to resolution expost. It remains possible however to instead compare performance regarding those efficiency factors noted in the contract with that of the state company in previous years. This comparison is possible only across those factors where data is available which covers the operation of both state and private operators. Availability of data is limited firstly by the measurement of varying factors by For example the state operator provided reasonably different agencies. comprehensive measurements concerning financial performance, metering status, operating costs etc., but GWCL has not released data from 2004 onwards - covering its own operation as both service provider (2004 and 2005) and as holding company (from 2006 onwards). Direct comparisons with performance of the private company are thus not possible using GWCL data. PURC data covers the period to 2007 (PURC, 2009), but is less comprehensive than that provided by GWCL, concerning only data relevant to the regulation of the service provider. Data available from the private company, AVRL, covers the period 2006-2008 (AVRL, 2007 & 2008), though is less comprehensive than that of GWCL, with some differences in data gathered.

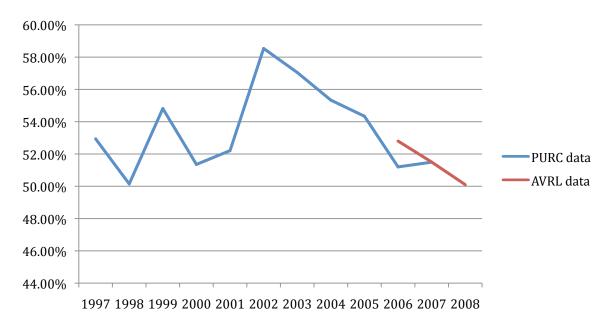


Figure 6.1: NRW performance, 1997-2008 (PURC, 2009; AVRL, 2008)

Regarding non-revenue water performance, one of the key determinants of the efficiency of operation and sustainability of a service provider, figure 6.1 shows the performance of the provider in Ghana through the period form 1997. This covers the operation of the urban water service provider since its inception, first under the management of the state company (1997-2005) and subsequently the private operator AVRL (2006 onwards). While the data shows the performance of the private company has seen year-on-year improvement, with the best NRW figures in the period of the service provider for 2008, this performance is generally a return to figures achieved in the period 1997-2001. The performance of the operator further continues a downward trend established in the latter years of the state provider. Furthermore, the annual rate of improvement for the private operator, at an average of 1.4 per cent (AVRL, 2008), is significantly less than the five per cent contracted (GWCL, 2005). Other determinants of improved operation include the improvement in revenue collection as a percentage of billing, key to the sustainability of the service provider. Figure 6.2 shows this data over the period of the urban water service provider. There appears to be a notable improvement over the period in which the private company has been in operation, with figures close to and above 90 per cent compared to an average figure of 80 per cent over the period of the state company. Figure 6.3 shows data concerning unit cost of water produced, a further measure of efficiency of operation, over the period to 2007, the latest data available. This data also shows improvement over the period of the private operator, although costs have been lower under previous years of state operation.

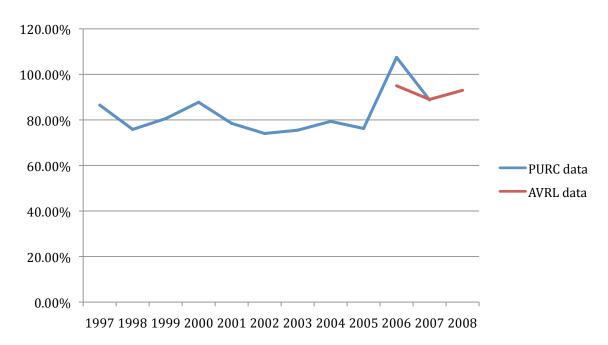


Figure 6.2: Collection as a percentage of billing, 1997-2008 (PURC, 2009; AVRL, 2008)

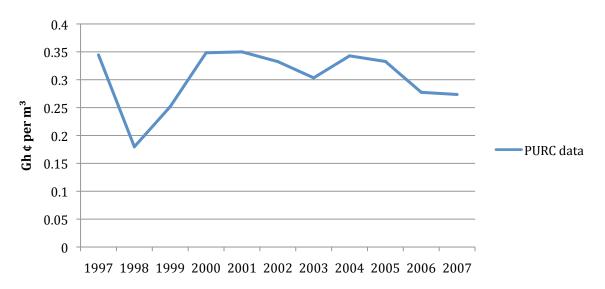


Figure 6.3: Unit cost of water produced 1997-2007 (2007 prices) (PURC, 2009)

While performance of the private sector, where quantifiable, demonstrates moderate improvement over that of the state provider in the years immediately before the introduction of privatisation, it remains the case that this performance is a return to that achieved in earlier years under the state provider, and is significantly poorer than that proposed and contracted for. As such, it may be maintained that the performance of the private sector in this instance is not comparable with the more extreme cases of privatisation as reviewed in chapter three. It is true however that the determination of performance and operation of privatisation is typically not by quantifiable performance figures, but by the instances of dispute and renegotiation which may or may not be instigated by quantifiable performance change. As such,

while Ghana does not demonstrate extreme conditions of divergence from proposed performance and operation, quantifiable performance as demonstrated here is consistent with the trend for divergence. More importantly, however, for the performance and operation of the contract are the other factors which inhibit the potential for proposed improvements, those which contribute to dispute and renegotiation. These will be reviewed subsequently.

6.2 Ex-post establishment of baseline data: rationale and consequences

The requirement in the contract for the establishment of baseline data upon commencement of the contract provides a foundation for the lack of performance monitoring, and ultimately the application of financial penalties or incentives. In practice the absence of baseline data from the contract derives from the standard of metering in the water infrastructure in Ghana, and the recognition of the potential for dispute which may follow the establishment of baselines using sub-standard metering. However, this concern for the potential dispute of baseline data has in turn led to further problems ex-post, with a continuation of sub-standard metering, and a continued lack of baseline data from which to evaluate performance.

Within the design of the contract, the rationale for the exclusion of baseline data derives from the condition of infrastructure and facilities in the water sector in Ghana. It is widely recognised by various actors in the sector that the metering of facilities in the sector is sub-standard, both in terms of coverage and reliability (Fichtner, 2007; World Bank representatives, 2009; PUWU representative, 2009; PURC representatives, 2009; NCAP representative, 2009). These conditions are true for production, distribution and consumer metering, with these various stages appearing in the contract as included within expected performance improvements (GWCL, 2000-2003; GWCL, 2005). Indeed, where GWCL data is available, for the early period of the state company's operation, it is shown that the percentage of effective consumer metering coverage varies between 39 and 53 per cent:

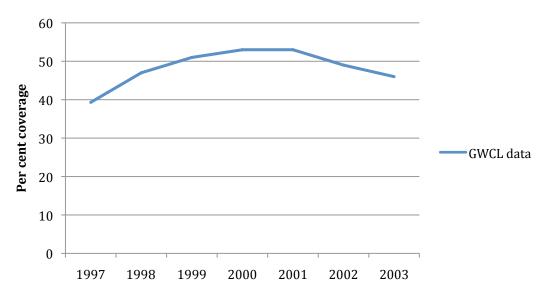


Figure 6.4: Per cent consumer metering coverage, 1997-2003 (GWCL, 2000/2001/2002/2003)

The contract requires improvements in treatment plant metering:

"D. TREATMENT PLANT OPERATIONS.

(a) Within sixty (60) days from the Commencement Date, the Operator will provide the Grantor with the specifications for meters and the required location thereof. [...]" (GWCL, 2005:38)

The contract requires the operator to specify calculation for NRW "in the absence of complete metering" and in addition it "will also include how Operator intends to reduce leakage and illegal connections" (GWCL, 2005:38).

It is clear in the contract that the grantor and those designing the contract recognise the potential problems in implementing complete metering within the contract period. This is further evident in the documentation regarding the development of the contract, where estimation of data is accepted as a possibility. The draft contract framework paper for PSP in Ghana considers the possibility of the requirement for agreement between Operator and Grantor for data where metering is not complete:

"Certification of NRW by technical and financial auditor:

As with all other performance standards to be monitored, NRW shall be certified through the monitoring of all the data on the parameters that go into the computation of the parameter. Where estimation of a component is necessary, the basis of estimation may need to be agreed between the Operator and GWCL." (GoG, 2004b: 14)

The intervention of an intermediary, mediating body is thus anticipated in the development of the contract. The structuring of the PSP in such a way has various repercussions deriving from the necessity of consultation and agreement between parties through the period of operation of the contract.

Indeed, the absence of sufficient metering in the water sector in Ghana has been noted by respondents as critical to the inclusion of the post-contract establishment of baselines. This recognition concerns not only the practicality of establishing baselines with sub-standard metering, but also the potential for dispute of any baselines established with such metering:

"I know people got confused because we put it under the contract that, when the operator comes he's going to establish the baseline. It's not like we don't have any baseline, but the thing is that, I am giving this [facility baseline] to you and I am saying 'this is the way that it performs'. You can come back when you start and say 'no, no, no, what you told me, that is not the way it is performing, but it is performing this particular way'. So I will have my figures as baseline, which is concerning the NRW, or production or whatever, but you can also come and confirm – compare the baseline, I have mine, and then we'll see." (World Bank representatives, 2009)

Furthermore, where the contract requires the rehabilitation or replacement of metering, this would lead to the superseding of those baselines established with the old meters, with further potential dispute:

"... after all, some of the facilities, we are going to change them anyway, by the time you are finished we may have changed the pump, we may have changed this, changed the capacity of your treatment plant – so your baselines will be changing, once you have changed some facility." (World Bank representatives, 2009)

Thus, to ensure some requirement for improved NRW was included in the contract, despite the absence of baseline data, an annual percentage improvement was incorporated in the contract:

"If you look at it, the contract says that when the operator comes in they should develop a method for assessing the NRW without necessarily 100 per cent metering, that is part of it. So we had this idea, that is why we put reduction rather than absolutes. [...] So the baselines they were there, only that I would say that it was not as refined as one would have hoped – because there were certain facilities that were not in place." (World Bank representatives, 2009)

Thus, where sub-standard metering was present, the compromise was to include a five per cent annual reduction in NRW, combined with contracting for the operator to propose some means of establishing baseline data post-contract, as well as improving metering. This compromise was necessary due to the importance of NRW as a measure of performance and sustainability of the service provider. NRW had been utilised as a primary tool to denigrate the performance of the state service provider through the development of the contract (Public Citizen, 2002), and thus rationalise the more efficient private sector. Consequently its inclusion in the contract was essential, even without baseline data and the problematic establishment ex-post:

"In fact at some point, [...] the Bank really wanted to remove this NRW because it was a grey area and it will bring confusion, because truly, we didn't have the gadgets and the excuse we used at that time was that if you look through all the Bank reports the main thing they used to accuse GWCL was the NRW." (World Bank representatives, 2009)

The contract was therefore designed in such a way that there were various unknowns regarding baseline data, with those designing the contract aware of these unknowns. The acceptance of the impracticality of establishing baselines with sub-standard metering determined the inclusion of the contracting of terms for the post-contract establishment of this data, with a further acceptance that complete metering post-contract was impractical and subsequently baseline data would anyway be incomplete.

These conditions present in the contract design have had repercussions in the operation of the contract, beyond the unfeasibility of evaluating performance as noted above. One year after the commencement of the contract, the technical auditor of the contract, Fichtner (2007), noted the continued absence of baseline data in any of the key determinants of performance. This is true for water quality, chemical usage, NRW, and treatment plant operation (ibid.). It is apparent within the report of the technical auditor that there is typically insufficient data being provided by the operator for the establishment of baselines. This is most likely due to the conditions of facilities as noted in the process of contract design, with the effect of sub-standard monitoring continuing into the period of private sector operation. For example, regarding treatment and distribution operations:

"The whole distribution process is handled like a black box. Only few facts are really known about the distribution process. The technical figures are derived from commercial figures, so that monitoring of physical losses or optimisation of storage capacities can hardly be achieved." (Fichtner, 2007: 8-5)

The lack of data made available by the operator has repercussions in terms of the capacity for the application of financial incentives and penalties to the private operator (Fichtner, 2007). This is true for NRW, where the contract required the operator to "propose relevant penalty provisions for failure to meet [...] yearly targets" (GWCL, 2005: 38). The operator in fact suggested a "symbolic penalty of $\in 1000$ up to a maximum of $\in 5000$ per year for each percentage below the 5%" reduction target, which was rejected by the auditor:

"The technical auditor considers that it is more appropriate to calculate the penalty prorated to the size of the system and the amount of the 'lost' expected revenue income. The operator should review its suggested penalty and agree it with the grantor.' (Fichtner, 2007: 7-8)

Similarly, with regard chemical consumption, the penalty to be applied had been postponed until sufficient baseline data is established (Fichtner, 2007). The inhibiting of the capacity to apply penalties for poor performance of the operator

is noted by NGOs and community groups active in the sector, who express concern at the lack of sanctions available to the grantor, on behalf of the consumers (NCAP representative, 2009).

Finally, it should also be noted that the requirements for performance for the operator regarding water quality may in fact be inferior to those standards operated by the preceding state company. It is noted by the consultants employed by the state holding company, at the time of introduction of the contract, that water quality standards contracted may meet Ghanaian minimum standards, but are in practice lower than those previously employed by GWCL. While the minimum standards set by the Ghana Standards Board meets international standards, those of GWCL are higher, and this potential discrepancy may have consequences:

"[One contract] flaw is the setting of the Operator's minimum water quality standard lower than what we think should be the minimum *operational standard for water quality*. The Schedule on standards indicates that the minimum standards should be that set by the Ghana Standards Board (GSB). The consultant has noted that the current GWCL standards are higher than those of GSB, though GSB based its work on the WHO guidelines. We again note that the management contract has given the Operator an incentive for cutting down on costs for example in the use of chemicals. If we put these two circumstances together we may argue that will be the tendency for the Operator to drive their operational standards towards GSB than GWCL standards as allowed by the contract." (GWCL, 2006b: 3)

The discrepancy between GSB minimum standards and those employed by GWCL in practice is not recognised in the contract or preparatory documentation. Reference is made only to "maintaining water at, or above, that required under the laws of Ghana" (GoG, 2004b: 7), or that water should "meet or exceed all relevant standards determined by the Ghana Standards Board and/or the Consumer Charter requirements, and the Drinking Water Safety Plan" (GWCL, 2005:38) (the latter documents refer back to the GSB standards (GWCL, undated)). Broader consequences of the potential exploitation of this discrepancy are recognised by the consultants:

"This will likely have some adverse effect on public acceptance of the water being produced (for example water colour may change die to use of less chemicals). Should this happen the repercussions will be serious; especially against the background that the public has been assured that the PPP is to enhance service delivery quality and water colour. We recommend that GWCL current standards be regarded as the operational minimum. In that light, we think the Operator be made aware from the onset that insistence on the letter more than the spirit of the contract in this case will likely lead to the creation of grounds for public outcry against the contract and jeopardise its continuation as the political risk will be unbearable for the government." (GWCL, 2006b: 3)

While the instance of public outcry relating directly to a change in water quality as produced and distributed is not possible to determine, it is the case that, as feared by the GWCL consultants, the private company operates to the lower GSB standards. Comparison of GWCL standards as noted in the consultant documents (GWCL, 2006b) and those evident in AVRL documentation (2009a) demonstrates a discrepancy in four parameters where evidence is available (of five in total).

Parameter	GSB standards	GWCL standards	AVRL standards
рН	6.5-8.5	7.0-9.0	6.5-8.5
Turbidity	5.0 NTU	1.0-2.0 NTU	5.0 NTU
Colour	15.0 HU	5.0 HU	15.0 HU
Residual Chlorine	0.20-0.50 mg/l	0.10 at far end of	0.5 mg/l
		distribution	
		network	
		1.0 at plants with	
		long transmission	
		lines	

Table 6.1: Water Quality standards utilised (GWCL, 2006b; AVRL, 2009a)

The discrepancy in standards used by the private operator further exaggerates problematic performance comparison. It further permits the operator a means by which to demonstrate apparent improvement in operation, where in fact they work to lower standards than the state operator. Thus, the claims of improved operation, according to the operator to be due to "better effective dosing, competitive procurement prices and improved control on the handling of the chemicals" (AVRL, 2007), may be disputed.

Considering the analysis of the technical auditor and the acknowledgement of the various issues underlying the failure to establish baseline, effectively repeating those concerns outlined in the design of the contract, the progress in this aspect of the contract remains limited. Various respondents active in the sector in Ghana have noted the continued significance of the failure to establish baseline data as an obstacle to progress in the contract and in the evaluation of performance (PUWU representative, 2009; PURC representative, 2009; NCAP representative, 2009; World Bank representatives, 2009). Indeed the issues of baseline data provides one of the primary concerns addressed at a mid-term review by the Ghanaian Government in August 2009, three years into the five year contract (NCAP representative, 2009; GWCL, 2009).

Summary

The inception of the contract before requisite data had been established, which could have been achieved through the utilisation of improved metering indicates the implementation of the PSP programme was rushed, was executed incompetently or prejudiciously. Had implementation been delayed to incorporate such information, the programme may deviate less significantly

from the underlying theoretical framework. The decision to establish baseline data ex-post has in practice reduced the timescale of the contract: whereas it was envisaged such information would be established in the first year of implementation, and therefore not impact on the capacity of the grantor to effect penalties or incentives, in practice the process has not been resolved after three years, limiting the capacity to effect penalties and incentives to a significantly shorter timescale. The potential for performance of the operator to be monitored and penalties and incentives to be applied is therefore severely restricted, and this undermines the very basis of the introduction of the private sector: efficiencies cannot be determined, profit motivations cannot be applied and thus improvements purported to derive from the private sector cannot be induced or assessed.

The incomplete information regarding these various aspects of performance of service provision is therefore significant, implementation of the contract regardless indicates a suboptimal execution of PSP. This provides a substantiation of various aspects of the critique of the underlying theoretical framework for the programme. The implementation of PSP with suboptimal information undermines the attribution of property rights and subsequently internalisation of externalities associated with provision. It follows that moral hazard issues exist, with residual control rights typically lie with the private operator, with the potential for monitoring of and applying penalties for performance are limited. Transaction costs are increased through the necessary ex-post consultation and agreement between parties, and the intervention of other agencies such as the auditor. It is further possible to identify possible adverse selection, where the contract bidder may consider the incorporation of ex-post agreement of such crucial data as potential for opportunism and low-ball the bid accordingly. The lack of penalties for the timely resolution of data ex-post furthers this possibility. Commitment of the private sector for the establishment of data is assumed. Those active in the design of the contract recognised the potential for dispute between parties where unknowns exist, yet ultimately provided a contract with significant unknowns which have in practice seriously undermined the operation of the contract, with dispute regarding baseline data continuing until at least three years after the commencement. These various aspects substantiating the critique of the theoretical rationale of privatisation are taken up in greater detail in chapter eight.

6.3 Maintenance and operation costs: RRR fund and revenue accounts

The contract between GWCL and AVRL is designed in such a way that day-to-day running of service provision may be undertaken be the operator without unnecessary intervention from the grantor (World Bank representatives, 2009). The most obvious manifestation of this is the provision of a 'repair, replacement and rehabilitation' (RRR) fund in the World Bank Urban Water Project of which the PSP programme is part. The fund provides the operator finance for the maintenance and repair of facilities for the continued day-to-day functioning of service provision:

""Repair, Replacement and Rehabilitation Fund" means a five million (5,000,000) United States Dollars fund financed by the Grantor through the Project Funds, operated solely by the Operator and used for minor works that will be identified during the Management Contract Period, including but not limited to:

- (i) urgent System repairs costing in aggregate above ten thousand (10,000) United States Dollars;
- (ii) distribution network (i.e., less than or equal to 100 mm/4 inch diameter pipe) repair, replacement or extension;
- (iii) non-office equipment required on an urgent basis costing more than five thousand (5,000) United States Dollars; and
- (iv) plumbing improvements and repairs in public sector entities." (GWCL, 2005: 6)

In addition, subsequent to the implementation of the contract the RRR fund, originally of \$5 million, has been supplemented by \$8 million through funding from the Dutch Government (NCAP representative, 2009; World Bank, 2008). The utilisation of this RRR fund is determined by the operator, without the intervention of the grantor, and is subject to World Bank procurement guidelines:

- "3.5 Suggested Capital Investment Report [...]
- 3.5.3 The Operator shall describe its planned use of the Repair, Replacement and Rehabilitation Fund in each Suggested Capital Investment Report submitted by the Operator notwithstanding that the use of the Repair, Replacement and Rehabilitation Fund is not subject to approval by the Grantor.
- 3.5.4 Any procurement which shall entail the use of the Repair, Replacement and Rehabilitation Fund shall follow the World Bank Procurement Guidelines. (GWCL, 2005: 11)

Finally, the operator further has the capacity, through the required 'initial review', to identify issues which they consider to be outwith the scope of the fund, subject to the agreement of technical auditors:

"The Operator will conduct a review of the Existing Facilities (the "Initial Review") to determine if such Existing Facilities need to be repaired, replaced or rehabilitated and the eventual presence of Snag Items. [...]

- 5.1.3 The Operator shall not be liable for failure to meet Service Standards and shall not be subject to Penalty Reductions where such failure is caused by: [...]
- (vi) the existence of a Snag Item which cannot be reasonably cured by minor works that can be financed by the Repair, Replacement and Rehabilitation Fund, as determined by Technical Auditors..." (GWCL, 2005: 10&13)

In addition to the RRR fund, the operator maintains control of the revenue account from service provision, for the financing of various aspects of operation. Factors included here range from personnel costs and administration costs, to

maintenance and other 'necessary costs'. The following describes the utilisation of the revenue account permitted for the operator:

- "6.3.2 The Grantor hereby irrevocably grants to the Operator for the Management Contract Period the care and control of the Revenue Collection Account, which shall be operated exclusively by the Operator pursuant to the terms of this Management Contract. Subject to the availability of the amounts, the Operator shall pay from the Revenue Collection Account operating expenses, including vendor accounts payable (notwithstanding that they may have been incurred prior to the Commencement Date) under this Management Contract in the following order:
- (i) staff salaries;
- (ii) staff pensions and benefits;
- (iii) Grantors Headquarter Operating Cost (on a monthly basis);
- (iv) vendor accounts payable, including cost of chemicals;
- (v) reasonable and prudent maintenance costs;
- (vi) operating costs (including Electricity Costs pursuant to Section 6.5 below and insurance premiums pursuant to 6.6 below) other than maintenance;
- (vii) Raw Water abstraction fees;
- (viii) general and administrative costs;
- (ix) in year five (5) of this Management Contract, the portion of Base Fee not covered by the Project as set forth in Section 6.1.5;
- (x) that portion of the Incentive Compensation set forth in Section 6.1.5 (d) 1.;
- (xi) debt service on Grantor's Existing Loans, as from the Debt Rationalization Date:
- (xii) amounts payable to Technical and Financial Auditors for years when the Project is not effective;
- (xiii) Operator Working Capital upon termination of this Management Contract; and
- (xiv) all other reasonable and necessary costs not included in (i) to (xiii) above.
- 6.3.3 The surplus after the payment of items (i) through (xiv) of Section 6.3.2 above shall be paid quarterly into an account determined by the Grantor." (GWCL, 2005: 15-16)

The degree of specificity regarding permitted use of the revenue account therefore remains limited, with the potential flexibility within terms such as 'reasonable and prudent maintenance costs', and 'all other reasonable and necessary costs', significant.

It is apparent, therefore, that the contract attempts to allow the private sector to operate, as much as possible, independently from the state holding company and institutional environment, and furthermore provides a degree of flexibility for the operator. Financial independence of the private company is attempted through the provision of, the RRR fund and control of the revenue account. The lack of specificity within the terms of use of each of these funds provides further freedom for the operator in their activity. The World Bank

maintains that such a contract design allows for the smooth operation of the private sector, who are thus not subject to the excessive intervention of the grantor, together with the flexibility of determining the means by which they wish to operate the service provider (World Bank, 2004b; World Bank representatives, 2009). Independence of the private operator is furthered by the application of World Bank guidelines for the disbursement of the RRR fund, thus reducing national influence on the process.

The intended independent operation of the private company is however potentially undermined where consideration is made of the requirement to establish baseline data. As is revealed in the draft contract framework paper (GoG, 2004b), the company's responsibilities in this respect are reliant on the activity of the GoG, and GWCL, in the utilisation of broader Urban Water Project funding. Metering, in this case for the public sector institutions, necessary for the establishment of baseline data, is funded from the UWP and baselines are thus dependent on the activity of the GoG and GWCL:

"It is intended that the annual capital works program supported by the proposed World Bank Project [UWP], which shall be procured by the GoG according to World Bank Procurement Guidelines, would provide for adequate metering of public sector entities in order to timely establish the baseline." (GoG, 2004b)

This demonstrates, firstly, an inconsistent implementation of idealised modes of operation for the private sector. It is also, however, interesting that this inconsistency arises where baseline data – necessary for the evaluation of performance, application of penalties and incentives – is concerned. Such an inconsistency undermines the very basis of the purported aims of the introduction of the private sector.

While independence of the private sector may be proclaimed to permit the efficient operation of the private sector, it has other unintended or unforeseen consequences, including the opportunity for the operator to utilise finance in an inefficient manner. The lack of specificity regarding the terms of use for both the RRR and particularly the revenue account means the operator can apply their own interpretation to 'reasonable and prudent maintenance costs' and 'all other reasonable and necessary costs', and this may be to the detriment of the grantor. The contract is designed in such a way that efficiencies purported to be achieved through the operation of the private sector are transferred via the revenue account to the grantor, who may then utilise the funding for investment in infrastructure.

Evidence suggests that this scenario has indeed been realised in the case of Ghana. It has been suggested by various sources in Ghana that the design of the contract as described above has led to the diminution of revenue finance being transferred to the grantor. This may have come about in two ways: firstly, the system of procurement and disbursement associated with the RRR fund has seen significant delays, with revenue account finance instead being used; secondly, inefficient use of revenue account funding by the operator. In the first

case, it is acknowledged by many parties (MP, 2009; PUWU representative, 2009; NCAP representative, 2009; PURC representative, 2009; GII representative, 2009) that delays in the procurement and disbursement of RRR finance has meant revenue account finance has been used in its stead. This process is advanced by pressure experienced by the operator, both from the public generally and opposition groups, to ensure the standard of service provision does not deteriorate (MP, 2009):

"If they give you \$100m and you want to access it and it's so difficult, and have money... You see there was major opposition from some, a group called ISODEC, to these water people – and so they were supposed to deliver. If you relied on the World Bank you would deliver nothing. So in the final analysis, if they have funds coming from the income, then they use it, because as I said, the infrastructure for water production was not to be paid for it was provided by government. So if you have money and you have enough to buy aluminium to clean the system, and by then have some money - you need to use it, so that's why they were using it. But if the government, if the World Bank had been more flexible they would use [the RRR fund], why not? They needed funds to build things, because when a system breaks down you don't wait for six months for World Bank to give you the money and they were constantly under fire by this ISODEC and this socialist group. So they needed to deliver, so then, and rightly so, I wouldn't fault them for that, they used the revenue for that. After all what was the revenue to be used for - because if I have provided the infrastructure, you have paid nothing for it, you have the revenue, why shouldn't the revenue help the people have water?" (MP, 2009)

Just as transfer of revenue to the grantor is diminished by the obstacles in slow procurement and disbursement processes associated with the RRR fund, it is further affected by the degree of control permitted to the operator and it's determination of utilisation of revenue. As noted above, the potential for inefficient use of revenue is established under the design of the contract, and certain of those active in the sector in Ghana have observed this may be the case in practice. Firstly, a Public Utility Workers Union (PUWU) representative:

"[AVRL] are supposed to do all the revenue collection. There is a range of payments that have been listed as to what they have to transfer to GWCL in relation to each one, its been stated in the contract. Then later on there are some differences also to be passed over to GWCL. But how do you create the difference after paying the statutory ones? AVRL could redirect it to other areas, AVRL could say that operationally they have not been able to make up a difference. And that can create some conflict between GWCL and AVRL. [...] The revenue that needs to be transferred has been given in the hierarchy of payments. But apart from that there could be excesses, but how you get the excesses depends on how you manage the place. So if you do too much of other things, operationally, it can eat into what you call the excess, and that will stifle the grantor – as the grantor controls no money. The grantor will be controlling investment funds, but it needs other monies from

this other side [the operator] to be doing the extension of mains and other related issues." (PUWU representative, 2009)

Similar sentiments are expressed by a representative of the regulator:

"Of course, if [AVRL] reduce NRW, reduce chemical consumption, reduce electricity consumption, all of these create more money, revenue. [...] They get the management fee, and they have the revenue collection account to do operations. [...] After they have used the money to do a certain hierarchy of payments, whatever money is left should transfer to GWCL. GWCL claims that the operator uses everything. [...] Because the management contract says 'prudent operational costs' – so prudent operational costs can be hire of vehicles, leasing of vehicles, they stay in hotels – so that at the end of the day they don't have anything to transfer to GWCL. That has been one of the big confusions between GWCL and AVRL. So they are not doing their investments... What money they have, they use." (PURC representative, 2009)

While these suppositions cannot be verified absolutely without access to the accounts of AVRL, they are supported elsewhere by documentation of the World Bank and the technical auditors of the contract, Fichtner. Fichtner noted as early as 2007, that there were potential problems in the definition of terms relating to the utilisation of funds and prudent industry practice. Following meetings between grantor, operator and auditor, amongst the list of problems encountered in the project were "problems with interpretation of the management contract" (Fichtner, 2007:3-1). In addition, there was the need to "establish levels for prudent industry practice in operations", and the requirement for the "definition in financial terms [of] 'capital', 'repairs', 'rehabilitate', and 'replace'" (Fichtner, 2007: 3-3). Despite this acknowledgement at an early stage of the contract, World Bank documents concerning the disbursement of funds relating to the Urban Water Project, of which PSP and the RRR fund are part, demonstrate the \$13 million allocated to the RRR fund have not been disbursed. As of August 2009, the latest records available relating to the project, no disbursement has been made from this fund, more than three years since the commencement of the contract (World Bank, 2009).

Problematic disbursement of funding and associated transfer of revenue from operator to grantor is further validated by press reports. The following extract demonstrates the degree of dispute and confusion deriving from the purported transfer of revenue to the grantor.

"Management of GWCL has refuted claims by the water operators that a total amount of GH¢ 35.3 Million (Thirty-five million three hundred thousand Ghana Cedis) had been donated/paid to GWCL by the operators over the three year period they have been in the helm of affairs at the water delivery section of the institution.

This claim made by General Manager in Charge of Communication as reported by one Caroline Boateng in the Thursday February 19, 2009 edition

of the Daily Graphic had it that the Operators had made profits to the tune of GH¢ 1.9 million, GH¢ 13.4 million and GH¢20 million in the 2005, 2007 and 2008 financial years. He said this represented a 121% increase in the operational surplus over the past two years.

According to the Daily Graphic report, "Mr. Sakyi Addo emphasized that the profit were given back to GWCL to invest in capital investments in the water sector, such as the water treatment plants and laying of pipes". However Managing Director of GWCL, Kwaku Botwe told the Financial Intelligence that his outfit had never received any such money from AVRL. He said if any such payments were to be made, there was the need for a certification process to be undertaken. [...]

Mr. Kwaku Botwe insisted that GWCL has not taken any such sums of money from AVRL. "If any such profit would be declared, the certification should have been done. This is why we have not made any public comments on that statement". However, Mr. Sakyi Addo insisted when this paper contacted him that the money was given to their counterparts monthly and recently quarterly." (GhanaWeb, 2009)

Contrary statements from each party contribute to the apparent antagonism which follows from this arrangement.

The issue of revenue utilisation and transferral was identified as a potential problem, at least in terms of public perception of the PSP programme, in the development of the contract. Public relations material published by the Project Management Unit (PMU) (that established within the Ministry for Water, Works and Housing for the management of the programme), acknowledges such concerns. In a document intended to rebut claims made by NGOs and community groups opposing the programme, the PMU states:

"The operator's contract is fee-based and is provided from the World Bank grant. It will, therefore, not earn any remuneration from revenues. Any increases in revenues collected, and benefits from improved efficiency and performance, will go to GWCL, not the operator." (PMU, undated)

While this establishes the intended operation of the PSP programme, in practice it may in fact be misleading considering the standard of contract implemented and the 'independence' or leeway provided to the operator.

Further to the obstacles presented by the utilisation of RRR and revenue finances, the contract offers the private company, in practice, the opportunity to determine the extent of the system to which the performance objectives apply, subject to technical auditors approval. Within six months of the commencement of the contract the operator was to determine, in an initial review of existing facilities, those 'snag items' which "cannot be reasonably cured by minor works that can be financed by the Repair, Replacement and Rehabilitation Fund, as determined by Technical Auditors" (GWCL, 2005: 10&13). The technical auditor reports, one year after the commencement of the contract, that there was

insufficient detail provided by the operator to approve snag items, thus delaying approval. Nonetheless,

"... the snag items presented in the Initial Review Main Report are of such a nature and magnitude that handling or eliminating them cannot possibly be achieved with the funds available during the project. Therefore, action of that issue had come to a stop at the time of arrival of the Technical Audit Mission." (Fichtner, 2007: 4-2)

Consequently, the auditor provides the following recommendations:

"Recommendation 4.1:

A list of systems (list A) shall be established and agreed between both parties where all snag items (as certified by the Technical Auditor) can be eliminated during the period of the management contract with the funds available. A second list of systems (list B) with snag items which cannot be handled due to whatever reason within the remaining period of the management contract will be established so that the Technical Auditor can certify them. [...]

Recommendation 4.2:

After a period of investment, which finally has to be agreed between operator and grantor and which shall not exceed 6 months, the systems of list A will be handled as accorded to the [management contract]. The respective incentives and penalties for performance of the operator shall be applied. The systems of list B will be run by the operator without the application of incentives and sanctions. Nevertheless transfer of technology should take place also in these systems and best practice should be applied." (Fichtner, 2007: 4-4)

The scope of the contract has thus been reduced according to which systems contain snag items which are outwith the capacity of the project to address. The incentives and penalties associated with the efficient, or otherwise, operation of the private company no longer apply to list B systems. The potential for the operator to move focus from these systems is acknowledged by the auditor with the phrase "nevertheless transfer of technology should take place also in these systems and best practice should be applied" to list B systems. This exhortation intended to maintain some degree of progress in list B systems is, nonetheless, a poor substitute for contracted terms of performance. Furthermore, the weakness in the contract which leads to this scenario are noted by the auditor:

"By analysing the management contract, it is clear that snag items are a tool of the operator to avoid penalties imposed in the contract. In order to achieve good performance within the execution of the management contract, the snag items should be defined in a reasonable way so that they will not form insurmountable obstacles which cannot be handled by both parties." (Fichtner, 2007: 4-1, emphasis added)

It is interesting to note that the technical and financial auditors here identify a mechanism for the operator to act opportunistically, thereby undermining the

intended outcomes of the programme. This is in parallel, however, with the auditor's previous recommendation for the effective reduction in scope of the contract, which results in the same undermining of intended outcomes. While the auditor's recommendations are no doubt made with the intention of practicality of implementation, they lack consistency in approach taken to the application of the letter and spirit of the contract.

Summary

The design and implementation of the PSP contract in Ghana is here evinced to be aligned with the underlying theoretical rationale. It is intended to isolate the activity of the operator from the other agencies active in the sector, primarily those of the public sector responsible for the implementation of the other elements of the UWP. In practice however, this commitment to a particular mode of implementation, motivated by a distrust of the host institutional environment, in fact permits opportunism for the operator. This is true for those aspects of the programme, evidence of moral hazard, which permit residual control rights to lie with the operator: asymmetry of information exists with the operator in knowledge of operating expenses and therefore required revenue utilisation; and, monitoring of activities of the operator is problematic and costly (as shown by the contrary statements on revenue transfer), requiring the intervention of an intermediary agency, with additional transaction costs and the reliance on the institutional environment. There is, furthermore, in the structuring of financial arrangement in this way, evidence of normative judgements regarding rent-seeking in this regard. The idealised 'independent' operation permits opportunism on the part of the private sector: rent-seeking by the private operator is deemed as permissible through the motivation, deriving from the associated rationalising theory, for the 'independent' operation of the The particular form of PSP established in Ghana impacts private sector. negatively on the utilisation of resources, and ultimately the sustainability of the service provider and the service consumers. The attempt to provide the private sector a degree of independence from the national intervention in fact provides the private sector an opportunity to profit through inefficient use of resources. These various aspects substantiating the critique of the theoretical rationale of privatisation are taken up in greater detail in chapter eight.

6.4 Institutional capacity: technical, financial and human resources

The restructuring of the water sector in Ghana and the introduction of the private sector requires the capacity of associated institutions to be commensurate with their tasks. This is true primarily for the regulator PURC, but also for other sector institutions including ministries and the state holding company itself. Factors that affect the capacity of sector institutions may be of financial or technical nature, or in terms of human resources available. In the case of Ghana, there is typically a shortfall in sector institutions in financial capacity, in technology and ICT, and in personnel of sufficient skill and experience.

For the regulator, PURC, there has been a trend for under-financing, despite the repeated requests on the part of the agency for additional funding or change in funding sources (PURC, 1998 & 2007). The shortfall in financing is acknowledged as early as 1998, the first year of operation, together with the effect on the activities of the regulator:

"The Commission would also like to emphasize that during the year under review it was greatly constrained by inadequacy and uncertain funding and its negative impact on the Commission's capacity building, material and equipment base. Although there was some improvement towards the end of the year the Commission had to be content with the minimum of equipment and logistic support for most part of the year. Also, a number of projects and activities - including technical studies, monitoring of utility services, establishing customer service committees, could not be undertaken due to lack of funds either from Government of Ghana or donor sources." (PURC, 1998: 10)

However, in 2007 conditions have changed little:

"Inadequate funding remains a grave concern ten years after the establishment of the Commission. The main source of funding is from Government's Central Budget. Unfortunately, the subvention of budgets approved annually fall far short of the Commission's requirements for effective operations. Indeed, from 1998 to 2000, PURC received about 45.7% of its budgetary requirement, and from 2001 to 2002 dropped to 28.5%. This has been the fluctuating trend. In 2007, the Commission received 57.3% of its budgetary requirements." (PURC, 2007: 56)

The constrained finances of the regulator inevitably inhibited its activities, with the "execution of most of its planned programmes" hindered (PURC, 2007:53). Furthermore, such constraints directly impact the ability of the regulator to maintain requisite staffing levels, both in number and experience:

"In the last few years, the Commission has began to notice that the level of motivation of its professional staff has began to wane. It has become obvious that the Commission's remuneration package has been surpassed by most of the comparable institutions and has therefore become less attractive to current staff. This has resulted in the loss of some well trained staff and made retention of existing professional staff difficult. It has become imperative to take measures to improve significantly the staff conditions of service including the staff remuneration package, if the commission is to succeed in retaining its core staff." (PURC, 2006: 16)

Constrained finances further affect the capacity of the regulator in terms of the technological facilities available, and this in turn impacts the interaction of sector agencies:

"At times the technology levels are so high in your country, EPA, DWI, Ofwat – the coordination is perfect. Over here, the environmental agency has no

idea what is happening with the water sector – it makes information flow very difficult." (PURC representative, 2009)

The impact of financial constraints on the capacity of the regulator to perform intended functions is thus significant. While the Urban Water Project includes support for institutional capacity building, the financial support allocated to the regulator does not match the shortfall experienced. US\$900,000 is allocated to the PURC for the period of the UWP, five years (World Bank, 2004b). At the end of the first full year of operation, the Ghanaian cedi (GH¢) exchanged at approximately 0.93 to the US\$ (July 2007, following redenomination of the cedi), with this rate at approximately 1.43 after four years of operation (July 2010) (Bank of Ghana, 2010). Considering the 42.7% shortfall in Government funding in 2007 (PURC, 2007) - GH¢768,000 - the proportional allocation of UWP funding would fail to provide the regulator with sufficient funding for its functioning; considering the performance of the cedi relative to the US\$, this is increasingly unlikely as the programme progresses. In practice, the PURC in 2007 acquired further funding from other unspecified donor agencies which aided the balancing of the national shortfall (PURC, 2007), though this is a precarious and unreliable means by which to operate a regulatory agency: donor funding in 2005 showed a reduction of approximately 85% from the preceding year (PURC, 2005d).

Just as the technical, financial and human resources capacity of the regulator is constrained, the same is true for the state holding company. The operation of the latter in its role administering the contract with the private sector is affected by similar constraints, in particular deriving from altered roles in the company. Whereas previously the company operated as service provider, its new role as administrator and asset holder makes different requirements of the organisation:

"GWCL has to face major changes in its core business and position itself to adapt to the needed changes required by new demands and responsibilities entrusted to it. The planned changes will rely heavily on GWCL developing capacity for dealing with the flow of information within and outside the organisation. The ability to deal effectively and efficiently with such information will be a major factor in enabling GWCL successfully play its new role of a sector developer, monitor and assets manager. GWCL must acquire capacity to collect accurately, speedily and cost effectively large amount of data and process it quickly to track performance in the areas ceded to the operator and other segments of the urban water sector." (GWCL, 2006a: 46)

The modified operation of GWCL and associated requirements are located within the conditions experienced by the company, characterised, similar to the regulator, by shortfalls in financing, technical capacity and human resources. GWCL recognises that "in addition to catering for sector wide financial monitoring issues, GWCL needs to sustain its own viability through sound financial structures and effective financial management", and therefore "the continuous declining financial health of the company has part of its source from

poor financial data capturing and reporting" (GWCL, 2006a: 23). The condition of the company derives therefore not only from issues associated with low investment levels and increasing demands on its services, but also from poor internal performance particularly regarding financial management. A review of the capacity of GWCL at the initial stage of PSP notes the company's weaknesses:

"Poor management practices as per best practices; poor MIS [management information services] and other logistics; low performance standards relative to best practice in developing world, especially in staff numbers; poor staff and skills development in financial monitoring generally; poor remuneration of staff in general; inability to attract and retain high calibre of staff in general and especially in ICT, accounting and finance, and chemistry; poor and limited skills development in ICT, monitoring and evaluation, and consumer education." (GWCL, 2006a: 7)

This inadequate capacity in various aspects of GWCL can only be assumed to have a similar negative effect on the operations of the company as those conditions have in the operation of the regulator. The paucity of data available from GWCL permits little analysis of their operations and capacity to undertake revised functions through the period of PSP. The very fact that no Annual Reports or financial data has been made available from the company from 2004 onwards is perhaps a reflection of their capacity to administer service provision as a state holding company.

The same factors which inhibit the capacity of the regulator and GWCL are similarly noted with regard to sector ministries. Where previously civil service occupation had a degree of prestige and commensurate salaries and privileges, it has been the case in Ghana that such roles no longer have associated benefits (PUWU representative, 2009; WD Consultant, 2009). Remuneration has not kept pace with that available in the private sector, nor even with that of sector institutions outside the ministries, such as the regulator or state company. Furthermore, perks associated with civil service occupation is no longer appealing, due to, for example, the state of repair of housing which is attaché to certain roles (the consideration of a Water Directorate Consultant):

"... the thing is here with the sector institutions, the salaries are much higher than in the public sector itself. For example, if you take an engineer at GWCL or CWSA, their salary would be three times higher than an engineer if he was working in the Ministry itself. It creates a kind of a problem for the Ministries, because they cannot recruit anybody, they can only recruit people who are newly educated, because as soon as they have been there for a little while and they think that they are better they will try to get another job. Three times is a lot of difference, so an engineer here in this Ministry for example is getting between \$150 and \$200 a month – you can't live on that, especially if you have a family, you can't." (WD Consultant, 2009)

Summary

The capacity of institutions, in technical, financial and human resources terms, inevitably determines the environment within which a PSP contract functions. In the case of Ghana it has been illustrated here that agencies which provide this institutional environment for PSP typically experience deficits in these various aspects of their operation. The consequences of these shortfalls may be in the form of the diminished ability to monitor the service provider, in the case of the regulator, or the incapacity to administer the financial management PSP, which in the case of GWCL would include the monitoring of revenue transfers etc. from the operator. Such institutional capacity providing a framework is necessary for the functioning of contracts, for example in the ability to regulate a company operating in a sector characterised by natural monopoly. The potential consequences of deficit in capacity in the case of Ghana demonstrates the significance of the institutional environment for the operation of PSP contracts, significance which is of course notably absent in the theoretical rationale for privatisation.

The failure to ensure the requisite capacity for the administration of PSP is a significant limitation in the implementation of the PSP programme. The intention to establish an independently operating private sector, free from interference from the public sector and government, is paralleled by a failure to consider the continued relevance and importance of this institutional environment in the water sector in developing countries. This is coherent with, and may be derived, from the underlying theoretical rationale, a negative view of the capacity and nature of each of the public sector. Universal service provision, also contradictory to the theoretical framework, is not considered at this basic level. Thus regulation as an essential counterpart to PSP in the water sector appears to have been overlooked, with functioning of the agency restricted. Information asymmetry in the operations of the service provider entails the necessary monitoring to ensure performance and contractual compliance, where this is problematic, inherent transaction costs are increased. The relation of this evidence to the rationalising theory will be taken up in greater detail in chapter eight.

6.5 Data reporting

The adequate transfer of data between operator and grantor, and grantor and regulator, is necessary for the functioning of PSP as intended, for the monitoring and regulation of the private company active in a monopoly sector. In the case of Ghana, it is intended, through the structuring of the contract as being between grantor and operator, that the private operator has no formal interaction with any other sector institutions. Regulation, therefore, is of the grantor and only indirectly the private company (PURC representative, 2009). The state holding company is further subject to performance contracts administered by the State Enterprise commission, and the private company subject to auditing performed by the technical auditor of the contract. The operation of PSP may therefore be

impacted upon where data reporting in these various relationships is inadequate.

In the case of Ghana, the management contract requires for periodic reporting on the part of the private operator to the grantor. It further requires for information to be made available to the technical auditor where this is necessary:

"SCHEDULE 3: PERIODIC REPORTING REQUIREMENTS

A. GENERAL PRINCIPLES OF RECORDING AND REPORTING

[...]

(b) The Operator shall submit such reports as requested from time to time by the Grantor. As a minimum the following routine reports shall be submitted to the Grantor:

Title	Frequency
Annual reports including audited	Annually
accounts	
Collection and costs summary	Quarterly
Market surveys	Annually
Suggested capital investment	Annually
reports	

[...]

(b) It shall be the duty of the Operator to co-operate with Technical and Financial Auditors and to provide them with all such information as they may reasonably require for the purpose of carrying out any investigation." (GWCL, 2005: 35)

The frequency of data transfer is thus established in the contract, there remains however the potential for flexibility on the part of the operator within this regime. In particular, the consequences of delayed or non-submission of data are not considered in the contract. This eventuality is recognised in a state holding company consultant's review of the contract when in its initial stages:

"... no penalty is given for times when the operator either fails to provide information required or provides it beyond the time required or inadequately provides it. Literature on best practice indicates that one of the factors cited for the failure of PPP in Conakry, Guinea is the consistent failure of the operator to provide the public regulator with the required information on timely basis. One of the reasons given for the success of PPP in Senegal is the stringent penalty applied for failure to report regularly and meet agreed performance targets. There are lessons for Ghana. In the current case where there is no penalty for non-submission of reports of late submission of reports, the consultant recommends that the matter be raised with the PURC and it is agreed between the parties that all routine information (which should be mutually defined) should be put on line and made accessible to the grantor within 24 hours of its availability within the operator's organisation." (GWCL, 2006b: 48)

The ambiguity of the contract with respect to data reporting is thus recognised in early stages of the PSP programme. It is further recognised here the potential consequences for the ability of the regulator to monitor the activity and performance of the private company – which would be indirectly through GWCL in the case of Ghana. In addition to the potential impact on the regulatory function, the impact on the ability of the state company itself to undertake its own responsibilities, vis-à-vis its own monitoring agencies, is recognised:

"Critical success factors and project risks: [...]

5. Though under the contract no penalty is attached to non-reporting by the operator as the contract does not provide for it, and understanding of the imperative of monitoring reports must be worked out to enable GWCL meet its monitoring mandate to other stakeholders such as GoG [Government of Ghana], SEC [State Enterprise Commission], and PURC, among others. Can GWCL that has a timeline to meet under its Performance Contract to report to the SEC or PURC, plead successfully that the operator has failed to report at all or on some given items or not timely enough? This issue must be dealt with early." (GWCL, 2006b: 2)

Data transfer from the operator to the grantor is thus recognised as a matter which may have repercussions for the operation of the contract as intended. In practice, due to the scarcity of information available from the state company, the degree to which the operator has complied with the requirements regarding reporting of data is not clear. Nor is it possible to ascertain whether the operator has taken advantage of the ambiguity of the contract in terms of penalties for late or non-submission. It is possible however, utilising the report of the technical auditor following the first year of the contract, to get an indication of the data transfer relationship between grantor and operator. Subsequent to a 'workshop' held between the parties, which provides a basis for some of the auditor's report, the following are noted as 'problems' in the contract to date:

"Difficulties in communication between parties; slowness in application of national procurement procedures; problems with interpretation of the management contract; delays in report submission by GWCL; long lead time in grantor's decisions; lack of information to operator on new planned infrastructure." (Fichtner, 2007: 3-1)

Subsequently, the following improvements are suggested:

"GWCL submits all reports on time; operator submits all reports on time; format for reporting agreed and also implemented; good communication between partners (regular, beneficial to both, quality information on time)." (Fichtner, 2007: 3-2)

The requirement for sufficient information flow between parties is thus established, and this highlights a further oversight in the contract for PSP. The potential for the restricted information flow from grantor to operator, necessary

for the operator to plan for future service provision, to inhibit the performance of the private company is acknowledged here, but absent from contractual terms.

Regarding data flow to the regulator, necessary for the monitoring of the performance of service provision, it is intended that the grantor provides information directly to PURC. In practice however, this is only one aspect of data flow to the regulator. In performing its role in tariff-setting, PURC requires verified data from GWCL. However, in terms of day-to-day monitoring of operations, PURC in fact receives data directly from AVRL: "The information from AVRL, we get it on the blind side, because the information should go to GWCL, [...] we get monthly reports from AVRL, for our own operations" (PURC representative, 2009). The direct relationship established here between regulator and operator, outside that envisaged in the contracted relationships, aids day-to-day functioning of the PURC:

"So we requested, now we are of the technology age, you can copy what is sent to GWCL. So we get copies of those reports here, just for our information and maybe if there are some issues we can take it up with them. We get monthly reports, then if there are special situation reports, we get them. [...] We have about 82/85 water systems, there is a system which is three parts – at times they can count it as one, at times they can count it as three. ... Out of these 82 water systems, about 4 of them gives you about 80% of production of GWCL. Accra is one, this is one system which we request for daily situation reports, which gives you an idea of the production levels, various problems in the system, which enables us to respond to consumer issues. For example if there is a plant break down, because of that water is not being produced, and because of that water flow has been interrupted somewhere – from the daily situation reports you have an idea. Then from the regulatory point of view, we can respond adequately to the consumer concerns. So we get daily situation report through electronic means." (PURC representative, 2009)

It is further suggested by the regulator that disputes between the grantor and operator regarding data contributes to delays in submission of verified data to the PURC (ibid.). To what degree this derives from the non-establishment of baseline data for performance evaluation, from the sub-standard facilities and metering present in the sector, or from the lack of capacity within the grantor to administer the contract – issues described above – is not clear.

It should also be noted that evidence in Ghana suggests that the operations of the private company have included the development of public relations strategies which modify the relation of the service provider with the public and other NGOs and community groups. Evidence from these groups suggests public relations strategies are different from those of the state company, with the latter typically having conducted operations in a closed manner, with little data released or interaction with the broader public (NCAP representative, 2009; CONIWAS representative, 2009). As has been noted in section 6.1 above, data produced by GWCL has typically not been made public, even where required in the form of annual reports, and this is coherent with the

more general strategy of public information being regarded as private (ibid.). Contrary to this, AVRL has engaged with NGOs in demonstrating the changes to be introduced by the private sector. This has included new data measurement (GPS technology), new training for staff, new flexibility of interaction with customers, and new modes of service provision in peri-urban areas (NCAP representative, 2009; CONIWAS representative, 2009; AVRL, 2009b/c/d/e). While this interaction is welcomed by NGOs in the water sector (CONIWAS, 2009), it is also true that this interaction is part of a means of improving perceptions of the private sector. This is apparent in certain press reports where the operator associates the activities of a separate charitable organisation with those of the private sector:

"Mr Martey [Communications Manager of AVRL] said it was important for the public and the critics of AVRL to appreciate the fact that the final decision on major investments in the urban water sector rested solely with the GWCL Entity Board. He added that it was therefore improper for critics to hold AVRL responsible for 'not doing anything to improve the urban water supply system'. Mr Martey, however, noted that even though AVRL was not required to do so, the company had undertaken some major non-contractual capital works using some of its own operational funds from revenue collected and from a Dutch charitable fund. [...] 'We have also delivered Water for Life Charitable Foundation projects serving some 48,000 people across the country and have also strategically placed 'Polytanks' by the roadside in deprived areas to serve some 10,000 people." (Modern Ghana, 2009b)

Summary

The issues noted here regarding data reporting and transfer between agencies within the water sector in Ghana demonstrate the potential impact of inadequacies in this area on the capacity to monitor and evaluate PSP contracts. Ambiguity in the PSP contract in Ghana has contributed to the deficiency in data transfer between agencies, and this has been compounded by the absence of penalties for late or non-submission of data. Capacity of institutions, whether technical, financial or in human resources terms, together with other contractual shortcomings such as the non-establishment of baseline data, has no doubt contributed to delays in data transfer. This is particularly so with respect to the grantor, where delays in data reporting force workarounds to be established between operator and regulator. It is notable therefore that where contracts are not complete, with ambiguity of terms, or absence of penalties, there is potentially negative impact on the performance of privatisation as anticipated. Furthermore, where data reporting and transfer is insufficient, the potential for institutions to enforce contractual terms, or regulate operators, is undermined.

The particular structuring of the PSP in Ghana appears to accentuate such problems in the implementation of the programme. The indirect and mediated relationship between regulator and service provider contradict the intended means of operation. Together with the problems of capacity seen in sector institutions, the structuring of the programme in Ghana undermines the

potential for the functioning of the regulator – with repercussions for the effecting of monitoring and improved performance as intended through the regulation system in the water system. In addition, the structuring of the programme in Ghana entails further substantiation of aspects of critique of the theoretical framework: residual rights of control are further assigned to the private operator; monitoring is problematic and obfuscated, increasing transaction costs; multiple principals are incorporated in implementation; and, information asymmetry is critical in the execution of the programme in these various respects.

Conclusion and discussion

It has been the intention of this chapter to outline the technical factors present in the programme of privatisation in Ghana that contribute to the divergence in operation and performance from that envisaged in the theoretical rationale for the programme. While this performance is not extreme relative to other cases of privatisation, it is consistent with the trend for divergence from that proposed, with the private sector returning performance to levels achieved previously under the state provider. Beyond quantifiable performance change, what is more important in the determination of the implementation of the programme, and the divergence from performance and operation as proposed, is the incidence of dispute and renegotiation, a trend with which the Ghanaian case is further consistent.

It has been maintained here that there are various factors of a technical nature which contribute to this characteristic divergence in performance and operation. Most significantly these include those factors relating to baseline data and control by the operator of revenue accounts. The failure to establish baseline data before implementation derives from the condition of the facilities of the service provider, a fact acknowledged by those authoring the contract. It is further acknowledged that the potential to establish complete baseline data ex-post is unlikely, for the same reasons, with the contract therefore essentially An incomplete contract was therefore reduced in scope from the start. recognised, as was the inevitability of continued influence of incomplete and asymmetric information. Regarding revenue accounts and RRR funding, this aspect of the project was intended to offer financial independence to the operator. In practice, the result has been that the company has been provided with an avenue by which they can operate inefficiently, to the cost of the grantor and ultimately the consumer. Without stringent contract terms and without the means by which to control the activity of the company, this situation has led to the reduction of revenue accruing to the grantor. Furthermore, where the operator has been allowed the freedom to determine 'snag items' in service provision, it has in effect been given reign to determine the scope of the contract, eliminating those items considered problematical. These factors combine with a shortfall in the capacity of sector institutions to administer and regulate the contract, and issues relating to data transfer and reporting which negatively affect the efficiency of operation in a natural monopoly environment.

As has been noted in the consideration of each of these aspects, there is an apparent correlation with certain features of the critical appraisal of the underlying theoretical rationale for privatisation. This appraisal has been considered with regard to the weaknesses, inconsistencies and problematic assumptions with the theoretical framework itself, and subsequently where this has been applied to the water sector. The evidence presented in this chapter suggests that the structuring of implementation of privatisation in Ghana is informed by the underlying theoretical rationale: it is intended for the private sector to operate with minimal intervention or the public sector and government; in parallel, there is an apparent failure to consider the institutional environment critical to the operation of PSP in the water sector; and, rentseeking, through the flexibility permitted to the operator, is normatively judged to be permissible. Information, its incompleteness and subsequent asymmetry, plays a significant role in the implementation of the programme: baseline data is not established ex-ante; failure to specify, and subsequent problematic monitoring of, financial disbursement and transfer is a basis for dispute; and, insufficient specification of data reporting undermines contract operation and The institutional environment plays a significant role in the determination of the implementation of the programme: consultation and agreement, mediated by an auditing agency, is designed into the contract; various issues (baseline data, definition of snag items, revenue transfer etc.) require the sufficient capacity and coherence of the institutional environment; and, the inevitable intervention of the regulatory agency in the water sector, as well as other intervention through sector institutions where political sensitivities determine this. Various principal-agent problems follow: typically of a moral hazard nature, with numerous instances of potential opportunism arising from the particular structuring of the programme in Ghana; and, potential adverse selection where bidding parties may have anticipated such potential opportunism ex-ante. Transaction costs associated with the implementation of the programme are therefore not inconsiderable. Efficiency of operation proposed to be inherent to the introduction of the private sector should therefore not be assumed.

Numerous aspects of the critique of the rationalising theory are thus evident in PSP in Ghana, and they furthermore underlie the performance and operation of the programme diverging from that proposed, contributing to the dispute and renegotiation process. These connections between the critical appraisal of the theoretical rationale for privatisation and the issues encountered where the programme has been implemented in Ghana are taken up in a more extensive analysis in chapter eight. This follows an assessment of the political, social and cultural factors which, in addition to those technical factors described here, contribute to performance and operation of PSP.

Chapter Seven:

Extra-economic and institutional factors affecting the performance and operation of PSP in Ghana

In addition to those technical factors outlined in the preceding chapter, there are further factors of a social, political and institutional nature that contribute to the divergence of performance and operation from that proposed within the rationalising theory. In part these derive from those technical factors, such as ambiguity in the PSP contract, which have subsequent repercussions where contract partners are required to cooperate. In addition, there are broader social, political and institutional factors, historically specific and dependent, which determine the environment within which PSP operates. Such factors thus determine the local interpretation and adaptation of the PSP programme, and subsequently the performance and operation of the contract within this environment. This chapter considers these various factors, with a special emphasis on their import in the case of Ghana, and its 'hybrid' form of management contract.

As with any management contract, that implemented in Ghana determines the continued existence and operation of two parties: the private operator responsible ostensibly for the management of services; and the state holding company, responsible for investment, ownership, expansion of services and so on. It is thus necessary for these two parties to having a working relationship through the period of private operation, with terms of this relationship determined by contract. Where contracts are incomplete however, and this has been shown in chapter six to be significant for the case of Ghana, the terms of interaction between contract parties are ambiguous with potential implications for the performance and operation of the contract. establishment of a 'hybrid' form of contract further impacts on performance and operation, with an exaggeration of the import of the grantor-operator relationship, with further implications in terms of the operations of the private sector where working within the public sector framework (seen in, for example the staffing arrangements). Beyond these extra-economic features manifest in relationships and organisational structures, it is necessary to consider the environment in which the PSP contract operates, and the historically derived modes of institutional organisation and governance which provide a defining dynamic. Contractual performance and operation depends on the assumed existence of a coherent institutional environment, in terms of, for example, procurement procedures, appointments and staffing, and a culture of commercial operation. Historically conditioned attitudes, approaches, and organisational culture contribute to the performance and operation of the contract, and provide a force for the local reception and mutation of attempted institutional reforms.

This chapter considers, firstly, the particular form of implementation of PSP in Ghana, the necessary consultation between parties, the associated import of working relationship and the extra-economic factors which determine the

nature of relationship established. Secondly, the operation of the private sector within the public sector framework is described, with purported inherent efficiency being inhibited by problematic implementation and the continued relevance of the public sector. Finally, the chapter considers the nature of the programme as implemented with reference to the broader PSP agenda and the developments and trends therein. It is described here the coherence of the Ghanaian PSP programme with those others previously established elsewhere, and reform programmes associated with such PSP programmes: PSP in the water sector in Ghana demonstrates a maintained coherence with underlying economic theory, with, typically, rhetorical commitment to revised sponsor approaches incorporating greater consideration of institutional relevance. A concluding discussion indicates connections between the findings described in the chapter, and the critique of the underlying theoretical rationale for the privatisation programme (to be taken up in greater detail in the following chapter).

7.1 Extra-economic determinants and the particular form of PSP: the grantor-operator relationship

It is noted in chapter two that where the theoretical framework underpinning privatisation fails to consider incomplete information, and subsequently contracts, there may be significant implications in terms of the relevance of extra-economic factors in the determination of those areas of activity not comprised within these contractual terms. It has further been demonstrated in the preceding chapter that, in the case of Ghana, there are various instances where such deficiencies are evident. It is the purpose of this section to consider the operation of PSP where this is the case – here in terms of the grantor-operator relationship, and the import of extra-economic factors in resolution of factors not determined ex-ante. The focus of this section is, furthermore, on the particular mode of implementation in Ghana and the exaggeration of the import of these extra-economic factors in determining operation and performance.

Factors contributing to the nature of grantor-operator relationship

The PSP contract in the Ghanaian water sector has been designed in such a way so as to allow the operator to execute their contracted responsibilities without undue intervention or delay on the part of the grantor. Through the process of the development of the management in Ghana, the potential for the grantor to impinge the capacity of the operator to meet contracted targets was recognised. For example, World Bank representatives note the importance of allowing the operator the various functions of service provision to be free from undue intervention, and thus allow the assessment of performance against contracted targets:

"Now, because of this hybrid we have that lease where you have more or less given you systems, your operations, you have seconded your staff and everything to them. So at some point it was felt that, when we were discussing these things, it was felt that, since they have this management

contract lease the two should be signatory. Now, they began to think that, what about, if for some reason there is some kind of strife or some misunderstanding and GWCL says that 'look for this one I'm not going to sign' or there's a delay, [and] that delay in signing is going to affect the operator. But here you have given him targets, you have given him everything to operate, so give him a free hand to be able to operate so that he doesn't have cause to complain that because of this. [...] So the contract was couched in this manner so that as much as possible each will work independently..." (World Bank representative, 2009)

In reality however, as noted in the previous chapter, the 'hybrid' contract implemented in Ghana establishes various additional factors which provide a basis for dispute between the contract parties. Where the contract allows for the administration of revenue collection and expenditure by the operator, combined with the problematic utilisation of RRR funding, there are grounds for potential dispute between parties. Evidence indicates that the degree of transfer of revenue to the grantor, intended to improve sustainability and provide funding for investment, has been limited. This provides one aspect of the contract which contributes to dispute between the parties:

"GWCL's case is different, there is the operator and the grantor. operator has to do certain things in consultation with the grantor who has been described as inefficient. The grantor has no access to revenue, any money apart from what has been stipulated in the contract as coming back from AVRL after he has collected all the monies. Because AVRL is in charge of revenue and the grantor is in charge of expansions and developments and all these things, still from the revenue. Now, if AVRL decides to do other things with the revenue to justify why there are no excesses. [...] So these are the knotty things in the contract that are creating the problem. There is always tension between AVRL and GWCL. [...] There is a range of payments that have been listed as to what they have to transfer to GWCL in relation to each one, its been stated in the contract. Then later on there are some differences also to be passed over to GWCL. But how do you create the difference after paying the statutory ones? AVRL could redirect it to other areas, AVRL could say that operationally they have not been able to make up a difference. And that can create some conflict between GWCL and AVRL." (PUWU representative, 2009)

Further aspects of the contract intended to provide the private company with the independence to operate services without intervention or delay provide additional grounds for dispute between parties, and subsequent breakdown in their working relationship. For example, the existence of the facility for the operator to identify 'snag items', which are effectively removed from the scope of the contract on the agreement of the contract auditor, entails the attempt at such by the private company (GWCL, 2005; Fichtner, 2007). The non-specific information provided to the auditor on the snag items identified by the operator substantiates criticism from the auditor, and further provides grounds for the subsequent failure in cooperation between parties. The assessment by the technical auditor in 2007 provides further evidence that the ambiguity in the

contract, relating to information transfer, contributes to the poor working relationship of the parties:

"At the beginning of the mission the Technical Auditor could state that between the Grantor and the Operator there was a certain degree of aloofness, mainly caused by a lack of communication. The information presented by both sides did not meet the requirements for taking evidence in order to proceed to the certification of baselines and snag items." (Fichtner, 2007: 3-1)

In relation to this, the failure to establish baseline data is a continuing obstacle to the operation of the contract as intended. With levels of non-revenue water being a significant issue in service provision in Ghana, the lack of baseline data in relation to this factor is particularly noteworthy:

"NRW issue – they have been arguing about it for the past three years, why is that? ... Amount of water produced is estimation, amount of water sent to distribution is an estimation, billing is estimation, and there is so much argument about that." (PURC representative, 2009)

"One of the things they have big problems with, what they call snag items, is about the information on baseline data – its very contentious, and issues about how to even measure the performance of AVRL – it's a crisis thing." (NCAP representative, 2009)

Indeed, the obstacle of baseline data continued to be relevant in 2009, three years into the five year contract. The failure to establish data, and the subsequent contribution of this factor to the contentious relationship between parties, has been the subject of government review in 2009 (GWCL, 2009).

The contract, and weaknesses and deficiencies therein, thus provides a basis for potential dispute between parties and determines the import of extraeconomic factors in the operation and performance of PSP. It should be noted here that the relationship between parties may be further conditioned by the development of the PSP programme in the country. As described in chapter five, the development of PSP in the country extended from 1998 through to the eventual institution of the contract in 2006. A central component of the rationale for the introduction of the private sector in the water sector was the inefficiency of the state company in operating services, as coherent with the rationalising theory. This is true, for example, in relation to the levels of non-revenue water, collection rates, and other factors which contribute to the sustainability of the operation of the service provider (World Bank representative, 2009). Thus in addition for the need to increase investment in infrastructure, there was a purported requirement for the reform of the service provider itself in terms of the mode of operation implemented. The Urban Water Project takes into account these aspects in the investment programme to be established using World Bank funding, but also in the introduction of the private sector as service operator for the improved, commercial, operation of provision (World Bank, 2004a).

It is apparent through this period of PSP development however, that the state company took a contrary view, and indicated that the purported inefficiency of operation in fact derives from the underlying condition of the infrastructure which provision relies upon. This is indicated in the response of the state company to the assessment by the regulator of the utility in the period 1998-2003. Comparison with potential performance of a future private operator would, according to the state company, be misleading considering the condition of infrastructure available:

"Reducing water losses (technical and commercial) to 25% of water produced has never been a target set for GWCL in view of the age of the infrastructure. With the existing infrastructure, GWCL's target has been set to progressively reach 40% in 2003 as evidenced by the Performance Contracts signed with SEC over the years. The 25% target was set for a new operator to attain after being in operation for five years after the infusion of capital for replacement of old infrastructure. The urban water project due to commence in 2005 clearly spells this out." (PURC, 2005a: 21)

Similarly, improvements in production are undermined by poor infrastructure downstream:

"Volume of water produced increased by 11.8% but water sold remained at best static. From reports, water production varied inversely with water sales simply because of the aged infrastructure. With weak transmission mains, any increase in pressure resulting from increased water production ended up with more pipe bursts. That was exactly what happened after the completion of the Weija expansion in late 2001. The issue was more prevalent in 2002 when with a water production of 204.6 mm3, water sales recorded 85.08mm3. This phenomenon was in fact reported to PURC. This is why the replacement of old and weak mains and rehabilitation of water supply systems are a major component of the urban water project due to commence with an injection of \$103m over a five year period starting from 2005." (PURC, 2005a: 22)

Performance of service provision was thus considered by the state company to be significantly due to the condition of infrastructure available.

Of course, the finance to be provided for the improvement of infrastructure by the programme sponsor, the World Bank, is linked to the introduction of the private sector as the means to reform purported inefficiency in operation. Thus, where infrastructure financing is required, there is an associated validation of the private sector as counterpart solution. The judgement expressed by the state company is consequently a counterpoint to the characterisation of the company as inherently inefficient and incapable, a characterisation utilised in the rationalisation of PSP introduction (World Bank, 2004a), rather expressing the concern that the necessary intervention is in the form of infrastructure investment to reach performance targets deemed necessary:

"Because for the government to justify the need for an operator, they demonised the GWCL management as ineffective, and make it look like it is they who are responsible for all the shortcomings of the company to justify why you should get your funding and bring in a new operator." (PUWU representative, 2009)

"There was no need to categorically state that, but if you have a group of people managing an enterprise, managers in a particular situation, and say 'hey I think I need someone else to do it better, it means that it's a vote of no confidence [...]. So although it was not stated in so many terms, that's what it meant." (MP, 2009)

Thus considering the necessary introduction of the private sector, this characterisation of the public sector was emphasised in contrast to the concern for the importance of investment by the state company. The differentiation in emphasis for sector reform, for the sponsors efficiency, and for the state company investment, provides an underlying determinant of the nature of relationship ex-post.

Consequences of failed cooperation for the performance and operation of the PSP contract

The relationship between the grantor and operator has been sufficiently poor that after the initial year of the contract, the technical auditor saw fit to establish a system of arbitration between the two parties with the intention of resolving difficulties in operation of the contract:

"At the beginning of the mission the Technical Auditor could state that between the Grantor and Operator there was a certain degree of aloofness, mainly caused by lack of communication. The information presented by both sides did not meet requirements for taking evidence in order to proceed to the certification of baselines and snag items. To relieve the situation and bring movement, the Auditor requested the Grantor to invite the acting parties to carry out a brainstorming. The Technical Auditor offered to moderate the event as a neutral party. The Grantor agreed to this proposal. For reasons of undisturbed execution, the workshop was carried out in a neutral place." (Fichtner, 2007: 3-1)

The degree to which the relationship between grantor and operator has changed since this early period of the contract cannot be absolutely determined without access to further technical auditor reports. However, the evidence from the grantor suggests that those factors contributing to the problematic relationship between parties continues to, at least, mid-2009:

"Status of the Management Contract:

- The management contract is in its third year of implementation.
- There are challenges extra high customer expectation, interpretation, GWCL-AVRL relations, baseline setting, procurement (main ones)

• The removal of Challenges within the contract was the main focus of a review (MTR) by Government – 5-6 Aug. 2009." (GWCL, 2009: 28)

This admission by the grantor, combined with evidence from others in the sector, suggests the continuation of the problematic relationship.

Indeed this is confirmed by press reports of interaction between contract parties in 2009. With performance of the PSP programme being scrutinised by politicians, NGOs and community groups (e.g. Boakye, 2008; Daabu, 2009; ISODEC representative, 2009; NCAP representative, 2009), resolution of these various issues was the focus of the 2009 review. The grantor considers there to be 'bottlenecks' to be removed from the contract, with 'distortions' to be 'streamlined' (Daabu, 2009). The grantor and operator are equally aware of the potential harm resulting from negligible change in performance through the PSP programme. Each party has sought to shift responsibility to the other, citing investment responsibilities and failure to improve management as underlying causes:

"[Mr Martey, communications manager of AVRL] told the Ghana News Agency in Accra that AVRL was enjoined, basically, to manage the existing urban water treatment plants more efficiently and make it more financially viable by reducing non-revenue water by 25 per cent over the five-year contract period. He said the procurement of capital equipment and other major capital investments rested with Ghana Water Company Limited (GWCL). "Without any prejudice I think it is important to say that the public should be asking GWCL, instead of AVRL, what they are doing about the expansion and rehabilitation of the urban water treatment plants, since that is what will help in the production of more potable water," Mr Martey said. [...] He added that it was therefore improper for critics to hold AVRL responsible for "not doing anything to improve the urban water supply system"." (Modern Ghana, 2009)

In seeking to counter this, the grantor seeks to emphasise the responsibility of the operator in improved performance, regardless of investment made by the grantor:

"Michael Agyemang, Public Relations Officer (PRO) of GWCL, also told the GNA that it was erroneous for AVRL to keep passing the buck to GWCL when in fact AVRL's five-year management contract clearly separated the performance of AVRL from expansion works and investments by GWCL. "Section 5.1.6 of the management contract clearly states that the performance of the operator (AVRL) shall not be tied into the investment programme of the grantor (GWCL)"." (Modern Ghana, 2009)

Problematic implementation of the PSP programme, and the grantor/operator relationship being critical to this, therefore has an associated public relations programme deemed necessary by each party for the maintenance of representation in the public sphere.

It is interesting to note that the public face of the disharmonious relationship between grantor and operator finds a basis in the roles played by each party in the particular form of PSP established in Ghana. This returns us to the requirement of both investment and improved operation as necessary to the improvement of performance and operation of service provision. The division of responsibility between parties provides an obvious basis upon which residual rights of control are based, and upon which claims regarding performance may be based. Where responsibility for each is blurred and disputable, as determined in this case by the standard of contract, such claims become a manifestation of this dispute. This process results in apparent resentment within the state company, observed by various actors in the sector. Relating to the separation of responsibilities noted above, this may be with regard the public perceptions of performance of the programme, and the derivation of this from investment or efficiency:

"For example, AVRL can make claims if GWCL does improvements – they repair a new water system – it goes to the credit of AVRL. But when the system is failing, AVRL is quick to point out that it is the responsibility of GWCL. So they take credit even when it is not due to them but when its collective damage, AVRL pull out and say this is GWCL. So because of that there's so much tension between the two [parties] and there have been two meetings to resolve this, outside Accra, [to resolve the] crisis, the tension between GWCL as the grantor and AVRL as the operator." (NCAP representative, 2009)

"GWCL is supposed to do the asset development, build new treatment plants, redo the networks and when they finish they hand it over to AVRL. And who will then take the credit when the water is flowing to people? AVRL. ... So if I want to sabotage you, I will not do the investment." (PURC representative, 2009)

The reality of investment in infrastructure under the Urban Water Project demonstrates that there is an apparent delay in disbursement of such funding. World Bank (2009) data shows that of the \$109.15m allocated to this component of the project, \$37.74m has been disbursed with \$71.31m (65.3%) remaining undisbursed. The responsibilities of each party to the contract are subject to the effects of sequencing of implementation of financing for such responsibilities. While management of service provision has been affected by delays in financing - disbursement of RRR funds - control of the revenue account permits the private company to finance and maintain operations with little effect. Contrary to this, responsibilities of the state company are affected by lost revenue stream where this is negated due to activity of the private operator (chapter six), by delays in finance disbursement for infrastructure, and by the inevitable time taken to implement infrastructure improvements and consequent effects thereof. Concerns evident on the part of the state company regarding public perceptions of the effectiveness of each contract party through the course of the programme therefore derive from this structuring of responsibilities and the likely delays in the realisation of improvements. This concern is evident in the perceptions of the programme of those active in the sector, where, without investment, improvements in operation could be disputed:

"The problem as I saw it was that the management of GWCL did not totally agree with the way [PSP] actually turned out in the end, because you could see that they were not very eager to cooperate and they didn't, it was a perception, that they didn't want it to be a success as they didn't want anybody else to prove that they could run it when [GWCL] couldn't. That was the perception that you got, and everybody that you could ask would say it – of course not themselves but others would say that, that's what [the Water Director] would also tell you. So you had this feeling that the cooperation spirit was not really there..." (WD Consultant, 2009)

It may be maintained that the relationship between parties, and the manifestation in concerns regarding responsibilities as noted above, is coloured by the prioritisation and sequencing of components of the Urban Water project. Capacity of the remaining state company is negatively affected, relative to the responsibilities of the private sector, by the sequencing and likely disbursement of financing through the period of the five year management contract.

Summary

The necessary relationship of the grantor and operator, the import of which has been increased through a sub-standard contract of a 'hybrid' form, is thus coloured by these various issues, the perceptions of each party and the performance improvements resulting from divergent responsibilities. The antagonistic relationship between the parties, demonstrated in their contrary public statements regarding performance and responsibility, has had real consequences however in terms of the resolution of factors not finalised ex-ante. This is true in terms of, significantly, the establishment of baseline data – that which is necessary for the application of penalties and incentives made necessary where the private sector is active in a monopoly setting.

It is further apparent from the grantor/operator relationship described here that the PSP programme as instituted in the Ghanaian case provides a significant illustration of the critical nature of the social and institutional environment in performance and operation. Beyond the abstraction of the economic modelling underlying the rationalisation of privatisation, it is evident that the market resolution of water service provision in practice incorporates significant instances of incomplete and asymmetrical information, associated substantial transaction costs, and the importance of the institutional environment in resolution. The intended independent operation of the private sector aligns with the idealised structure associated with this underlying theory: the efficiency of the private sector is realisable where interference of the inherently inefficient public sector is limited. In practice what results in the implementation in the Ghanaian water sector, with a foundation in the incomplete and asymmetric information existing ex-ante and ex-post, is the increased importance of interaction of the contract parties. Where the contract fails to incorporate all aspects of operation of the service provider, the resolution through consultation between parties increases in importance. As has been demonstrated here this resolution is inhibited by the antagonistic relationship between parties in this case: the implications of such human and social interaction are not considered or encompassed by the underlying theoretical framework. The transaction costs associated with the attempted resolution of the problems encountered may be significant: in the Ghanaian case the resolution of problems has extended to the third year of the five year contract, and required the intervention of mediating parties (the auditor and government). These various aspects of performance and operation of water service provision in Ghana, and their connection with the underlying theoretical framework of privatisation is considered in greater detail in the following chapter.

7.2 Extra-economic determinants and the particular form of PSP: private sector within the public framework, and constrained 'flexibility'

Further to the implications of the grantor-operator relationship for the operation and performance of PSP, other extra-economic factors impinge on the purported improvements of the programme. Just as the nature of this relationship demonstrates the import of factors not incorporated within contracts, it is the purpose of this section to consider the implementation of the programme and the reorganisation associated with privatisation, and the import of modes of organisation of the institutional environment which impinge on this process. It will be maintained here that the failure to consider the continued and inevitable intervention of the public sector in water service provision entails the parallel operation of different modes of organisation, not considered in the rationalising documentation and theory. The particular mode of implementation, of a management contract, and one of a 'hybrid' form, exaggerates the effects of this process.

PSP and inherent benefits of commercial operation

The establishment of a management contract in the Ghanaian water sector entails the emphasis on purported inherent efficiency of the private sector in the operation of the service provider. The parallel inherent characteristics of the public sector are considered by those proponents of the programme to be inhibiting the sustainability of the service provider. It is intended therefore that through the introduction of the private sector the mode of operation of the service provider, shifting emphasis to commercial operation, and thereby improving profitability with such improved profit being transferred to the state company for infrastructure investment. This idealised structuring of management contracts is thus coherent with the underlying theoretical framework rationalising privatisation: purported inherent characteristics of the individual have diverging results where in public and private sectors – negative and positive, respectively, for total welfare.

The nature of the public service provider in Ghana is conceptualised by programme sponsors as being oriented not towards commercial operation but,

firstly, to engineering operations. World Bank project documents consider necessary a "re-orientation of the company to emphasize commercial and managerial expertise, as well as the current engineering skills is required" (World Bank, 2004a: 1). Thus the purported inherent characteristics of the individual in this context are not profit-oriented, to the detriment of commercial sustainability. Similarly, the individual in this context may further be oriented towards activity defined by political patronage, with capacity being negatively affected by loss of staff to outside agencies, and poor remuneration, as other studies note:

"Weakness of management could also in part be ascribed to the fact that many of the GWCL urban systems were headed by engineers who had little or no training in management skills. Some observers maintained that they had the habit of mixing management and technical issues. In addition, the "brain drain" from Ghana has been posing a cross-cutting challenge which also affects the water sector. On the one hand, well qualified staff were hard to find in large numbers in the public services. On the other hand, the GWCL was labelled an overstaffed "typical state enterprise (with) underemployed employees that were recruited according to patronage principles. There are many drivers where there are no cars; at the pay points you see 8 people where one or two would be sufficient" (Opoku-Agyemang, 2003). According to a consultant study, 50% of GWCL-staff were considered to be redundant by industry standards (Nii Consult, 2003). In general, employees of GWCL were paid badly and had little incentives to repair, maintain, or to obtain material and equipment. There were no effective internal sanctioning mechanisms." (Fuest & Haffner, 2007: 181)

The mode of operation of the public sector is seen by those within the sector as deriving from the historical development of the civil service in the country:

"Well it is a public service, you see GWCL is supposed to operate like a private company, owned by government. But then, the historical evolution, pre- and post-independence it was part of this ministry directly responsible to the minister, and that kind of thing. So it had a civil service mentality, it was then part of the public works department, where water supply, electricity, all those things were seen as, under the public works department – the responsibility of this ministry. With time, this had to change, but the change has not really engrained in the system, the ability to view your actions as providing service from the private sector point of view. In other words you need to be efficient in delivering services. But again, the fact that government owns [the company], also inhibits the ability of the management to take certain decisions." (Ministry representative, 2009)

Subsequently, PSP should be structured in such a way as to permit the private sector to demonstrate efficiency to resolve such inherent problems of the public sector:

"Experience shows that utilities that can bill, collect and keep their revenues, have their own employees (i.e., that are not civil servants), can employ the

best qualified people and set salary levels free from government interference, and that have the opportunity to develop their own procurement rules will generally perform better than utilities that are under close political control or part of a large bureaucracy. Thus, the Project seeks to deepen the autonomy of the GWCL through strengthening of the regulatory framework, lessening its reliance on subsidies (especially for electricity and debt service) and increasing its commercial capacity." (World Bank, 2004a: 6)

The World Bank as sponsors of the programme recognise the risk associated with the attempted reform of the service provider, in particular the reform of the 'culture' of the organisation:

"Risk: GWCL does not internalize the operational improvements and corporate orientation. Risk mitigation measures: introduction of private operator and infusion of new corporate culture including performance-based instruments. Risk rating with mitigation: substantial." (World Bank, 2004a: 9)

The mode of operation of the service provider, and the reforms associated with the introduction of the private sector, are thus considered to be significant in the improvements to result from PSP. It would follow therefore that the mode of implementation of PSP in Ghana should permit the private sector to alter the operation of the service provider in such a way as to demonstrate such inherent efficiency. It is assumed furthermore, both within the theoretical rationale for privatisation, and the project documentation associated with the PSP in Ghana, that such flexibility is inevitable where PSP is implemented.

Particular mode of implementation: continued relevance of the public sector

Indeed through the development of PSP in Ghana, documentation shows that the programme was intended to provide the private sector with the flexibility considered to be necessary for commercial operation to be established. This is demonstrated in Government of Ghana documentation regarding the project, as well as that of the World Bank. The following passages describe the operation of the private company with regard its staffing and organisational arrangements, thus the organisation that is considered above to be inhibiting the sustainable, commercial operation of the provider. It is considered in these documents, dated 2004, that the private operator would have freedom to organise their operations and staffing, with staff transferred and becoming employees of the private operator:

"Staff: GWCL employees are not civil servants. All GWCL staff will, after the Staff Retrenchment is complete, become the employees of the Operator without interruption in service. All GWCL staff will report to the Operator (after Roll Out in the region where they are assigned), except for those assigned to the GWCL Headquarters prior to the Management Contract Effective Date. The Operator will be free to assign duties, work location and to manage the staff to accomplish the objectives of the Management

Contract. The Operator will manage the staff according to applicable Ghanaian Law and the collective bargaining agreement, including the right to hire, fire and retrench staff." (GoG, 2004b:)

"Operator hires all employees not retrenched. After the World Bank (and GOG, if required) financed Staff Retrenchment Program is completed, then the Operator can retrench workers according to the existing law and union contracts at its own expense." (World Bank, 2004a: 76)

It is further noted however that operation of the private sector, and the whatever modifications are to be introduced through the purported commercial operation of the provider, are subject to collective bargaining agreements established with the relevant union. It is acknowledged therefore that the potential for modification under the private sector is inhibited by this factor.

In addition to this inherent obstacle where the private sector works, under a management contract, with staff previously in the public sector, the eventual form of contract exaggerates this factor further. In reality, the organisation and staffing of the private operator has in fact been determined by the secondment of staff from the state company – contrasting with the transfer of staff envisaged in the ex-ante project documentation. Thus, the contractual obligations undertaken by the state company, and associated staff expectations regarding their future development within the organisation, remain relevant under the new PSP arrangement. In addition, however, whatever modifications to operation may be intended by the private sector, as coherent with commercial operation, they are further subject to the approval by the grantor as staff remain in the employ of the latter. Thus, while the operator may exercise a degree of organisational freedom, they remain subject to the intervention of the grantor, to a degree not anticipated or considered within the PSP development documentation:

"With effect from the Commencement Date and subject to appropriate Secondment Contracts, all the employees of the Grantor listed in the Schedule 6 shall be seconded to the Operator, on the terms and conditions of their current employment with the Grantor (the "Seconded Staff"); notwithstanding the terms of this Management Contract, such Seconded Staff shall remain employees of the Grantor. The salaries of the Seconded Staff shall be determined by the Operator in consultation with the Grantor. During the term of this Management Contract, within the scope of the Applicable Law and collective bargaining agreement, the Operator shall assign duties, work location, manage and discipline the Seconded Staff to accomplish the objectives of this Management Contract. The Operator may recommend to the Grantor the promotion of any Seconded Staff and shall manage and update human resource records and information systems as relevant. If the Operator has reasonable cause to be dissatisfied with the performance of any Seconded Staff or for any other reasonable cause, the Operator may recommend to the Grantor the suspension, termination, and/or retrenchment of such staff. The Grantor may act upon any

recommendation of the Operator, subject to Applicable Law." (GWCL, 2005: 18)

The practical effect of this structuring of PSP in Ghana is manifest in the reorganisation of the service provider proposed by the private sector. The 'culture' that is considered inhibitive by sponsors of the programme, as noted above, provides a force contrary to the proposed reorganisation. Contract and service expectations of employees of the state company are threatened where this reorganisation is proposed, with consequent resistance from the staff concerned. Certain promotion expectations of staff, which may be considered to be component to a "civil service mentality" (Ministry representative, 2009) as part of a hierarchical and seniority based organisation (rather than meritocratic), are threatened by the reorganisation:

"We are almost there in implementing. But we've raised some objections, because, at a certain point when they started and I realised there might be a problem. Promotions have not been effected for a while, and when they bring in these new organograms ... it will not be promotion, it will be conversion and placement, which will not resolve the promotionary issues. Therefore it will come back staring you in the face. The workers were made to believe that this could resolve their promotional problem, because many positions were to be created. When I as a union man told the AVRL management that they should be told that they should be careful - they had some people that supported them in what they are doing, they are to benefit - there was a backlash, with some workers attacking the union with some writing that they didn't even want to belong to the union any more. So we went to the minister to try to explain the situation and got down to some principle to try to implement. Now they have started implementing, and the very things that I drew attention to, have started to come round." (PUWU representative, 2009)

The representative of unionised workers in the service provider here demonstrates the shift in mode of operation being attempted by the private company, with a change in organogram in line with the intended shift from engineering to commercial focus. The change in organogram inevitably affects the prospects of seconded staff, and the union representative notes the resistance and associated delays which follow. Such resentment is consequential of another aspect of the 'hybrid' contractual arrangement established, with the parallel existence of public and private with overlapping responsibilities:

"[W]hat happens if AVRL is not given the contract again? Do we revert back to where we were coming from, do we stay to manage something when the proponent of it is gone? [...] The seconded staff are still workers of GWCL, and the nature of the contract is such that they have been seconded to an operator, because when it comes to the end of the contract two things may happen, three things. Either a new operator is engaged, they retain the old one, or it reverts back to GWCL. So you cannot give all the staff out and finish off with them. GWCL is still there as the grantor, with its particular contract arrangements, so it's a bit complex. So it's just like sub-letting part

of your job to someone and you still being in control, it is not very smooth, its not like a lease arrangement. If you come and you are making serious policy changes, what happens if after 5 years, they don't retain you and there's another company which would want to come in with a different organisational structure – or if they revert back to GWCL. So definitely, you will have problems." (PUWU representative, 2009)

"GWCL started as a department of the ministry, so it behaved like a civil service. Gradually, because of the responsibilities it was made a corporation and now has become a company. But it is still carrying the civil service traits, because it is a public company. Now, there is a big difference between a public company and a private company. So the problem is the new tools and mechanisms and policies that AVRL wants to introduce, are they for private companies or public companies? If they are private company arrangement they are going to have a problem with a company that is basically a public company and that is the issue." (PUWU representative, 2009)

This mode of implementation of PSP in Ghana underlies delays in the restructuring of the service provider under the operation of the private sector. Delays in reorganisation continue through the period of PSP operation, with implementation of the process continuing until at least mid-2009, as noted above by Union representatives, as well as the private company:

"In the year 2008, AVRL realised the need to introduce a new organisational structure to better serve the needs of the key stakeholders, and to help meet the corporate objectives. Among other things, the new structure will introduce a stronger customer and commercial focus. The previous structure was built with an engineering emphasis, and therefore needed to be more commercial and customer focused. Under the new structure, promotion will be based not only on academic ability but also on attitude and performance. The new structure is a modern management structure which is less hierarchical, and places more emphasis on strategies, processes and procedures." (AVRL, 2008)

Press reports indicate that the secondment of staff, and the associated expectations with regard the conditions of employment, have caused various instances of worker unrest through the period of the PSP contract to date. Pressure for the improvement of conditions was evident in the first year of the contract, with purported threats to strike (GhanaWeb, 2007). Such concerns regarding the proposed improvements in conditions continue into the third year of operations, with demonstrations at the headquarters of the grantor (Amevor, 2009).

The efficiency purported to derive from the introduction of the private sector is thus inhibited by the parallel existence of grantor and operator, and exaggerated by the problematic implementation of reorganisation that follows. The move from an engineering-focused organisation to a commercial-focused organisation is considered necessary as a means of improving the sustainability

of the service provider, and the introduction of the private sector is considered the obvious means by which this change in focus may be achieved. However, the particular mode of implementation in Ghana contributes to the delay in realisation of such purported efficiencies, shown here to continue to year three of a five year contract. This is demonstrative of the failure of the proponents of the PSP programme, in line with the underlying theoretical rationale, to consider the institutional environment of privatisation. In this instance such a failure concerns the inevitable role of the public sector in water service provision, which has been exaggerated firstly by the establishment of a management contract, and secondly by the particular form as demonstrated. The change to a commercial and thus sustainable organisation as intended by those sponsors of the PSP programme is inhibited.

Summary

The mode of implementation of the PSP programme in Ghana is here demonstrated to incorporate a failure to consider the implications of local reception, interpretation and transmutation of the policy. It is shown that local variation, in this case with regard the organisational norms of operation of the host environment, may inhibit the operation of the programme. Where universal uniformity in the environment of economic transactions is assumed within the underlying theoretical framework for privatisation, it is shown here that, where contracts are inevitably not absolute, variations in the host environment impinge on the performance and operation of that contract. The particular mode of implementation of the PSP programme in the Ghanaian case has in practice exaggerated the effect of this incoherence. Where the hybrid contract, with grantor and operator working in parallel, entails the secondment of staff from the former to the latter, the flexibility assumed to be natural to the private sector is inhibited, with effects on performance and operation. These issues are taken up in further detail in the following chapter.

7.3 Institutional importance: PSP, institutional capacity and 'governance'

The history of privatisation in developing countries demonstrates, as described in chapter three, a revision of the approach taken in implementation. This revision incorporates a growing recognition of institutional importance for the successful operation of PSP, with more recent programmes incorporating the recognition of at least sufficient regulation, but furthermore the nature of the local institutional environment more broadly. It is the purpose of this section to consider the coherence of the PSP programme in Ghana with this broader trend and reform agenda, and to consider its location within the broader 'governance' programmes being implemented in the country. It is maintained here that while project documentation provides a rhetorical commitment to such reform ambitions, the practical reality demonstrates a more close alignment with underlying theory. Operation of the PSP programme diverges from the idealised form deriving from underlying theory.

Chapter three describes the apparent shift in approach taken by the sponsors of privatisation through the period of the expansion of the programme from the 1990s. This has been conceptualised variously as, for example, a shift to a 'post-Washington consensus' (Fine, 2003a) or 'second wave neo-liberalism' (Smith, 2004), and has been considered necessary for the less problematic implementation and operation of PSP in developing countries. The reification of this shift is apparent in the broader reform programmes initiated in Ghana, described in chapter five. These incorporate a coalescence of sponsor funding under a multi-donor budget support (MDBS) programme, entailing conditionalities are attached to the totality of funding (ODI, 2007). Such conditionalities are broad in their scope: the growth and poverty reduction strategy (GPRS) attempts to revise the structure of governance within the country, following a particular conception of governance as defined by the IMF:

"Ghana must redefine the role of the state as the policy manager for development and the economy, enforcer of law, rules and regulations and a provider of public utilities and services. Public sector reform involving the right-sizing of the public service, restoring competitive conditions of service and SOE reform is a sine qua non for provision of an enabling environment for private sector development and the effective provision of public services. Progressive public sector reform is required significantly to improve capacity and efficiency. A continuous process of reform is also required to enable the public service to accommodate its changing role in relation to the private business sector and civil society." (IMF, 2003:40-41)

Within the context of the water sector in Ghana, the conception of the 'enabling' state is reified in terms of the concern for the improved capacity of sector institutions, the decentralisation of control and decision-making within the structuring of the sector, and the depoliticisation of sector institutions. Regarding the PSP contract, this can be seen in the establishment of certain procurement procedures for funding associated with the Urban Water Project (World Bank, 2004a), the establishment of a 'Project Management Unit' within the Water Directorate for the purposes of administering the contract (ibid.; WD Consultant, 2009), or the procedures for the appointment of personnel within the sector (GWCL 2006a & 2006b; Ministry representative, 2009). The National Water Policy (MWRWH, 2007) considers reform of the sector in a similar manner, with the need to "deepen democratisation of society, through transparent and accountable leadership, and adherence to the rule of law". It may further be seen in the sponsor documentation regarding the project, with concern for 'capacity building' being component to the Urban Water Project seen in the funding support for the regulator, for example (World Bank, 2004a). Sponsor concern for the adequate capacity of other sector institutions is further evident where concerning the state company (ibid.). Following the introduction of PSP the role of GWCL shifts to that of infrastructure investment and administration of the contract, the latter of which provides novel requirements of the company. This required capacity of the company is further recognised by the company itself, in 2006 at the start of the contract, with decentralisation being key:

"Strategic actions: [...]

Establish a total framework of delegated authority down through the new organisational structure to ensure decision making at the lowest appropriate levels. This will require extending formal authority for expenditures within plans and budgets and for staff matters down the line. As far as practicable authority limits should be compatible with scope of job, responsibility and individual experience." (GWCL, 2006a: 40)

"Critical success factors and project risks: [...]

- 1: Critically essential will be the degree of autonomy that the Board of Directors will have in taking a professional stance in the recruitment process. It is important that competent management is employed to lead the new operation and that political influencing shall be avoided at all cost in the implementation of the recommendations.
- 2: That overall project implementation coordination shall be provided and clearly defined criteria in terms of deadlines, cost, quality etc. are adhered to.
- 3: The speed with which the new organisation is put in place in terms of recruitment of key staff, especially in the first batch priority positions of the Managing Director, the ICT Director, and the Finance Director." (GWCL, 2006b: 2)

While the documentation from the state company here demonstrates recognition of the reform of the institutional structure within which the PSP contract operates, it is further noteworthy that this recognition is contemporaneous with the start of the contract. This is indicative of the problematic implementation of a purported revision of approach to acknowledge the significant of institutional context. The incorporated 'capacity building' component of the Urban Water Project would only become active at the same time as the contract itself. Thus, were the capacity building to be sufficient and effective, it is expected to be so immediately for the administration of the contract to be effective – PSP design in this respect appears sub-optimal. The timing of implementation may however be irrelevant considering the extent of the capacity building component: it has been noted in the previous chapter that capacity building for the regulator is likely to be insufficient, with the regulator consistently operating with insufficient financing. The capacity of other sector institutions to perform required functions is also questionable (also noted in the preceding chapter). Thus, while there is rhetorical commitment for the capacity building associated with PSP, the mode of implementation and the extent of commitment appear questionable.

The questionable commitment to, and implementation of, an institutional reform programme is furthered when considering the operations of sector institutions. Sector institutional reforms are primarily intended to promote a particular form of governance and mode of organisational operation. In practice, however, intended reforms, and the PSP contract itself, are implemented in an environment where historically developed norms remain the primary

determinant of operation. Political intervention and management remain the key determinants of policy implementation, and of the reception, interpretation, and commitment to proposed institutional reforms. Near universal among the respondents providing evidence for the consideration of this aspect of service provision and PSP implementation was the concern that political influence remains considerable despite attempted reforms, and that the engrained nature of the normalised mode of operation was unlikely to recede in prominence (Ministry representative, 2009; WD Consultant, 2009; PUWU representative, 2009; MP, 2009).

Considering the expression of concern for independent and professional appointment of personnel in senior positions found in the documents relating to the restructuring of GWCL, the reality remains distant from this objective (Ministry representative, 2009). The GWCL redesign documents express the concern for the importance "that competent management is employed to lead the new operation and that political influencing shall be avoided at all cost in the implementation of the recommendations" (GWCL, 2006b: 2), and the need to "conduct a selection interview for the appointment of Directors and Departmental Heads for all suitable candidates" (GWCL, 2006b: 27). However, even where revised appointments procedures are effected internal to the organisation, where senior roles are considered, the external influence of the Public Service Commission remains:

"In terms of appointments, because the Public Services Commission is the agency that vets and recommends for appointment to especially the managing directorship. [...] You have to apply either internally or externally, then the public services commission interviews and recommends to the office of the president for the appointment. So that has political, you could say that has political input." (Ministry representative, 2009)

Similarly, political influence is noted in the decision-making process within the organisation, for example relating to the financing of operations:

"But again, the fact that government owns, also inhibits the ability of the management to take certain decisions. The government owns it, and if it wants money to expand its systems it has to borrow and government has to provide. So it's not strictly like a private enterprise where the board can take a decision to go and borrow money for certain things. The whole thing, the government is still exercising huge control, therefore to a large extent inhibiting the ability of the management to make certain decisions." (Ministry representative, 2009)

Where political management and intervention is normalised, the political allegiance of those working within the institutions is perceived to be of great importance. Where a change of government occurs, it is assumed that those existing staff within institutions, at least at a senior level, have an allegiance to the previous administration:

"This year, several head of state institutions have moved, and those sympathetic of the ruling party have come to replace them. The last time in 2000 when there was a change, that was happening. Most committees are dissolved and new committees set up. [The managing director of GWCL] is about to be replaced... Some of them were playing their cards... they were not openly supporting one party, [...] trying to hide the party they actually belong to. So in this case, I don't know if he actually belongs to one party, but because that [previous] government appointed him, the perception is there – in general he was expected to be removed, though he tried to hang on." (GII representative, 2009)

While the negative impact of such a mode of operation and organisation is noted by the former Minister, the admission of his own party's role in this normalised mode of organisation is admitted:

"It is quite detrimental [to the operation of the state company], and I believe that, I have said it and I will say it again any time that I get the opportunity in parliament I will say, it is not good for development. They should assess each and every individual on his merit. Take the case of the electricity corporation, the managing director, he's worked all his life in the electricity corporation, and through the ranks to be promoted to managing director. Now they come in and they say 'alright you go, because we want to take somebody who is of this tribe'. You know ethnicity is a problem in Ghana, no matter how people describe, you tell them I say ethnicity is a problem. So they get [...] of the Rawlings tribe, then he comes, and he changes everybody there [...]. So what we are saying is that, let them continue with the work there's no reason to change to NDP, but we did the same so we are also guilty. So that's why people are being changed, I feel very sad about quite a whole lot of things. Now, sitting back with the wisdom of hindsight, some of the things were wrong, and they made... two wrongs do not make a right." (MP, 2009)

The coherence of the programme, and assumed conditions deriving from the theoretical rationale, with the host environment may be undermined. The normalised culture of political management entails that the turnover of staff in senior positions, including Managing Directors for the state company, is significant and thereby threatens consistency of programme implementation. The culture of assumption of allegiance of those working within institutions, and the assumption that allegiance is necessary for the operation of institutions, demonstrates the engrained and normalised nature of this mode of organisation (GII representative, 2009; GACC, 2001). This politicisation of institutions is mirrored in other aspects of the sector institutional framework (Azeem, 2007; GII, 2007b & 2008a), for example where procurement agencies are considered, where

"The heads of all the tender committees are politicians, headed by representatives of the ruling party [...]. People who have funded the party think there is a duty to award the contracts to repay support. There are cases where, in giving contracts, it says that the beneficiary pays something

to the party account, or does he hold a party card." (GII representative, 2009)

The normal mode of organisation of the institutional environment within which PSP is implemented is contrary to that assumed and necessary for the operation for the PSP programme. The failure to account for the host institutional environment thus aligns this case of PSP in the water sector with those earlier examples described in chapter three. It is described in this earlier chapter that where there is a failure to account for local conditions the performance and operation of PSP is affected in such a way as to appear divergent from that proposed and envisaged by proponents of the programme. Indeed such a process underlies the revision of approach in the sector, that conceptualised as incorporating an increased acknowledgement of the role of the state, revision which appears to be absent, or least only rhetorically present in the case of Ghana. Such a judgement of the implementation of PSP in Ghana, and the degree of institutional coherence present here, is consistent with other studies of the sector in the country:

"Without government capacity, or "good governance", no reform processes can be successful (Green, 2003). The lack of this capacity, the preoccupation of government agencies in consolidating their power in the absence of strategic directions and the lack of political and economic compliance with the implementation of reforms in general had been observed by various key informants. They were considered as cross-cutting structural impediments to any national reform. Investments were driven by what donors are prepared and willing to finance, "... rather than what has been determined to be strategic directions for the Government of Ghana, a consequence being the declining/diminishing investments by GoG in those priorities" (The Royal Danish Embassy, 2002: 33). Likewise, in the organisation of the GWSC/GWCL a persistent lack of a "culture of reform" was noted. Amis suggests that this could be generalised to the entire public sector reform process in Ghana: "... despite a substantial amount of rhetoric, there has been almost no reform on the ground. Arguments about efficiency gains through private involvement are simply irrelevant if the overriding logic of institutions is patronage" (Amis, 2004). [...] If implemented, the reforms in Ghana's sub-sector of urban water supply were going to be incomplete, unsustainable and misdirected. They did not sufficiently address the important issues of sector coordination in the face of weak national institutions and structural interdependencies based on patronage relations among the government, regulator, provider and clients." (Fuest & Haffner, 2007: 186&189)

The observations of Fuest & Haffner here align with the experience of privatisation as noted in the above responses from participants engaged for the present research. Similarly, Osumanu (2008) considers that "the independence of the PURC and metropolitan assemblies remains fragile because of regular political interference" (2008: 108). The continued relevance of patronage politics for the operation of sector institutions is further consistent with the broader analysis of the public sector provided by Handley (2008; see chapter

five). Where government indicates a shift to sector institutional governance of greater coherence with that promoted by sponsor agencies, such as the National Water Policy (MWRWH, 2007), such policy fails to be manifest in any legislation, rendering the commitment rhetorical:

"It hasn't found a lot of expression, in terms of practice, in the way that, it has not been operationalised. What is the sense of policy if it is not to be operationalised? You require laws, because, you do the policy and then you make the laws to operationalise those policies there hasn't been any kind of legislation that will actually lock us into that kind of arrangement." (ISODEC representative, 2009)

The failure to ensure capacity of sector institutions, the continued operation of these institutions in modes that run contrary to those assumed in the rationalising theory and programme, is furthered by the failure to ensure an appropriate institutional structure is in place. While the reform of the sector incorporates the multiplication of agencies (regulator, licensing agency, project management unit, private sector etc.) and the associated attempt for the decentralisation of power, critical reforms have been overlooked. apparent in the structure of regulation in the country. The preceding chapter describes the mediated regulation of the private company, with the regulator regulating the state company and thus only indirectly the private company. It appears that this structure derives from the continuation of the state company as holder of water use licenses for domestic and municipal use (as a public utility). Water Resources Commission documentation demonstrates that such licenses are held only by the state company, with no licenses granted to the private company (WRC, 2006 & 2007). It follows that, considering the functions of the regulator, as set out in the Public Utilities Regulation Commission Act (1997), it is the state company, as license holder, that is to be regulated. Consequences of this structuring of regulation are demonstrated in the preceding chapter, with a mediated relationship between provider and regulator leading to problematic data transfer and communication. The significance attached, by the sponsors of the programme, to the establishment of a project management unit within the Ministry for the administration of the contract appears inconsistent with the failure to consider the structure of regulation under which the private sector operates. It may be argued that the 'flexibility' considered necessary for the private sector to demonstrate its purported inherent efficiency, as noted in the preceding chapter with reference to various aspects of the contract, is further evident here – with the private company being subject to the intervention of only one other agency (the state company) rather than two (state company plus regulator).

The failure in the Ghanaian PSP programme to account for and incorporate local institutional norms, as historically dependent and developed within this particular context, entail incoherence in the implementation of such policy. It may be maintained that the introduction of privatisation in an environment where there remains an institutional condition that is so incoherent entails inevitable divergence in operation and performance from that envisaged. The sequencing of implementation is therefore critical to the

operation and performance of the PSP programme. The acknowledgement of the critical nature of the institutional environment within the broader approach of the sponsors fails to be translated in this case, with implementation typically following more closely the underlying theoretical framework – aligning with purported inherent characteristics of public and private sectors. The significance of sequencing, as demonstrated in previous instances of privatisation, has not impacted on the scheduling of the programme in Ghana (see also Fuest & Haffner, 2007).

Commercial operation: implications for the scope of PSP and regulation

A final aspect of PSP in Ghana to be considered is the coherence of the underlying tenets of the programme, as requiring full cost recovery from service provision (as a means of improving sustainability), with the desire for improved access and provision. This is reified, once more, in the structuring of regulation in the country. The requirement for full cost recovery has implications in terms of the extent of PSP within the sector, and subsequently the potential for competition (surrogate as effected by the regulator) to be realised. The mode of implementation of PSP in Ghana can be seen to be sub-optimal in the restriction of this potential competition, thus undermining purported efficiencies to be gained through the private sector. This contradiction of the reality of service provision and the potential for the effective implementation of PSP is derivative of the underlying contradiction of profitability in a context characterised by requirements of significant investment and natural monopoly.

The importance of competition in the internalisation of externalities of activity, and the parallel costs of failed attribution of property rights in the public sector, are component to the underlying theories rationalising the introduction of the private sector (chapter two). Where established in the context of a sector characterised by natural monopoly such competition, and subsequently the effects of this effect of property rights attribution, is to be effected through the regulatory agency. It is described in chapter two that the means by which to effect competition through a regulator is limited with the primary means being through surrogate competition and performance comparison between providers. In the case of the Ghana water sector, the potential for this process to be realised is seriously limited. This is true firstly in the establishment of PSP with only one operator: the initial lease contract developed in the country provided for two operators, but this structure has been abandoned with the implementation of the management contract (Fuest & Haffner, 2007; World Bank, 2004a). limitation of PSP to one operator immediately undermines the potential for the regulator to effect surrogate competition. Contrary to the assessment of performance by reference to comparative alternate providers, the regulator in Ghana is limited to the comparison of performance to historical records, to performance aspirations noted in government and sponsor documentation, or to comparative operators in other countries. This latter possibility is attempted in an assessment of the performance of the state company prior to privatisation, but such comparisons in critique of the operator are easily disputed, by the state company, as "it would be misleading to compare utility companies with different levels of infrastructure" (GWCL statement in PURC, 2005a). The implications of

this structure of regulation, as deriving from the information asymmetries inherent to the sector, are noted in 2002 where referring to the state company (Aryeetey, 2002). The introduction of PSP fails to resolve this issue, thus continuing a process which determines the inherent advantage of the operator in relation to the regulator. It is interesting to note the comparison of this aspect of regulation to that in the UK. Chapter two describes the activity of the regulator in effecting competition, and notes the UK experience where the decreasing number of companies through mergers entails referral to the Competition Commission. Such a consideration is not evident in Ghana, and the provision of such an overseeing agency is absent.

The failure to ensure a structure of privatisation that permits the effective regulation of the privatised water sector is a further illustration of the inconsistent application of the purported acknowledgement of the importance of the institutional environment in which the programme is implemented. The inhibiting of the potential effectiveness of regulation, and the failure to ensure such effectiveness by the sponsors of the programme, is extended through the operation of the programme. The limited basis of private sector operation in the sector derives from the commercial viability of provision. This is limited in Ghana to the urban context, with peri-urban and rural provision considered appropriate for alternative service providers and the CWSA respectively (see chapter five). The limited scope of the private sector is however furthered through the operation of the programme. This is true firstly through the process by which the private operator can effectively reduce the scope of the systems to be subject to contracted requirements through the identification of 'snag items' (section 6.2). Furthermore, it has been indicated that the reduction in the scope of PSP is to be continued when the contract is renewed, changed to lease contract or concluded. According to representatives of the sponsor agency:

"So the rationale, the essence is that in the future, I personally see that a number of these systems will be going to the small towns. [...] Out of the 80 systems that are now in the urban system, only about 20 of them can really be considered urban – so if it comes to that, from the 210 systems which we thinking of for two separate operators, you may not need two separate operators because now you'd be talking about 20 or 30 thereabouts." (World Bank representatives, 2009)

The failure to consider, on the part of the sponsor agency, the implications of a reduction in the scope of PSP and the continuation of a single provider is symptomatic of the general approach taken with the management contract. While there is certain commitment to improved procedures for the implementation of PSP, as coherent with the general approach taken in policy programmes in developing countries, the practical manifestation of this rhetorical commitment is often lacking. It may be maintained, once more, that the failure to consider the importance of regulation and the institutional environment further favours the operator: information asymmetry is likely to be more significant and monitoring more costly where this sector structure is in place. The problematic implementation of PSP in this instance derives, of course from the particular characteristics of the resource and sector, factors

contradictory to assumed conditions necessary for the proposed advantages of private sector operation.

Summary

The above discussion demonstrates that the introduction of PSP in the Ghanaian water sector has, at one level, been accompanied by a rhetorical commitment to an increased recognition of the importance of the institutional context of implementation. At another level however, the practical manifestation of such an apparent commitment is brought into question either where measures intended to improve institutional capacity are insufficient or where such a commitment is contradicted by the particular mode of PSP established. This is true where restructuring of the sector is inconsistent and incoherent with existing norms, with a commitment to underlying theory and associated characteristics of public and private sectors. Regulation is a particular example of this, with the establishment of a structure that obfuscates the relationship between regulator and operator. There is, furthermore, a failure to consider the implications of the reduced scope of PSP, deriving from the limited commercial viability of provision, in the inhibiting of the potential for regulation to perform its intended function. This inconsistent and incoherent implementation of PSP in the Ghanaian water sector can be seen to be indicative of the various aspects of the critique established in chapter two, that concerning the limitation of the underlying theoretical framework in accounting for variable environmental contexts and the role in extra-economic factors in this variation. The connection between weaknesses and assumptions as identified and the factors identified here are taken up in greater detail in the following chapter.

Conclusions and discussion

The above description of PSP as implemented in the Ghanaian water sector demonstrates the importance of factors of an extra-economic and institutional nature in the determination of operation and performance of the programme. The primary findings of the chapter concern, firstly, the import of the grantor/operator relationship in determining the resolution of non-contracted issues which have proven to be critical in the operation of the service provider. Contributing the antagonistic relationship between grantor and operator are various technical factors including baseline data, RRR and revenue funding, in addition to responsibility for different aspects of service provision and the associated residual control which contribute to varying public claims. antagonistic relationship between parties has contributed to the protracted resolution of non-contracted issues, including those which relate directly to the evaluation of the performance of the private operator. Secondly, the existence of a contradictory institutional and organisational culture contributes to the incoherent and partially problematic implementation of the PSP contract. This is exaggerated where the private sector operates in parallel to the public, with poor differentiation in organisation. Thirdly, the location of the PSP programme in broader trends of reform programmes demonstrates an incoherence with such reform, typically evident in rhetoric commitment only, with inconsistent regard for issues of governance and institutional structures.

In each of these areas, the form of PSP contract implemented in Ghana has a particular significance in terms of the impact on the performance and operation of the contract. Because the contract takes a 'hybrid' management form, the additional complexity of this has various negative effects on operation. This is most significant when considering the administration of revenue and repairs and maintenance funding, which has contributed to antagonism between parties, and ultimately has had a detrimental effect on the sustainability of the provider, if only temporary. Furthermore, where the contract permits the restructuring of the provider, under the management of the private company, there is resistance due to the continued public sector nature of the seconded staff.

It is also worthy to note that the evidence presented in this chapter suggests that the limited form of acknowledgement of institutional importance, as conceptualised in the 'post-Washington consensus', is inadequate where applied in the Ghanaian context. Conceptualising the state as an 'enabling' institution, facilitating the operation primarily of the private sector, necessarily disregards the persistence of normalised modes of operation in the host country. The lack of comprehension of local variation entails a failure to recognise the historically developed modes of operation and their persistence through the recent period, together with their contribution as a form of resistance to the proposed reforms associated with the consensus. Furthermore, the proposed recognition of the import of governance and the institutional environment appears to be typically rhetorical where evident in the Ghanaian water sector. Capacity building measures are likely to be insufficient, and the failure to establish a consistent reform of the institutional environment undermines the operation of the PSP programme, particularly when considering regulation.

The evidence presented here provides a basis for the substantiation of the critique of the underlying theoretical rationale for privatisation on the grounds that it is necessarily limited in the conception of the political, social and institutional environment as a determinant of performance of service provision. It is demonstrated here that where the assumed complete contract is absent, the determining factors in operation and performance are those of an extraeconomic nature. The particular institutional and organisational cultures and norms existent within the country provide an important environmental factor in describing how non-contracted issues may be resolved. The PSP programme implemented in Ghana in fact provides a significant basis for the determination of performance and operation by these extra-economic factors, due to the various ambiguities in the contract. Indeed, the importance of these other factors for the performance of the PSP programme is well recognised by those working in the sector:

"Contracts don't do things on their own, it is human beings that use contracts to administer a place, and when these orchestrations are going on, definitely, when these cultural differences are going... The human factor influences

most of these things, more than they should have done. [...] So it is a big problem, it goes beyond contracts and you must be part of the system to know all these things." (PUWU representative, 2009)

The significance of the local interpretation and reception of policy, and furthermore the host political, social and institutional environment therefore validate further of the various elements of the critique provided in chapter two. It is the connections between this critique and the evidence presented here to which the following chapter turns.

Chapter Eight:

Correlating performance and operation of privatisation in Ghana with critical aspects of the rationalising theory

The preceding chapters outline the conditions found in the water sector in Ghana, and the performance and operation of the PSP contract in relation to both technical, and social, political and cultural factors. It is apparent from the evidence presented in these chapters that the implementation of PSP in the water sector in Ghana has failed to align with the proposed improvements central to the theoretical rationale underlying the programme, deriving from the proposed inherent qualities of public and private sectors. Indeed, performance, where quantifiable, has not changed significantly from that of the previous state service provider. While this performance is not extreme when considered relative to other cases of privatisation, it is consistent with the trend for divergence from that proposed, with the private sector returning performance to levels achieved previously under the state provider. Beyond quantifiable performance change, what is more important in the determination of the implementation of the programme, and the divergence from performance and operation as proposed, is the incidence of dispute and renegotiation, a trend with which the Ghanaian case is further consistent. Thus counterpart to moderate change in performance has been the various complications encountered in implementation, deriving significantly from the form and quality of contract established, and the extra-economic factors that subsequently determine negotiation and dispute. The purpose of this chapter is to assess each aspect of technical, and social, political and cultural factors, as previously outlined, by reference to their relation to the underlying theory and critique thereof. In this endeavour, the contribution of the particular aspects of the underlying theory to the practical implementation may be realised. This in turn provides a basis by which to make a critical appraisal of the validity of the underlying theoretical rationale for privatisation, for the application to the water sector in developing countries.

Following from the evidence presented in the preceding chapters, the discussion here maintains that the PSP programme as implemented fails to encompass and account for conditions present in the water sector in Ghana. It further maintains that the conditions found in this context in fact contradict those assumed in the rationalising theory, and this contradiction has implications for operation and performance of the PSP programme. Assumptions central to particular rationalising theories, for example relating to complete information or contracts, to principal-agent relations, are manifest in practical implementation of policy based on this theory. Further assumptions regarding inherent qualities of the individual, of public and private sectors, and of institutional environments, are also observable. It is further maintained here that the particular form of PSP programme implemented in Ghana 'hybrid' form of contract established in the country, which, through ambiguous responsibilities and distortion of risk, has contributed to the problematic operation of the programme. Furthermore, an implicit acceptance of the limitations of the PSP

programme within the Ghanaian water sector reduces the scope and potential contribution to the improvement of service provision. Also, where attempts are made, in line with the 'post-Washington consensus' approach, to engage and modify national institutions to comply with a particular narrow conception of the state, implementation is met with resistance or local mutation.

There are therefore overarching themes which are central to the assessment of the validity of the theoretical rationale for application of PSP in the water sector in developing countries. The first is the failure of the theory to account for conditions encountered in this context. Secondly where assumptions central to the theory are contradicted by conditions encountered, the import of extra-economic factors is increased. Thirdly, the particular form of contract established in Ghana increases the potential for dispute and negotiation, and subsequently the import of extra-economic factors in resolution. Finally, where an implicit acceptance of the limitations of the PSP programme are evident, these further inhibit the potential improvement of service provision through the PSP programme. These themes will be discussed here by reference to the various levels of critique described in chapter two. The initial section considers the inconsistencies, weakness and problematic assumptions of the privatisation theories in general terms, their manifestation in the Ghanaian water sector, and their impact on operation and performance. The second section considers the ramifications of the broader weakness of the theoretical rationale in the exclusion of consideration of extra-economic factors in the determination of performance and operation – particularly significant in the case of water sector PSP in Ghana.

8.1 Privatisation theories within themselves: weaknesses and inconsistencies as reified in the Ghanaian case

The particular theories that substantiate the introduction of the private sector in service provision are premised on various assumptions for their associated propositions to hold true. In practice, as has been noted in chapter three and as evidence from Ghana suggests, the implementation of privatisation in the water sector typically diverges from the assumed and idealised conditions of the rationalising theory. The following discussion considers the various aspects of PSP in the Ghanaian water sector that demonstrate the validity, or otherwise, of policy based on such theory for application in this context. It will be maintained here that particular assumptions, weaknesses and inconsistencies as identified in chapter two are manifest in implementation, or have repercussions where confronted with contradictory conditions.

Public choice theory

The relevance of public choice theory to PSP in the Ghanaian water sector can be seen in the mode of implementation of the programme. The underlying tenets of the theoretical framework significantly inform the particular approach taken in the country. It is obvious from the evidence of PSP in Ghana that the mode of implementation is significantly shaped by the concern for the private sector to be

uninhibited in its operation, and in particular a concern to restrict the impact of public sector institutions on the operator. Regarding the permitting of flexibility to the operator, there is evidence in various aspects of the contract implemented that such flexibility is apparent. This is true with regard to the financing structure of the PSP programme – for example where the operator is permitted control of the revenue account (with vague disbursement and monitoring requirements) and associated RRR fund, and where the operator is permitted to identify snag items (see section 6.3). It is further evident in the allowing of the contract to commence without baseline data (the private sector not being subject to publicly determined baselines), with the result that the private sector has been allowed to operate without being subject to such baseline data in the determination of performance (section 6.2). The failure to establish penalties for data reporting permits the private sector flexibility in this aspect of operation (section 6.5). It may also be maintained that the concern for the private sector to be uninhibited by intervention of public agencies is manifest in the failure to establish direct regulation of the private company, with mediated regulation through the state company reducing the intervention of the regulatory agency in the operation of the provider (section 7.3). It is noted by sponsors and authors of the contract in the country that the mode of implementation of PSP is specifically concerned with the ability of the private sector to operate in such a way as to be uninhibited by intervention from public and political agencies (section 7.1).

Beyond the flexibility permitted the private sector, influence of public choice theory is further demonstrates in the structuring of the PSP programme and the institutional environment within which the contract operates. The conceptualisation of the public sector as inherently inefficient, and subject to associated costs in terms of reduced total welfare, is considered manifest in the Ghanaian context in the evidence regarding the politicisation of operation of public agencies. Such a conception is not without validation considering the evidence noted in chapter five and subsequently within the present research in chapter seven. The programme undertaken in the water sector, of which PSP is component, seeks to reform the sector through restructuring to align the institutional environment with such a conception. Thus the concern is for the decentralisation of power, with the multiplication of sites of administration and the introduction of agencies proposed to be independent from central government (chapter five). Sector agencies are therefore considered to be at lesser risk of the politicised operation considered the manifestation of inherent public sector inefficiency in this context. While this structuring of the sector is consistent with the underlying tenets of public choice theory, the practical realisation of such intentions fail to be comprehensive and consistent. Evidence of PSP in other developing countries (chapter three) suggests an increasing realisation of the relevance of institutional capacity for the administration of the programme. In the Ghanaian case public choice theory is apparent in the structuring of the sector, yet the broader trends demonstrating a moderation of the tendency to undermine the capacity of the public sector is not consistently mirrored in the water sector. The structuring of the sector in such a way as to establish the state as independent enabler of private sector operation is undermined where capacity of sector agencies is insufficient and structuring obfuscates the functioning of the state vis-à-vis the private sector. This is apparent when considering the regulator: the PSP programme fails to assure sufficient capacity, and the sector is structured in such a way as to necessitate the mediation of regulation of the service provider (sections 6.4 and 7.3 respectively). The moderation of the tendencies of public choice theory based policy appears absent in the Ghanaian water sector.

Beyond the structuring of the sector in Ghana, the concepts associated with public choice theory have further implications for the operation of the private sector in this context. Counterpart to public choice theory is the underlying assumption of the sufficient attribution of property rights to the private sector. The purported inherent characteristics of the public sector and the actions of the individual therein have costs associated: in terms of the inefficient use of resources, and in terms of the monitoring of activity to avoid such inefficiencies. Externalities associated with service provision in the water sector fail to be internalised by the private operator. It has been described previously the inherent characteristics of the water sector which undermine assumptions necessary for the validity of purported benefits of private operation of service provision (chapter two). The role of the institutional environment in the provision of a coherent framework within which the private sector operates is implicit in theory and was absent in sector policy through the early stages of privatisation (chapter three). The Ghanaian experience demonstrates an acknowledgment of the relevance of such an environment, when the broader reform agenda for the country is considered (chapter five). The experience in the water sector provides a more inconsistent and contradictory picture however. The inherent costs of monitoring a private company operating in a natural monopoly environment are acknowledged only in the form of limited capacity support for the regulator (section 6.4). Capacity support for the administration of the contract for the state company – the central agency with oversight responsibilities - receives little consideration (sections 6.4 & 7.3). Similarly, through the process of sector restructuring there are significant oversights which in practice increase the costs and obstructions in the monitoring of the private sector. This is true in terms of the establishment of a sole operator thus leading to more problematic regulation (section 7.3), and the mediated nature of regulation in the sector (sections 6.5 & 7.3). Thus not only does the PSP programme undertaken in the water sector have inherent costs which contradict underlying assumptions of the rationalising theoretical framework, but the particular mode of implementation in Ghana exaggerates these costs further. The rationale for privatisation is therefore significantly undermined where applied in this context: the costs of monitoring public agencies as identified by Coase (1960) and Niskanen (1975) are equally applicable to the private sector. The explicit desire for the private sector to be uninhibited by the public sector, where the structuring of the sector inhibits such monitoring, contributes to this process: the commitment to purported characteristics of each sector, and the (ideological) commitment to their application in policy in conditions which undermine necessary assumptions, underlies this divergence in theory and implementation.

Property rights theory

The manifestation of the concerns and propositions central to property rights theory are apparent primarily in the technical aspects of performance of the privatisation programme in Ghana, and in particular the design and operation of the contract. Transfer of risk and liability, a complete transfer of interest between each party, information certainties, assumed commitment of each party and substantially complete contracts provide the basis upon which claims of property rights theory are made. Where applied in the water sector, in developing countries, and in a sub-optimal manner, these propositions are undermined however. The Ghanaian case provides an instance which demonstrates the difficulties in establishing the idealised conditions of property rights theory, with problems of information asymmetry, subsequent moral hazard and adverse selection, and principal-agent problems undermining purported improvements and demonstrating the over-simplified conceptions of the underlying theory.

As is described in chapter two, much of the critique of property rights theory finds a basis in information economics: the introduction of asymmetric information undermines the proposed completeness of contracts and transfer of interests between parties (e.g. Spence, 1973; Stiglitz, 1975b & 2000). In the case of Ghana, information regarding water service provision, and the various aspects which comprise the activities of the private operator, is significantly incomplete ex-ante and asymmetrical ex-post. As observed in chapter six, information regarding various aspects of service provision in Ghana is either incomplete or is disputable. This is most notable where baseline data is concerned (section 6.2), with ex-post resolution being rationalised by the requirement for improved metering, with existing data being disputable. The PSP programme in Ghana is thus established with a basis of information asymmetry designed into the contract: the data necessary for the evaluation of performance and subsequent incentive structures is absent from the contract. Section 6.4 further describes the shortfall in capacity of sector institutions in the administration and monitoring of the contract, such that the information asymmetry designed into the contract is augmented by a likely failure to correct this asymmetry ex-post. It is maintained here that this scenario provides the basis for various elements of implementation which correlate with those aspects of the critique of property rights theory noted in chapter two: moral hazard and potential adverse selection (e.g. Akerlof (1970), Spence (1973), Williamson (1971), Stiglitz (e.g. 1975b & 2000)), principal-agent problems (e.g. Sappington (1991), Sappington and Stiglitz (1987), Hart (2003)), and subsequent failure to establish property rights with consequences for the internalisation of externalities associated with service provision.

Regarding the allocation of risk and liability, the design of the contract in a sub-optimal and incomplete manner provides the basis for the distortion of transfer, and subsequently insufficient incentive for improved performance. The distortion of risk and liability transfer is engrained in the contract in various ways. Firstly, the inclusion of snag items which may be identified by the private operator, and subsequent to agreement by the technical auditor be removed

from the responsibility of the operator, provides a significant basis for the revision of contract terms ex-post (section 6.3). The inclusion of snag items is intended to provide flexibility in the contract due to the unknown condition of infrastructure in the sector. This is the first element of flexibility permitted the operator, described by the proponents of the programme (e.g. World Bank representative, 2009) as both incentivising the initial engagement of the private sector and subsequently providing the operator with sufficient flexibility so as to be unhindered in their exhibition of efficiency. In practice it has permitted the operator to, to a degree, determine ex-post the terms and scope of the contract and their liability therein. The role of the technical auditor as arbiter in the determination of a 'List A' to which contractual terms apply, and a 'List B' to which they do not (Fichtner, 2007), effectively removes the determination of contract and subsequent outcomes from the principal.

The nature of the contract and its 'hybrid' form permits further distortion of risk and liability. The desire to allow the private operator a degree of flexibility in its operation underlies the decision in contract design to assign responsibility for revenue collection and disbursement to the operator (section 6.3). The arrangement of responsibilities in such a way is intended to permit the operator to execute its duties without undue intervention from the grantor. This is furthered by the inclusion of such vague contract terms, as noted in chapter six, which allow the operator to determine disbursement of revenue without any significant control by the grantor. Asymmetrical information between grantor and operator provides a basis for the operator to take advantage of this control over finance. The efficiency of operation intended through the establishment of such measures is undermined by the distortion of liability and risk in favour of the agent, and to the cost of the principal.

Further distortion of the transfer of risk and liability is evident in the incentive structure in the contract. Following from the absence of competition and thus market discipline, penalty and incentive for the private operator must be contained within contractual terms. In fact, the contract established in Ghana is bereft of detail regarding such penalty and incentive. Conditions present in the water sector, and the standard of infrastructure at the time of inception of the contract, determine that the capacity to establish baseline data was limited. The subsequent inclusion of contractual terms to establish baseline data ex-post provides the potential for distortion of risk (section 6.2). Because no penalty is included in the contract for non-establishment of this data (GWCL, 2005), there is reduced incentive for the private sector to engage in this process. Indeed, the contract further allows the private sector operator to propose their own penalty regime ex-post, based on the baselines to be established (GWCL, 2005). This and other contract penalty measures are criticised by the technical auditor as insufficient for improved performance (Fichtner, 2007). There is subsequently a deficiency in the means by which to measure performance of the operator, and from which to apply penalties for substandard performance. This is a significant failure in the design and implementation of PSP in the case of the Ghanaian water sector, the propositions of property rights theory being undermined where risk and liability are not transferred and residual control rights remaining with one party (e.g. Klein et al (1978), Williamson (1979), Hart (2003)).

The sub-optimal design of the contract in Ghana is further evident in the requirements for the transfer of data between operator and grantor (section 6.5). This is recognised by consultants to the state company (GWCL, 2005a & b), where it noted that the contract permits the possibility of insufficient data transfer to the grantor thus threatening the responsibilities of the grantor in conforming to its own performance contracts established and monitored by the State Enterprise Commission. Combined with the recognition by the technical auditor of the failure in data transfer required to establish baselines for the measurement of performance and subsequent application of penalties (Fichtner, 2007), it is obvious that the conditions of information transfer and availability for each party are insufficient for the operation and performance of PSP as Such conditions of asymmetrical information contradict those assumed within property rights theory (e.g. Stiglitz, 2000). The degree to which information is known by each party determines the potential for the transfer of interest between principal and agent, and furthermore the potential for the principal to monitor the agent in the execution of contracted responsibilities. The conditions present in the context of the Ghanaian water sector and the PSP contract established therefore undermine, firstly, the potential transfer of objectives from principal to agent, and secondly, the subsequent monitoring of execution of those objectives.

Beyond contractual terms the design of the PSP programme in the Ghanaian water sector has further implications for the validity of the propositions of property rights theory. Ambiguity in the contractual terms is combined with the existence of multiple principals (section 2.2). Within the terms and context of the contract, the principal exists as the grantor, with the contract determining the transfer of objectives from this principal to the agent. In practice however, there are further principals that affect the execution of the contract including: the regulator PURC, the Ghanaian government, the World Bank as sponsor of the programme, and the technical auditors of the contract.

The regulator, in setting the tariff under which the operator executes its responsibilities, determines the revenue available to the operator and therefore the efficiency of operation required by the operator. Thus while the management fee is intended to determine improved efficient operation by the private sector, in reality, because of the ambiguous terms of the contract and the ability to utilise revenue for operations, the regulator then, as determinant of revenue, becomes a principal to the agent. Because of the information asymmetries that exist in the sector, the poor quality and disputable information, and these are exaggerated because of the mediated relationship between regulator and operator (GWCL being the mediator), the potential for the regulator to function as intended is limited. The peculiar structuring of PSP in this case exaggerates the potential effect of information asymmetries, with multiplied principals each having access to, and incentive to maintain, particular information.

In addition to regulator, other principals include the technical auditor of the contract in their role in arbitration between contract parties, and in determining appropriate conditions for those contract terms intended to be finalised ex-post. This may include, for example, determining which snag items proposed by the operator are indeed sufficiently inhibitive to be removed from contractual terms. In this particular example, the technical auditor performs a significant role in the determination of the scope of the contract. In arbitrating between parties and ultimately certifying a 'List B' of water systems to be excluded from contractual terms, the auditor defines terms of operation for the private operator that may not coincide absolutely with those of the grantor. Asymmetric information once again contributes to the problematic operation of the auditor: it is noted by the auditor that the operator provides insufficient information for the decision-making process. Non-penalised delays in information transfer may in this sense be in the interest of the operator: the delaying of the establishment of contract terms. Similarly, in arbitration between parties, following from the various disputed aspects of the contract, the Government of Ghana acts as a further principal to the agent.

The factors described here which contribute to the divergence of the formulation of privatisation from the propositions deriving from property rights theory are exaggerated in this instance by the particular mode of implementation, for example regarding the 'hybrid' nature of the contract. However it should further be noted that the establishment of a management contract in itself, regardless of the particularities of its implementation, contributes to the exaggeration of this divergence. In addition to the multiplicity of principals which results from this formulation of privatisation, the parallel operation of private and state companies has implications in terms of the realisation of interest of the principals. In the context of a lease contract, the interests of the ultimate principals characterised as the government and subsequently broader population may be more easily transferred to the agent, the private sector, without the obfuscation of the increased number of principals and the parallel responsibilities of private and state companies. In practice, the management contract is here demonstrated to operate to the detriment of these ultimate principals. Because of the division of responsibilities for management (the private company) and long term investment (the state company), there is the potential for interests, and subsequently capacity to implement these responsibilities, to diverge. It has been demonstrated in the preceding chapters that the division of interest here proves problematic in implementation. The failure to specify absolutely the activity of the private sector entails that where the private sector engages in opportunistic behaviour this is to the detriment of the state company as principal in their long term interests. On the contrary, where the long term investment interests, in addition to the management of service provision, are integrated within the remit of one party such divergence is Therefore the assumption of complete contracts in this instance contributes to the detriment of the long term interest of state company and ultimate principals of government and broader population.

It follows from the above discussion that the propositions of property rights theory cannot be assumed to manifest in improved performance and operation of services under the private sector. Information asymmetries, and incomplete and sub-optimal contracts provide the basis for much of this divergence of practical implementation from rationalising theory. Where distortions in risk and liability allocation occur, where incentive and penalty measures are ambiguous or insufficient as motivating measures, where information transfer and subsequently monitoring are inadequate, and where multiple principals with varying interests exist, the validity of the rationalising property rights theory for application in this context may be questioned. The practical manifestation of policy based on assumptions of such theory, and the inadequate consideration of contradictory conditions, is in fact the establishment of a foundation for the increased relevance of extra-economic factors in the determination of performance and operation.

Regarding the origin of the private company, AVRL, in two public sector corporations, it is not evident that such origins differentiate the operation of AVRL from any other private sector water service provider. The actions of AVRL in terms of their exploitation of poor contract design and ambiguities in terms is consistent with that expected of any other private company. Indeed the implementation of the programme in Ghana is consistent with others elsewhere, with opportunistic behaviour on the part of the operator, in terms of ex-post moral hazard in reinterpretation of contract terms, reduction of risk exposure and so on. The intended introduction of a commercial mode of operation is further evident in Ghana, with implications for the coherence with existing institutions and modes of organisation. The performance and operation in Ghana is further consistent with that more generally in the trends identified, with dispute leading to renegotiations and cancellations, and the evident noted through the experience of Ghana demonstrates the critical contribution of the mode of implementation, the standard of contract established and the administration thereof.

The conditions noted here, and their undermining of assumptions inherent to the property rights framework, are exacerbated by the limitation of competition in the sector in Ghana. This is true firstly in the development and form of the management contract - the establishment of one operator, thus increasing the significance of the role of the regulator in effecting competition and the increased importance of information flow from the operator - and, secondly, the actual and proposed further reduction in the scope of the privatisation programme – thus inhibiting any future potential for competition. Regarding the first aspect, the establishment of the PSP programme in Ghana followed a protracted design and tendering process, as described in chapter five. consequent of limited and reducing investor interest in PSP in the sector. The establishment of the management contract undermined some of the few avenues for competition, in particular the potential for effective surrogate competition under the regulator: the existence of one operator reduces the potential for the regulator to monitor performance and potential improvements in efficiency of operation, and make subsequent tariff revisions. This capacity is further limited by the quality of data, and where the only benchmark data by which to determine performance is historical, and with such data being subject to dispute. The potential for the disciplining effect of surrogate competition effected by the regulator is thus diminished through failure to establish sufficient and reliable means by which to determine variation in performance (section 6.3).

Regarding the second aspect of competition in the sector, just as it is limited by the form of PSP implemented, the performance and operation of the programme since its inception suggests the scope of the programme may be reduced thus threatening potential competition in the future. It is apparent from the data of the technical auditor that the scope of the contract, and thus PSP is to be reduced through the course of the five year management contract (Fichtner, 2007; section 6.3). The means by which this process occurs is the provision within the management contract for the identification of snag items by the operator, which it considers insurmountable within the period of the contract. Subsequent to agreement with the grantor and certification by the auditor, the revised scope of the contract may be reduced to those systems which are most practicable with other systems excluded from contract terms. Therefore, just as in the PSP contract design where unprofitable rural areas are excluded, through the course of PSP unprofitable urban areas are excluded. With each reduction in the scope of PSP the potential for competition is reduced, thus inhibiting the potential for effective regulation and subsequent monitoring of performance and efficiency. Considering this, the intentions expressed by the World Bank representatives (2009; section 7.4) for the further reduction in the number of systems to be serviced under any future PSP programme threaten to further undermine the potential for surrogate competition and subsequent effects on efficient private sector operation.

The assumptions made in the underlying theory of property rights are thus shown to be problematic where privatisation is implemented in the context of the Ghanaian water sector. It possible to identify various aspects of the critical assessment of the theoretical rationale for privatisation that are supported in this context, including moral hazard and potential adverse selection (e.g. Eisenhardt, 1989; Grossman & Hart, 1981), residual control rights being allocated to the private sector (Hart, 2003), the existence of multiple principals (e.g. Laffont & Tirole, 1991), significant transaction costs (e.g. Stiglitz, 2000) including those of sector institutions, and the sub-optimal design of contracts (section 2.2).

Moral hazard is evident in various aspects of the programme implemented in Ghana. Firstly, the decision to formulate baseline data ex-post inception of the contract, entails the principal cedes control of essential aspects of the contract, commitment of the private sector is assumed to exist ex-post, as is the transfer of objectives and interests to the agent. Secondly, the inclusion of snag items which determine the scope of systems to which contract terms apply ex-post provides a means by which the private sector can reduce liability, and alter the transfer of rights intended ex-ante. Thirdly, the control of revenue collection accounts, and the freedom in disbursement thereof, provides the operator a basis for opportunistic behaviour to the detriment of the principal and their objectives. Fourthly, the design of the contract in such a way that penalties and incentives for the operator are either lacking or inadequate, for example in the resolution ex-post by recommendation of the operator, entails that control in this respect is ceded to the operator. Fifth, the requirements for data transfer between the parties is threatened by the lack of penalties for non-

compliance, with the potential for asymmetric information – this not only jeopardises the potential to monitor the operator, but further affects the ability of the regulator to execute its intended functions. In each of these instances, the residual control rights of the various aspects of service provision belong to the private operator. Thus, in the case of Ghana, the contract design determines significant potential opportunism for the private sector.

In various respects the contract may also be considered sub-optimal in establishing a basis for these various aspects of moral hazard. Firstly, regarding baseline data, the potential for opportunism in this respect, and dispute following from this, is recognised by those designing the contract but is nevertheless integrated in the final contract. The anticipation of dispute underlies the failure to establish baselines, with those responsible fearing dispute of data and metering ex-post. However, the decision to initiate the contract without any such data simply provides the same possibility of dispute as has been the case in practice. Thus, the establishment of baseline data exante, utilising improved metering, would have avoided this aspect of moral hazard. Secondly, sub-optimal design is also evident in respect of the inclusion of inadequate penalty and incentives for the inducement of operator action. Where the contract stipulates penalties are to be decided ex-ante, following a recommendation by the operator on the scale of penalty, such explicit acceptance of moral hazard could be avoided by the stipulation of penalties exante - this of course would follow the establishment of baseline data from which performance may be assessed. Thirdly, and related to this second point, the potential opportunism which follows from non-compliance with data transfer requirements could be prevented through the inclusion of penalties from such non-compliance. Each of these aspects results in a practical manifestation of a contract where the effect of property rights transfer is significantly reduced: after three years of a five year contract, there remains to be a transfer sufficient to realise the proposed value of privatisation, a significant failure in this example of PSP. The failure to consider these various aspects of contract design, which would restrict associated opportunism, offers a basis upon which to question both the capacity of the institutions responsible for designing and administering privatisation in Ghana, and the motivation for such failure - questions taken up in section 8.2 below. The reduced scope of the contract, from an initial five year period (which is already short relative to other water sector contracts - see chapter three), further reduces the potential for the impact of implicit control mechanisms. Such mechanisms are noted by Williamson (1971) and Arrow (1969) as providing a implicit means by which to counter potential opportunism: the long term interests of each party are similar, for example repeat business may restrict opportunist behaviour (section 2.3, 2.4). There is no such implicit control mechanism apparent in the Ghanaian water sector.

In parallel to the existence of various forms of moral hazard and the exacerbation of these through sector structuring, the costs of administering the contract are increased where institutional responsibilities for the resolution of the various resultant disputes are considered. Within the field of transaction cost economics, such costs are proposed to be the determining factor in the selection of the optimum mode of economic organisation, and in the case of

Ghana such transaction costs may be significant. The ex-post resolution of non-contracted issues, and the intervention of a regulatory agency as is typical in the water sector, provide the basis for the existence of transaction costs. Thus, they exist in the resolution of, and dispute relating to, baseline data, snag items, revenue accounts and disbursement thereof, the failure to establish penalty and data transfer regimes, and in the intervention of the regulatory agency. The costs by nature are therefore not only in terms of finance, but in terms of time taken for dispute and resolution, and consequent loss of purported improvements associated with the programme.

It is obvious from the various aspects of the implementation of privatisation in the water sector that the purported advantages accruing from the introduction of the private sector may be undermined in the Ghanaian case. It is apparent from the evidence presented in the preceding chapters, and the correlation with theory and critique presented here, that the conditions and mode of implementation found in the Ghanaian case significantly limit the incidence of proposed advantages. Incomplete and asymmetric information, combined with a sub-optimal contract, provide a basis for the relevance of the various aspects of principal-agent theory. The failure within the rationalising theory to sufficiently consider the significance of asymmetric information, subsequent principal-agent problems, and the relevance of the local environment and conditions, demonstrates the questionable validity of property rights theory for application in this context. The proposed advantages of the introduction of the private sector are obfuscated by the complexities of implementation and administration, and thus where the private sector may, in the idealised world of the abstract economic modelling, provide efficiency of operation, the case of Ghana demonstrates that the context and environment of implementation determine the undermining of any potential to achieve these propositions.

Summary

The introduction of the private sector in the provision of water services in Ghana is rationalised by the purported improvement in efficiency, sustainability of services and greater total welfare that would follow. The mode of economic organisation, and the resolution of externalities through either government or private sector approach, is dependent on the associated costs of each approach. The rationalisation of the introduction of the private sector finds a basis in the costs associated with government intervention, and the efficiencies to be realised in private resolution (Coase, 1960; Barnett & Yandle, 2009). Assumptions are made when proposing such costs and efficiencies however, and as has been demonstrated here, the import of minimal transaction costs and sufficient attribution of property rights is significant. While it is apparent that the operations of the government and public sector in Ghana have associated costs, the assumptions underlying the proposed efficiencies are shown to be problematic in this case. Water service provision has inherent and significant externalities, described in chapter two, which provide a foundation immediately contradictory to conditions assumed: natural monopoly infers the intervention of an external regulating agency, and the nature of the resource infers inevitable

political interest. In addition to these factors basic to any private sector participation in water service provision, information economics and principalagent problems indicate further significant undermining of purported improvements. Incomplete and asymmetric information in the Ghanaian case leads to problematic establishment of property rights, with a failure in the transfer of interest from principal to agent. Instances of moral hazard and opportunism are frequent and considerable, and inhibit the operation of the contract as envisaged. These conditions are exacerbated firstly by a sub-optimal contract design, with various deficiencies advancing this moral hazard and opportunism. Secondly, it may be observed that the deference to public choice theory leads to a failure to consider the inevitable role of public sector institutions in the operation of the contract, resulting in a shortfall in capacity of such institutions to perform intended roles. The evaluation of PSP in the Ghana is therefore complex, but it is possible to assess the implementation of the programme in this case to be problematic, sub-optimal, and incoherent with the host environment. The evidence from Ghana demonstrates the weaknesses and simplicity inherent to the rationalising theoretical framework where applied in the context of the water sector in developing countries.

8.2 Assumptions underlying the theoretical rationale: extra-economic factors impacting performance and operation

As a further consideration of the validity of the rationalising theoretical framework for application in the water sector in developing countries, it is necessary to align the performance and operation of PSP in Ghana to the critique reviewed in chapter two regarding more substantial assumptions of the nature of the individual and the disregarding of the extra-economic. Such extraeconomic factors are of particular relevance in the case of Ghana, beyond the institutional considerations inherent to the implementation of privatisation of water services, the institutional condition and capacity, and the hybrid form of contract established, provide contradictory tendencies to the assumed conditions underlying the theoretical rationale. Similar contradictory tendencies find a basis in the nature of the resource as an objectively determined human need, with such normative judgements providing paradoxical reality to theoretical paradigms. Following from this, it is possible to consider the motivations for application of policy founded on a particular theoretical framework which provides so little consideration of environmental conditions. in particular where they are likely to be so contradictory to those assumed.

Limitations of the rationalising theoretical framework: extra-economic determinants of PSP performance and operation

Considering the performance and operation of PSP as implemented in the Ghanaian water sector as reviewed in chapters five to seven, it is apparent that significant in the determining factors are those of an extra-economic nature. Of particular importance in the Ghanaian case is the sub-optimal contract established, and the hybrid nature thereof. The import of extra-economic factors in this case provides an illustration of the problematic assumptions underlying

the theoretical framework rationalising the introduction of the private sector. The consideration of the optimum mode of economic organisation and service provision as is inherent to the motivation for PSP implementation, finds a basis in the costs associated with each of public and private sectors. However, as will be maintained here, assumed conditions as underlying the rationalisation for PSP in service provision are contradicted in this case, with consequences in terms of operation and performance. Insufficient property rights provides a foundation for the import of extra-economic factors, with associated costs, where ambiguities and incomplete contracts exist. This is evident in the case of Ghana when considering the inhibiting effect of the relationship between grantor and operator, the parallel and interrelated operation of each sector, and the failure to consider and provide sufficient institutional capacity.

Optimal provision, and the efficiency of the provider, is at the basis of the rationalisation of the introduction of the private sector. However, the utilisation of property rights and public choice theories, as components to the rationalising framework for PSP, in this context demonstrates a failure to consider the assumptions necessary for their validity in policy implementation. The idealised modelling of the private and public sectors, based on an abstract conception of the individual, is contradicted where implemented in the water sector in developing countries, with implications in terms of costs associated with the mode of organisation. The contrast in preference for public and private service provision is dependent on the resolution of externalities associated with economic activity. Preference for the private sector operation is shown in the work of Coase (1960), as a foundation to subsequent component theories, with externalities proposed to be better resolved through establishment of property rights: costs associated with the public sector and government intervention renders the private sector preferable (section 2.1). Coase is explicit in stating necessary assumptions however: appropriate property rights should be established and transaction costs should not be inhibitive. Where developed in the particular theories of public choice and property rights, such assumptions appear secondary to the power of the concept of the individual in the elaboration of an abstract model validating private sector operation. Certainly, where the programme is implemented in the water sector, as has been discussed, environmental conditions, and their implications for transaction costs and property rights, are secondary to the idealised mode of organisation.

Property rights and transaction costs, as identified by Coase as being critical to the appropriate mode of economic organisation, are determined by the form of contract and administration thereof. Such assumptions are implicit within the particular theories rationalising PSP, a presumed coherent environment and institutional framework integral to the operation and performance as proposed. The conception of the individual as inherently self-interested and utility maximising provides the defining factor in each of public choice and property rights theories. Such a conception provides the basis for the abstract economic model which rationalises implementation across a globally uniform environment: variation in institutional form and capacity is not accounted for. Parallel to this is the ideological conception of the small state, the limiting of the individual in government, and the organic development of laws

(section 2.1). The basis for the failure to account and provide for the capacity of state and institutional structures is established. Transaction costs arising from the existence of conditions contradictory to those assumed are thus not factored into the prioritisation of PSP or the particular mode of implementation of such programmes.

Evidence from the introduction of PSP in the water sector in Ghana demonstrates that assumptions integral to the realisation of benefits as proposed are undermined with consequences for operation and performance. Regarding the first assumption, property rights fail to be established in coherent and complete form, primarily due to the sub-optimal and incomplete contract. Subsequently where resolution of issues deriving from this failure is required, transaction costs impinge significantly on operation and performance – undermining the other significant assumption – with administration of the contract incoherent and renegotiation typical.

Of particular importance in the Ghanaian case is the sub-optimal contract established, and the hybrid nature thereof. The contract established provides a significant basis for the ex-post increase in importance of extra-economic factors in determining performance and operation. Where incomplete contracts exist, the potential impact of ex-post renegotiation and dispute increases. In the case of Ghana, the design of the PSP contract increases the potential for such eventuality. This is apparent in the desire of those proponents of the PSP contract for the private sector to be able to operate with minimal intervention and interference from grantor and sector institutions as was possible. Thus flexibility for the operator designed into the contract, with, for example, the inclusion of access to revenue accounts finance for general administration and maintenance costs, and the provision for snag items to be identified by the operator and subsequently removed from its remit. Attempts to design a 'hybrid' contract, where the operator is allowed increased flexibility to demonstrate their purported efficiency of operation, therefore contribute in this context to the basis for ex-post renegotiation and subsequently the import of extra-economic factors. The effect of this aspect of contract design is paralleled where contract ambiguities and other aspects of sub-optimal design are considered. The primary aspect to impact performance and operation here is the failure to establish baseline data and any sufficient ex-post arrangement to establish to data. Insufficient and ambiguous penalties and incentives, for example relating to data transfer or to performance improvements, provide further instances of weakness in contract design and operation that increase the import of extra-economic factors in ex-post renegotiation and resolution.

Considering the foundation for increased import of extra-economic factors in the ex-post renegotiation provided by the contract design, evidence suggests further extra-economic factors impinge on the renegotiation process. Negotiation following from the various factors which remain ambiguous or unknown ex-post entails the import of the nature of the relationship between grantor and operator. This is demonstrated to have significant implications for the resolution of such non-contracted factors, and subsequently for the operation and performance of the programme. In addition, the prioritisation of

the implementation of PSP and failure to sequence investment appropriately provide a basis for ex-post conflict. Parallel operation of public and private sectors, and the particular mode of management contract implemented, contribute to this process: responsibilities for different aspects of service provision, combined with ambiguity in the particular conditions of this, leads to conflicts in the implementation of the programme, and the public representation thereof (section 7.1). Such contradictions, conflicts and subsequent antagonism evident in the relationship between grantor and operator represent a field of extra-economic factors which fail to be accounted for in the underlying They further contribute to significant costs in theoretical framework. administration, not considered in the rationalising of the programme and the particular mode of implementation. This process furthermore undermines the possibility of the development of implicit control mechanisms (section 2.2), whereby common understanding and norms of operation, as well as long-term mutual interest, entail that disputes and non-contracted issues will be resolved with minimal costs.

The particular form of PSP established in Ghana has further repercussions for the potential for improvement in performance and operation. This has been shown in respect to the parallel operation of private and public sectors, with staffing and organisational arrangements impinging on an idealised independent operation of the private sector. This would be true where any private sector operator takes on service provision with previously public sector staff, with acquired employment rights impinging on organisation of operations. It is however exaggerated in the case of Ghana where staff remain employees of the grantor, being seconded to the operator. Expectations of service conditions and promotion provide a resistant force to the proposed reorganisation under the private sector. The continued relevance of the public sector in this respect is not considered in rationalising theory, and provides an inhibitive force to the proposed commercialisation of operations under the private sector.

The broader institutional environment provides further evidence of the problematic implementation of the PSP programme within this context, with normalised modes of operation and insufficient capacity demonstrating incoherence and the import of such extra-economic factors. While there is incorporated, within documentation relating to the programme, a recognition of the significance of a coherent and adequate institutional environment, it may be maintained that this is either rhetorical commitment to such provision or This may be demonstrated where considering implementation is flawed. regulation of the operator, firstly with regard to the structuring of such regulation, with the grantor being the regulated body and the operator therefore being regulated indirectly. It is secondly evident where the structuring of the programme entails a single operator, undermining the potential for the regulator to provide surrogate competition as necessary within this sector - the reduced and reducing scope of PSP, deriving from questionable commercial viability of operation, undermines this likelihood further. Finally, it is evident in the financing of the regulator, with funding associated with the programme insufficient to permit the functioning of the agency. The failure to ensure the coherence and adequate condition of the institutional environment

demonstrates a divergence from the, at least rhetorical, commitment evident in the broader reform agenda being undertaken in Ghana. It demonstrates, more obviously, a manifestation of the underlying theoretical rationale for the programme, which fails to consider the costs associated with operation of the private sector, in general terms but in particular where in this particular context – monopoly conditions and contradictory institutional environment.

Limitations of the rationalising theoretical framework: normative judgements of need

In addition to the implications for the potential to account for variation in local context and institutional environment, the theoretical rationalisation for privatisation, and the particular conception of the individual inherent therein, prove problematic where accounting for normative judgements on water service provision. As has been described in chapter two, there appears to be a paradox between the theoretical framework and associated conception of individual determinant of their need, and what is typical in practice, where objective or normative conceptions of human need provide a basis for social policy (Doyal & Gough, 1991). The very basis for introduction of PSP in water service provision, as propounded by sponsors of the programme, is the improved sustainability of the service as a basis for subsequent expansion of provision. At the same time, The Ghanaian Government is signatory to international covenants regarding the right to water as an essential physiological need and therefore human right (see chapter five). The paradox is thus established in practice in the Ghanaian case.

Regarding the PSP programme, the paradox between theory and sector policy contributes to the basis for the divergence in proposed operation and that realised. The inherent contradiction between market based provision, which underlies the desire for full cost recovery in services, and sector requirements in developing countries such as Ghana, is manifest in various areas of the PSP programme in the country. Noteworthy here is the effect realised in the form of contract established and the repercussions which follow. A lease contract, requiring investment for the expansion of services (following from the normative judgement regarding the benefits of such) failed to attract investor interest, thus forcing a management contract. The subsequent parallel operation of grantor and operator contributes to the problematic implementation observed in Ghana: the inevitable role of the public sector, and political interest in service provision, entail divided responsibilities - disputed where ill-defined. contradictory tendencies of the underlying theoretical rationale and the aspiration for universal service provision are further manifest in the reducing scope of the PSP programme. In addition to the reduced scope evident in the shift to management contract, the utilisation of a single operator and the reduced number of systems to which PSP applies is demonstrative of this contradiction. The failure to successfully incorporate these contradictory ideals, full cost recovery and universal service provision, leads in the case of Ghana to the undermining of the operation of the PSP programme: the functioning of regulation is increasingly undermined by the implications of full cost recovery for the scope of PSP (reduced systems and a single operator undermines the potential to implement surrogate competition). Of course, the very requirement

for a regulatory agency is based partly on the requirement to maintain socially acceptable pricing in a monopoly environment, thus deriving from the normative judgements of need.

It may be maintained therefore that within the context of the water sector, the failure at a theoretical level to account for the reality of normative conceptions of need provides the basis for a policy programme which neglects the needs of service provision within that context, and which furthermore denies the social reality of the institutional environment within which the programme is located. Practical manifestation of this is policy that is misaligned with the needs of service provision and expansion thereof, and in fact contributes to the problematic implementation of such policy and the successful operation thereof.

Theory as ideology

It is apparent from the above discussion that the validity of the theoretical rationale for privatisation may be questioned where applied in the water sector in developing countries such as Ghana. Propositions of the particular theories underlying the implementation of PSP in the water sector become invalid where assumed conditions are contradicted by the existing environment. This is true for both public choice and property rights theories, with various associated propositions subsequently shown to be questionable in practice. It is further maintained above that the commitment to implementation of policy based on such theory may in fact contribute to the import of extra-economic factors in resolution of problematic implementation. The disparity in assumed and real conditions, and subsequent divergence in proposed and real performance, prompt the questioning of the motivation for application of such a policy programme deriving from this theoretical paradigm.

This commitment to a privatisation programme rationalised by the particular theories outlined in earlier chapters is demonstrated in the implementation of a contract with obvious and significant failings. contracts are inevitably incomplete and will incorporate proposed means of resolution, these means of resolution are an inhibitive cost to the propositions of the underlying theory – and these are significant in the case of Ghana due to the occurrence of dispute. In addition to these inherent transaction costs, the design of the contract is sub-optimal in terms of the inevitability of moral hazard consequent to its design, and the various issues that could have been resolved prior to the commencement of the contract. The contract in Ghana was established with various critical elements left to ex-post resolution, when these unknowns could have been resolved prior to commencement. This is true for baseline data, for systems to be designated as 'snag items', and for penalty and incentive regimes. It is also the case that improved specificity regarding revenue collection and disbursement and data transfer would lessen the likelihood of dispute. Had such issues been clarified prior to the contract, ex-post dispute and negotiation would have inevitably been reduced in scope. In practice however, the contract has been established with such unknowns included, and an apparently insufficient regime of ex-post resolution incorporated.

It has been expressed by those involved in the design of the contract that many of these factors exist as a means by which to allow the private sector flexibility in their operations, thus not being inhibited by government intervention. Such an intention may coincide with the underlying conception of the state as associated with privatisation theory, but in practice it is a tacit recognition of the capacity provided to the private sector for opportunistic behaviour under the veil of 'flexible' and thus 'efficient' operation. It is therefore possible to question the motivations for the implementation of such a contract with obvious but preventable flaws - it is unlikely the cost of ex-ante resolution would be greater than that ex-post, considering the impact of disputes and negotiations. This question may equally be applied to the motivation for implementing the programme within an environment with apparently lacking capacity. A failure to provide such capacity indicates that commitment to the propositions of public choice theory undermines the performance and operation of the contract. In ignoring such basic prerequisites, the contract and its designers shift significant potential for opportunism, and power, toward the private sector. The asymmetry of information existent ex-post – information required for the resolution of those various contract terms noted above - is in the favour of the private sector. The asymmetry of capacity evident in the exante period, in the establishment of a sub-optimal contract, is only exacerbated ex-post.

Evident contradiction between theory and practice raises the question of the motive for implementation of policy based on such theory. As is noted by Udehn (1996, see chapter two), the potency associated with the neo-classical theoretical framework beyond its abstract theoretical basis, derives from the inherent, notional, qualities of universality and objectivity. The supposed universal character of the individual, as self-interested and utility maximising, and the associated conceptualisation of the structure of the state-individual relation, provides significant power as a basis for the rationalisation for social policy without regard for host environment. It is maintained by Udehn (1996) that the theoretical qualities of the neo-classical framework take on a meaning and power in their reception and utilisation in broader social analysis and beyond which is not explicit in the theoretical detail.

In the case of PSP in the Ghanaian water sector, it is apparent that the PSP programme based on this theoretical framework is implemented in conditions and an environment contradictory to that assumed. Considering the operation and performance of PSP in this context, it is reasonable to propose to question the validity of the theoretical model utilised. Considering the history of PSP in the water sector in developing countries (as described in chapter three), and the typically contradictory conditions found therein, it is reasonable to question the motive for the repeated application of this theoretical model in this context. Consequently, does the notional potency of the theoretical model preclude such analysis of host conditions and the validity of the model in that context? Thus, as Udehn (1996: 189) may ask, does the theoretical model move beyond its strict theoretical basis and come to take on an ideological force: "a theory that misrepresents reality and introduces bias in order to justify a free market society"? It may be maintained that, considering the various stages and levels of

PSP which demonstrate the problematic, sub-optimal and ill-considered design and implementation, theory in this instance takes on an ideological form. The influence of theoretical framework rationalising PSP is obvious in the form of programme implemented. It is also apparent that theoretical concepts, and the potency thereof, influence the decision making and design process - the undermining of the public sector and provision of flexibility for the private sector – even where the practical manifestation of such design undermines the operation and performance of the programme. This influence demonstrates a utilisation of theoretical concepts beyond the idealised conditions found in abstract economic models. The utilisation of such concepts beyond their theoretical capacity undermines the required appraisal of the host environmental conditions and thus the design required for successful implementation. Global uniformity and absence of institutional consideration as central to the rationalising theoretical framework further contributes to this. There is thus a misrepresentation of reality within the water sector in the developing country context as a means of implementing a particular model of economic organisation, one detached from the actual environmental conditions evident in this context. Such an implementation of a demonstrably limited and simplistic model, which is acknowledged by at least some of theorists upon which the theoretical model is based (e.g. Coase, 1960; Buchanan, 1962), shows the ideological potency of associated conceptions yet also their manifest implications for policy.

Conclusion and discussion

Preceding chapters have considered the propositions of rationalising theory for privatisation, the associated weaknesses, inconsistencies and problematic assumptions, and the apparent manifestation of these where the programme is implemented in the water sector in the case study country of Ghana. It has been the purpose of this chapter to establish the extent of the connections between the factors identified in the critical appraisal of the theoretical rationale, and performance and operation of privatisation where implemented in this context. The evidence from Ghana suggests that there are various levels at which the factors identified in the critical assessment are manifest in the divergence of performance and operation from that proposed within the theoretical rationale. The contract has been demonstrated to be incomplete in various critical respects, resulting in various instances of moral hazard, distorted risk allocation, and the increased import in the intervention of institutions in the resolution of associated disputes. The propositions of, in particular, property rights theory are undermined where assumed conditions are contradicted in practice. The importance of the social, political and institutional environment is demonstrated further in the reception of the programme, its administration and coherence with the national framework including those agencies responsible for monitoring, regulation and resolution of non-contracted issues, as well where the private firm is intended to operate in parallel with the state holding company.

The theoretical framework underlying privatisation rationalises the exclusion of the political, social and environmental environment from consideration in development of the policy programme. The over-simplified and abstract modelling of economic exchanges is notably detached from the reality of social and economic contexts within which privatisation is implemented, and this is evident in the case of Ghana. Thus where the assumptions of those theories are undermined by actual conditions in implementation, particularly regarding complete contracts, the inevitable role of the social, political and institutional environment in the resolution of non-contracted issues is not accounted for by the theory and is limited in recognition in the policy programme. Where the role of this environment is recognised by those sponsors of the privatisation programme, resulting limited practical manifestation demonstrates typically rhetorical nature of such recognition. Furthermore the conceptualisation of the role of the state is that which may be aligned with the 'post-Washington consensus': the state is considered as facilitator of private sector operation, regardless of existing institutional structures and norms of operation. Intervention of government is undesirable, regardless of whether this contradicts the actuality of local norms and practices, or contradicts the inevitability of intervention in a resource provision characterised by politically sensitive features of public and merit good or human right.

It is further apparent in the case of Ghana that the particular mode of implementation exacerbates the undermining of assumptions inherent to the theoretical rationale. The contract established incorporates numerous elements which are left to ex-post resolution, including those integral to the assessment of performance of the private sector operator. The inclusion of these numerous factors provides an enhanced likelihood of ex-post opportunistic behaviour, dispute and negotiation. It follows that, considering this increased likelihood which has been shown to be evident in practice, the role and import of the social, political and institutional environment is also increased. In attempting to provide the private sector increased flexibility in its operations, those responsible for the programme design in fact move the practical implementation of privatisation further from the idealised conditions of the rationalising theoretical framework – and thus making the undermining of assumptions have greater negative ramifications for the operation and performance of the programme than otherwise may have been the case.

Considering the apparent contradiction between the theoretical rationale for privatisation and the conditions found in the water sector in Ghana, and the contribution of this to the performance and operation of the programme, it is possible to question the validity of this theoretical framework application in such contexts. Considering the typical conditions found in the water sector, and the nature of the resource itself, the failure to account for the inevitable intervention of government provides a basis upon which particular theories are undermined. The inevitable role of extra-economic factors is thus established, and contradictory to the theoretical rationale. This divergence of actual conditions of implementation from rationalising theory is furthered where the programme is implemented in local environments which prove to be contradictory to the assumed institutional coherence associated with the theoretical rationale –

minimal state intervention, facilitation of private sector operation. Where these inevitable complexities affect implementation of privatisation, the utilisation of a theoretical framework which fails to account for these factors in its very design appears incoherent. It is further evident from the case of Ghana that such an implementation contributes to the evident divergence of performance and operation from that proposed. The validity, both in terms of theoretical coherence and evident divergence in performance, of such a rationalising framework may therefore be questioned.

Considering this apparent incompatibility, incoherence and invalidity, the implementation of the privatisation programme in the Ghanaian water sector raises the question: what motivates the utilisation of such rationalising theory outside those conditions the capacity of its theoretical basis? implementation may be seen to align more closely to an ideological commitment to idealised conceptions of the public and private sectors as a purported solution to improved performance, thus disregarding the realities of sector and national conditions. The dogmatic commitment to such idealised notions of public and private service provision provides a basis for the divergence of performance and operation from associated propositions, and contributes to the incidence of dispute and negotiation that occurs in Ghana as part of a broader trend that characterises water sector privatisation in more general terms. Such ideological commitment is further demonstrated in the form of contract established and the flexibility permitted to the operator. The evident distrust of the national institutional framework in this respect motivates a divergence of contract form from that idealised, in terms of completeness, which in practice in fact provides a greater foundation for the necessary intervention of that very framework, where disputes and negotiations inevitably arise. It may be concluded therefore that the validity of the theoretical framework for privatisation in the water sector may be questioned, and the ideological commitment underlying implementation in the sector in fact, certainly for the case of Ghana, contributes to the problematic realisation of the programme, subsequently contributing to the divergence in operation and performance from that proposed.

Finally, regarding the typical realisation of PSP in the water sector, evidence from Ghana is both coherent with this and provides a means of understanding the basis for this process. The typical experience of PSP in the water sector in developing countries is that of disputes with subsequent renegotiations and cancellations of contracts. Evidence noted in the case of Ghana provides an exposition of the underlying factors which contribute to this process, these being the contract developed, ambiguities therein and problematic administration of this contract. Aligning these with the underlying theory, its critique and the apparently ideological commitment to associated conceptions necessary for such implementation, provides an explanatory framework for this manifestation of PSP.

Chapter Nine:

Conclusions: reappraising privatisation and theoretical validity; implications of the Ghanaian experience for broader trends in PSP

At the outset of this thesis, it was described that the performance and operation of privatisation in the water sector in developing countries typically follows a trend that significantly diverges from those essential propositions associated with the underlying rationalising theory. The subsequent intention has been to attempt to account for this divergence through the analysis of potential weakness, inconsistencies and problematic assumptions in the underlying theory, and consequently confirm their manifestation in the problematic implementation of the programme in the case study country of Ghana. Preceding chapters describe the correlation of aspects of the rationalising theoretical framework, and the associated critique, noting that the problematic implementation of the PSP programme can be attributed to the manifestation of various of these aspects. The following discussion provides an assessment of the process by which divergent performance and operation of the PSP programme is realised, the contribution of the particular mode of implementation demonstrated in Ghana, and the potential implications for the broader PSP programme where applied in the water sector in developing countries.

The central argument made here concerns the derivation of divergent performance and operation from, initially, incoherent and invalid theoretical basis for the programme, subsequent sub-optimal and ideologically motivated implementation, and, finally, consequences which may undermine the potential for successful operation of the programme in the future. Following from the evidence revealed in Ghana, it will be maintained in the first section here that the problematic implementation of PSP derives from an incoherent rationalising theory, the manifestation of which is evident in the design, structuring and administration of the programme. The basis for the trend for dispute, renegotiation and cancellation typical of water sector PSP is thus established, and underlies subsequent manifestation. This is demonstrated where the particular mode of implementation of PSP in Ghana is considered, with a suboptimal and ideologically determined form of PSP exaggerating the inherent incoherence of theory and context, further contributing to the trend established in the sector. It follows, it will be proposed here in the second section, that the trend established in the sector finds an inevitable progression in the manifestation of PSP in Ghana – one which potentially threatens the viability of the PSP programme as typically structured. This concerns the repercussions of decreasing investor interest (deriving from the incoherence of theory with sector conditions) in terms of concessions made to the private sector to engender their involvement (realised in permitted opportunism), and the consequences for the structuring and necessary intervention of sector institutions (the capacity and functioning of, for example, the regulator). Where concessions determine opportunism, the result is necessary institutional intervention for dispute resolution and renegotiation - institutions denied capacity consequent to ideological commitment to theoretical conceptions.

9.1 Reappraisal of theoretical validity and coherence with sector conditions

The Ghanaian experience of PSP in the water sector demonstrates consistency with the broader trend for dispute and subsequent renegotiation of contracts. In the exposition of the factors which underlie this trend, this thesis has utilised the rationalising theory underlying the programme as an explanatory framework. The following discussion draws together the evidence from preceding chapters in an analysis of the apparent incoherence of theory with existent conditions. It is maintained here that the utilisation of this rationalising theoretical framework has inevitable consequences for the functioning of the PSP programme, such consequences being consistent with those of the broader trend characterising PSP in the sector. It is possible therefore, as will be maintained here, to question the validity of the rationalising framework for application in this context. In addition, the particular mode of implementation in Ghana, with a deficient contract demonstrating sub-optimal execution, demonstrates the role of ideological commitment to theoretical concepts, in this case leading to the exaggeration of problematic implementation and subsequent divergence from purported operation.

Problematic implementation: incoherence of theory and water sector conditions

Evidence from the water sector in Ghana demonstrates the contradictory processes in play where privatisation is implemented in such a sector in developing countries. It is evident that the form of programme implemented is coherent with the underlying theoretical framework, and that this framework informs the approach of those responsible for the design and administration of the contract. While the programme thus derives from this particular theoretical framework, its implementation inevitably encounters conditions contradictory to those assumed within this rationale and which are necessary for the validity of associated propositions. This contradiction can be found in three aspects of provision. The first is the inherent problems offered by the water sector, including those deriving from natural monopoly conditions, and include furthermore the apparent paradox of conceptions of water as a right and need relative to underlying conceptions of the individual essential to theory. Contradiction is found, secondly, in the broader political, social and institutional environment hosting the PSP programme. The underlying theoretical framework provides a rationale for the absence of such an environment from the policy and programme design process, and is thus as an explanatory factor for the failure to account for, and provide sufficient capacity for, this institutional environment. Contradiction is further found, thirdly, in the location of the PSP programme within the broader institutional programme being employed by sponsor IFIs. Such a programme, coherent with the 'post-Washington consensus' recognised as being employed in developing countries more broadly, explicitly acknowledges the importance of institutional capacity in the success of development policy - as seen in Ghana GPRS programmes. The failure to

acknowledge and provide sufficient capacity for water sector institutions for the administration of PSP in this case thus appears inconsistent.

A number of research questions were identified in chapter four, being drawn from the preceding description rationalising theory, critical assessment thereof, and the trends of implementation of the programme in developing countries generally. The overall motivating question was that regarding the divergence of performance and operation from that proposed: why is there a divergence in the propositions associated with the theoretical rationale and actual performance and operation of the programme where implemented in the water sector in developing countries? In the context of this thesis this question has been addressed by reference to the critical analysis of this motivating rationale and alignment of practical implementation with those weaknesses, inconsistencies and problematic assumptions. As the central motivating question with which this research has been concerned, the corresponding central conclusion that may be provided in response is that the underlying rationale and the associated effect on the practical form of privatisation may contribute to the trends characterising privatisation in the sector. The data revealed in the implementation of privatisation in the water sector in Ghana demonstrates that the utilisation of the particular rationalising theoretical framework for the programme has implications in the performance and form of operation that results. This is evident at various levels of analysis, but can primarily be seen in relation to the form of contract implemented and the deficiencies thereof, and the intervention and relevance of the political, social and institutional environment within which the programme is implemented. It is maintained that this evidence in the case of Ghana supports the contention that the failure to account for these elements, which are so integral to implementation, in the underlying theoretical rationale contributes to the divergence in performance and operation of privatisation. It further maintained following the evidence from Ghana that the commitment to the privatisation programme in such contradictory conditions, and its derivation from this theoretical rationale, exacerbates the divergence in performance and operation. This commitment further contributes to the conflicting trend present in Ghana, and aligning with water sector privatisation in other countries, for the programme to be characterised by dispute, conflict and renegotiation. The failure to account for conditions in the sector is evident in relation to the commercial viability of service provision. The trend in Ghana indicates the reduction in scope of privatisation – both through the period of the contract under review and potentially for the succeeding contract should there be one. The failure to account for conditions in the sector is also evident where institutional importance is overlooked in the design of the programme. It has been maintained in relation to this that the theoretical foundations of privatisation rationalise the exclusion of the institutional environment and the import thereof in the implementation of the programme.

Other research questions considered the manner and extent to which the particular aspects of this theoretical rationale contribute to this divergence in performance. The first of these other research questions relates to the specific contribution of the points noted in the critical appraisal of the underlying

rationale to performance and operation: to what extent, and in what ways, do the component theories of this rationale, and their weaknesses, inconsistencies and problematic assumptions, contribute to this divergence in performance and operation from that proposed? Subsequently, the aspects of the water sector, and their coherence with the underlying theoretical framework are considered: in what respects do the conditions typically found in the water sector in developing countries undermine the validity of the theoretical framework for application in this context? In addition to the particularities of the water sector, the import and implications of local contextual and environmental conditions are considered: to what extent are local conditions – social, political and institutional norms and capacities - recognised in the form and mode of implementation of the privatisation programme? The application of the privatisation programme in apparently contradictory conditions subsequently raised the issue of motivating factors for this application: does ideological commitment to the programme, founded on an inherently flawed theoretical model and applied in contradictory conditions, negatively affect the likelihood of coherence with local environmental conditions and thus more successful operation? These questions have been addressed with assessment at various levels of privatisation of water services in Ghana, and considering the data revealed in this context, it has been maintained that the validity of the theoretical framework rationalising privatisation is undermined considering performance and operation and the contribution towards this of failings in this framework.

The first notable aspect of privatisation in Ghana that substantiates this claim of questionable validity is that relating to the contract that has been established. It has been noted in the preceding chapter that the contract in Ghana has various elements which validate the critique of property rights theory offered by information economics, principal-agent theory and transaction cost economics. The numerous and significant deficiencies in the contract provide evidence of moral hazard, opportunistic behaviour, the failure to allocate rights and risk appropriately, and significant costs of institutional intervention and administration - all aspects associated with the critique offered by principalagent and transaction cost economics literature. This is true in relation to the lack of baseline data in the contract, from which performance of the private operator is to be assessed, and this has consequences in ex-post in terms of the lack of ability to apply penalties or incentives associated with performance, the extensive ex-post process of resolution and negotiation, and the associated disputes between parties that have characterised the contract, and which remained at the time of research (three years into a five year contract) significant obstacles to the operation of the contract as intended. It is further true in relation to the inclusion of 'snag items' in the contract which significantly alters the degree of transfer of rights, with an associated distortion of rights attribution and residual rights of control being located with the private sector. Further distortions of the transfer of rights is seen in the ceding of control of revenue and its disbursement to the private sector, the incomplete or suboptimal penalty and incentive structure, and the existence of multiple principals. The asymmetry of information in the sector underlies much of these various aspects of problematic implementation of theory. The transfer of property rights, the associated internalisation of externalities is thus undermined and significant and

evident potential opportunism. The consequence of this failure to formulate property rights theory in a complete contract is not only the undermining of proposed performance improvements, but more noteworthy in this instance the contribution of these various deficiencies to the likelihood of and manifest dispute and renegotiation process. A failure to account for such possibilities in the rationalising theory provides a basis for such eventualities.

The failure to account for such conditions further demonstrates the water sector provides a context which undermines the assumptions of the underlying theoretical rationale, and this is demonstrated in various respects. necessary intervention of a regulator, deriving from natural monopoly conditions and the nature of the resource as merit good and human right, implies information asymmetry, multiple principals and transaction costs contradictory to the proposals of property rights theory. The particular configuration of regulation in Ghana further confuses the transfer of rights and objectives, with the regulatory agency having direct regulation of the state holding company and only indirectly the private operator. In practice this intended operation is in fact undermined by the informal interaction of the regulator and private company. The evidence of Ghana further demonstrates the reducing scope of privatisation with respect to the extent of service provision under the programme. The contract has resulted in practice in a reduction of the number of provision systems to which contractual terms apply, and indications of sponsors suggest this reduced scope will be confirmed in any future contract. These among other instances of non-commercial operation demonstrate that the water sector in practice provides contradictory conditions to those assumed, undermining the proposed improved mode of operation and performance.

The presence of contradictory conditions deriving from the characteristics of the water sector are paralleled by those presented by the political, social and institutional environment in the developing country context. The environment in Ghana demonstrates an incoherence with those conditions assumed within the rationalising theory, and necessary for the validity of associated claims. It has been demonstrated that the role and mode of operation of the state in this context diverges from that assumed and idealised within this theoretical framework. This is evident in the typical and normalised mode of operation of national institutions, with inevitable intervention in the sector due to political sensitivity or water pricing being paralleled by norms of political management within the sector and associated agencies. This evidence of resistance to, and mutation of, the privatisation programme is contrary to the assumed coherence of the institutional environment inherent to the rationalising theory. The potency inherent to the rationalising theoretical framework derives from the over-simplification of economic transaction, established in abstract economic modelling which excludes the inevitable complexities of both incomplete contracts and the intervention and import of institutional environments in the determination of the outcomes of such transactions. In this sense, the utilisation of this particular framework provides a basis from which proponents of the programme can disregard the inevitable role of this institutional environment and the intervention of incorporated agencies. This is seen in the history of privatisation in developing countries, with more recent

limited recognition of institutional role. In the case of Ghana, this limited conception is manifest in several respects. Within the context of the sector itself, it is the case that capacity of sector institutions to perform administration of the privatisation contract is typically lacking. This is demonstrated in the case of the regulator that has persistent and significant shortfalls in budgetary requirements through the period of its operation. It is notable in the broader institutional context in terms of the resistance and local mutation of policies intended to provide accountable and transparent operation of, for example, procurement procedures. This absent or limited conception of the role of the institutional environment in the performance and operation of the privatisation contract is rationalised by the exclusion of such considerations in the underlying theoretical framework. In this sense, local conditions – social, political and institutional norms and capacities – fail to be recognised in the rationalising theory, and are subsequently recognised in only a limited sense in the practical implementation of the programme.

Sub-optimal and inconsistent implementation

In these various aspects of implementation of PSP in Ghana, it is apparent that there are multiple occasions on which it may be considered that there is demonstrated both sub-optimal and inconsistent execution. In each case evidence suggests the contribution to the problematic performance and operation of the programme and deviation from that proposed. Sub-optimal implementation is evident firstly in the failure to establish baseline data in the contract, the foundation of which being substandard metering and a failure to consider the capacity for establishing such data. Most substantially, this aspect of PSP in Ghana demonstrates a prioritisation of the implementation the programme ahead of implementation with such basic information being available. This prioritisation is either demonstrative of significant incompetence on the part of those responsible for the programme, or is representative of a bias in preference of a particular contract partner. The latter possibility may be substantiated by the deficiency of data ex-ante (as acknowledged by the sponsor), and subsequently the possibility of opportunistic behaviour on the part of the private operator. This position is compounded by the neglect, further evidence of sub-optimal implementation, to establish sufficient penalties for the delay or failure to establish such data: this may further be considered incompetence or bias in the favour of the private operator. The particular structuring of PSP in the Ghanaian case provides further evidence which may be considered sub-optimal, with subsequent questions as to the motivation for this aspect of implementation. This is true in the sense that the mediation of the relationship between regulator and operator, by the intermediary of the state company, restricts the capacity of the former to function as intended (data transfer being a primary reason here).

In addition, inconsistency in the application of the theoretical framework is evident in the case of Ghana. The rationalisation of 'flexibility' offered to the private sector, permitting the demonstration of their purported inherent efficiency, may be found in the underlying theoretical framework: the intervention of an inherently inefficient public sector would disrupt the

operation of the programme. This process however ignores the consequences for the very same inefficiencies where resulting from a private sector which is not subject to sufficient rights transfer or monitoring. Once again, such shortsightedness may be considered incompetent or biased. This is continued in structuring of the private operator and the staffing thereof: where secondment of staff is established, the 'flexibility' considered necessary is absent. In the context of a five year management contract, the resolution of this organisational incoherence of public and private sector is evidently inhibiting. Inconsistent implementation is further evident when considering the PSP programme in the context of the broader interests and intentions of sponsoring agencies in Ghana. The GPRS strategies established in the country demonstrate a concern for the reform of broader institutional processes, as well as a concern for accountability and transparency in governance. Yet such a concern is significantly absent from the PSP programme in the water sector: sector institutions suffer a significant shortfall in capacity, notable in the case of the regulator and the state company and their ability to administer the programme. Furthermore, the establishment of a Programme Management Unit (PMU) by the sponsor agency is demonstrative of distrust of the host institutions and their presumed activity in intervening to the detriment of the programme. This separation of administration of the programme, by an agency working within the host state structure under the aegis of the sponsor agency, may further undermine the development of capacity of this host environment - contradictory to the intentions of the broader 'post-Washington consensus' and GPRS.

Incoherence and sub-optimal implementation: a basis in ideological commitment?

The utilisation of an apparently over-simplified theoretical framework that lacks the capacity to account for conditions present in the water sector in developing countries demonstrates a process that instigates the questioning of the motivation for the implementation of a privatisation programme based on such a framework. The utilisation of such a theoretical framework which fails to account for the conditions present – those associated with the water sector and with the political, social and institutional environment found in the developing country context – further provides a basis for the divergence in performance and operation from that proposed. In one sense the increased recognition of the role of institutions in the operation of privatisation contracts is an implicit acknowledgement of the inherent deficiencies of the rationalising theory: it is an attempt to integrate institutions into the programme, yet remains limited in the water sector, and, where implemented more broadly, is ideologically aligned with the conception of the role of the state as associated with this theory. The conception of the state as manifest in the limited incorporation of the institutional environment in the privatisation programme is that which aligns with the individual-state relation of underlying economic theory, with the intention being a limited intervention of the state - its primary role being the provision of an environment facilitating the operation of the private sector. As has been noted previously, such a conception is undermined both by the nature of water as a resource and the state responsibilities which follow from this, and by the real conditions found in developing countries – typified in Ghana where political management is both normalised and expected. This application of theory, outwith its conceptual basis and capacity, is combined with those various aspects of sub-optimal and inconsistent implementation, demonstrative of potential incompetence and, in various aspects, partiality to the private sector based on the purported characteristics of public and private sectors.

It may be considered therefore that some element of ideological commitment to the idealised conceptions of the rationalising theory underlie the prevalence and mode of implementation of privatisation in the water sector, at least in the case of Ghana. While this ideological commitment in this sense provides a motivating factor for the implementation of the programme, it further provides motive for the particular form of implementation in Ghana – that which in fact exacerbates the divergence of performance and operation from that proposed. This is evident in the attempts by those responsible for the design of the contract to provide flexibility to the private sector operator. This is evident in the design of the functioning and scope of both public and private sectors in the Ghanaian programme. Firstly, in this endeayour the intention has been, as aligning with the conception of the state and its role associated with the theoretical framework, to limit the potential intervention of the state in the operation of the private sector. This may be seen in the limitation of the role of the public sector in the administration of the programme, with the provision of parallel donor sponsored administrative body. It is further realised with respect to the functioning and scope of operation of the private sector. Through the establishment of a 'hybrid' contract the private sector is permitted considered 'flexibility'. Thus the private firm has control over the revenue account and its disbursement, they benefit from the incorporation of snag items in the contract, and through other means that reduce the potential inhibiting of operation of the private sector. The design of the PSP programme in Ghana is such that where there is demonstrative preferencing of the private sector. This is rationalised by the reference to inherent inefficiency of the public sector, with parallel efficiency of the private sector. Thus, in this respect ideological commitment is evident in the attempt to provide an environment in which the private sector is free to operate without restraint and thus realise its purported inherent efficiency. In practice however, the provision of flexibility to the private sector entails the flexibility to act opportunistically, for example with regard to the utilisation of revenue streams or the determination of scope of contract terms through the identification of snag items.

The provision of flexibility to the private sector may be considered a normative judgement regarding the rent-seeking which follows. Idealised 'independent' operation permits opportunism on the part of the private sector: rent-seeking by the private operator is deemed as permissible, in contrast to that purported inherent to the public sector. Such normative judgement regarding the permitting of opportunism, and its derivation from conceptions of purported inherent characteristics of public and private sectors, demonstrates an ideological alignment with these particular conceptions as deriving from the rationalising theory. In reality however, such an attempt has provided the foundation for the manifestation of those weaknesses, inconsistencies and problematic assumptions in the form of opportunistic behaviour, and ultimately dispute between parties. It may be concluded, considering this experience in

Ghana, that the ideological commitment to the particular rationalising theory underlies the implementation in evidently contradictory conditions – and thus providing a basis for the manifestation of these contradictions in practice – but, furthermore, provides a basis for the inauthentic realisation of the theory, through the permitting of flexibility to the private sector – and therefore providing a foundation for the exacerbated experience of these contradictions. Furthermore, where theory is implemented in an environment characterised by conditions contradictory to those assumed, the consequence is the realisation of an incomplete contract. Where incompleteness exists, where factors cannot be contracted for, there is a demonstrated prioritisation of private sector interest as based on an commitment to particular conceptions of private and public.

9.2 The Ghanaian experience and implications for broader trends in PSP

The above discussion demonstrates the questionable validity of the rationalising theoretical framework of PSP, the manifestation in the process of dispute and renegotiation, and the exacerbating role of sub-optimal implementation and ideological commitment within this process. The exposition of factors underlying divergent performance and operation thus provides a means by which to assess broader trends in PSP in the water sector. The experience of PSP in the Ghanaian water sector is consistent with the general trend developed where the programme has been implemented in other developing countries. Yet it further demonstrates a potentially problematic future for the programme in this context: the underlying incoherence of the programme with conditions found in the water sector in developing countries determines a reducing investor interest and this ultimately, as will be maintained here, undermines the successful operation of the programme. Thus, despite particular aspects of the PSP programme which may be improved following the analysis of implementation in Ghana, the realisation of such improvements is subject to the process by which concessions to the private sector are made (consequent to reduced investor interest).

Locating the Ghanaian experience within broader trends in PSP

The evidence revealed in the Ghanaian water sector is coherent with the characteristics and trends identified in much of the literature which focuses on privatisation in the sector. This is true primarily in relation to performance and outcomes of the programme, and the incorporation of privatisation into the institutional environment in developing countries. The performance of privatisation in the Ghanaian water sector, where quantifiable, has seen negligible change in the period of operation of the private firm, as compared to previous performance of the public utility. This, of course, may be attributed to the failure to establish baselines for performance assessment, and this further contributes to the problems in quantifying the operation of the private firm. In this sense Ghana is consistent with other instances of privatisation in the water sector in developing countries, as reviewed in chapter three. While the Ghanaian case may be considered a less extreme example of the dispute-renegotiation-cancellation process (the contract is in operation, cancellation has not been

mooted), it remains the case that this instance of PSP demonstrates problematic implementation consistent with other instances globally. It should also be noted that the Ghanaian contract had progressed only to year three at the time of research, with extreme cases of the dispute-renegotiation-cancellation more likely as contracts progress. The negligible improvement in performance from the introduction of the programme, which is itself a return to performance achieved previously by the public operator, is consequent of factors which underlie this dispute-renegotiation-cancellation process. It is also consistent with the disparity and divergence of proposed improvement and actual performance and operation.

Significant parallels with other instances of PSP are thus seen in outcomes of the policy: dispute and renegotiation has been evident in Ghana and forms a major restraint on the progression of the contract, and this confirms the more general trend demonstrated in other countries having implemented privatisation. What is revealed in Ghana, and the data utilised here, is the specific reasoning behind such dispute and renegotiation – and potentially more significantly, the fact that such potentialities are designed into the contract and privatisation programme. The form of privatisation implemented in Ghana is further evidence of the trend in privatisation in the sector in developing countries, which, as noted in chapter three, has shifted from long-term lease contracts with transfer of responsibility for investment, to shorter-term, lower risk management contracts. Indeed, the evidence from Ghana suggests that within the period of the contract, and subsequently should a further contract be awarded, the scope of the contract is being reduced further. This factor is further evidence of the contradiction in application of privatisation in the water sector: where significant sunk costs are required to expand service provision (or even to maintain or repair existing networks), such operations are typically not commercially viable. In this respect, data from Ghana confirms the experience elsewhere, where private firms frequently lack the incentive to invest.

Further to the contract, its form and the performance and outcomes of privatisation, the experience revealed in Ghana confirms other aspects of the programme experienced elsewhere in developing countries. This further correlation concerns the approach of the sponsors of the programme to the political, social and institutional environment of the host country, and the means by which these contextual conditions are incorporated into the programme. The evidence from Ghana is coherent with the analysis of those authors describing typical development in the sector as being characterised by an underlying mistrust of the state while increasingly being paralleled by a purported recognition of the import of local variation, at least at a rhetorical level. Described as the 'post-Washington consensus', the purported increased recognition of institutions is evident in the Ghanaian case in the broader reform agenda – as part of the IMF Poverty Reduction Strategy. As has been noted however, this agenda promotes a particular conception of the role of the state, and is not necessarily coherent with the political, social and institutional context of the host country. Within this encompassing reform agenda, the particular formation of the privatisation programme may appear inconsistent: the inevitable intervention of the regulatory agency, for example, is not

comprehensively incorporated into the programme, with funding necessary for the execution of its functions typically lacking. As noted above, the rationalisation of this apparent contradiction between privatisation practice and rhetoric, may be considered to be the exclusion of such factors from the underlying rationale for privatisation. What is evident in the privatisation programme in Ghana is a mistrust of the national state, in the form of privatisation that has been established, for example in the contractual attempt to avoid any intervention of state agencies. It is apparent that the privatisation programme is therefore inconsistent with the broader reform agenda (at least at the rhetorical level) of those international sponsoring agencies, and, in fact, where the underlying mistrust of the state is manifest in the privatisation contract, the intervention of agencies of this state is made increasingly likely through the increased possibility of dispute.

Implications of incoherence for the potential operation of PSP in the water sector

The basis of the privatisation programme in the requirement for full cost recovery within service provision instigates a reappraisal of the potential for the programme to operate successfully within this context. Commercial operation, and apparent incoherence with the inherent nature of the water sector, entails that there is a history of intervention of political agencies where continuation of service provision at socially acceptable standards is threatened. demonstrated in chapter three with reference to the broader experience of privatisation, with this factor contributing to the dispute and renegotiation process characterising the sector. This process contributes to the difficulty in the achievement of commercial viability over long term contracts where investment is necessary, with private sector interest in such forms of PSP being increasingly seriously limited. The decreasing interest of the private sector in investment in turn determines the form of contract which may be undertaken in the sector. As has been demonstrated in previous chapters, this entails the establishment primarily of management contracts. The scope of PSP is thus reduced: the private sector, and risk aversion, determines that their role is limited to those aspects of service provision reliant on already existing infrastructure – typically restricted in the developing country context.

The consequence of this trend is manifest in the Ghanaian case: a management contract with limited role for the private sector. However, it may be maintained, considering the experience of PSP in Ghana, that the trend for the reduced scope for the private sector threatens the potential for successful operation of the programme: the scope of private sector involvement is reduced so significantly, and the distortion of risk so substantial, that the operation of the programme is inevitably incapacitated. It is obvious from the preceding analysis of PSP in Ghana, utilising the rationalising theory as an explanatory framework, that the ideological commitment to the introduction of the private sector as the means by which to reform service provision in fact contributes to the undermining of this very programme. The introduction of the private sector in a limited number of systems in the country determines that a single operator is adequate, and the future likelihood of the shift to two operators appears unlikely considering the apparent reduction in systems under private control – in turn

determined by the commercial viability of systems in the country. Thus, the functioning of regulation of the private sector, through surrogate competition, as necessary in the water sector, is undermined through this process.

Furthermore, the lack of investor interest not only determines the shift to a management contract, but it further determines a significant distortion of risk within this contract. The experience in Ghana suggests this is evident in the attempt by those sponsoring and designing the contract to permit the private sector significant flexibility in their operations, which entails the reduction in the potential intervention by the public sector. This ideologically determined conceptualisation of the inherent capacities of public and private sectors entails in practice the permitting of significant opportunism for the private sector. This process of course undermines the very rationale for the introduction of the private sector as a means by which to limit the effect of such practice by those active in the public sector. It further entails however the necessary and more costly activity of institutions active in the sector where dispute and renegotiation consequent to distorted risk allocation occurs. This is evident in Ghana where negotiations, inevitable considering their incorporation within contract design, require the intervention of the state company in its administering of the contract, the contract auditor and furthermore the government in mediation of negotiations.

The problematic commercial viability of PSP in the sector, the decreased investor interest, and the consequent reduction of the scope of private sector operation thus leads to two processes which undermine the potential for the functioning of the programme as anticipated. Firstly, the regulation of the sector is undermined through the increasingly problematic implementation of surrogate competition. Secondly, the increased role of institutions in the administration of PSP increases associated costs and the likelihood of intervention of those institutions which privatisation was purported to limit.

The repercussions of the decreasing commercial viability of service provision, decreasing investor interest, and subsequent increasing distortion in risk allocation are therefore apparent in the increasing role of the institutions active in the sector. Considering this experience of PSP in Ghana, implications for the broader PSP programme should be noted. The experience in Ghana is a direct consequence of previous instances of PSP in the sector, whereby incoherence of the programme with sector conditions entails a typical result of dispute, renegotiation and cancellation of contracts. The trend for decreased investor interest and subsequently reduced scope of the private sector in service provision thus appears to be furthered when considering PSP in Ghana. This is true where the private sector is permitted reduced risk and liability in the design of, and through the course of, the management contract. If this is a progression in the sequence of PSP in the water sector in developing countries, it may be maintained that the viability of the programme has deteriorated to the point that the concessions made to the private sector, as necessary to engender their involvement in the programme, come to undermine the functioning of the programme - and subsequently therefore the potential to realise purported advantages associated with the private sector. If this is the inevitable, or even

likely, form of PSP where private sector risk aversion increases and interest in involvement declines, then the experience of PSP in Ghana indicates costs associated with this form of PSP are likely to be more significant than is anticipated, with little realisation of purported benefits of the programme.

The parallel process to this development in the trend of decreased private sector interest and associated consequences where risk allocation is distorted is the failure to provide adequate structuring and sufficient capacity to the institutional framework. The trend for dispute and subsequent renegotiation and cancellation of contracts has entailed, in the broader PSP programme, a recognition, at least at a rhetorical level, of the role of institutions in the successful operation of PSP. This is further coherent with broader programmes of governance reform being pursued in developing countries. commitment is evident at a rhetorical level in the Ghanaian water sector project: practical manifestation of this is limited, with insufficient capacity provided and institutional structures which obfuscate the operation of sector institutions (regulation being the most obvious and significant example). Considering the increased role of the institutional framework following from the particular mode of implementation, deriving from risk averse private sector, the failure to consider these aspects of the institutional environment seems short-sighted. It has been maintained above that this is likely to due the conceptualisation of the public sector, and the purported inherent inefficiency thereof, thus leading to reluctance to assign funding and status.

The apparent reluctance to engage in more substantial support for the institutional framework is therefore likely to be problematic where this framework performs an increasingly significant role in the determination of contract operation and performance. Thus in parallel to the undermining of the functioning of the PSP programme likely to follow where risk distortion is significant, as in the case of Ghana, the failure to account for this framework within rationalising theory appears increasingly incoherent. Should this be a further component to the development of the trend in PSP in the water sector in developing countries, the divergence between manifest performance and operation from that purported to be inherent to the private sector is likely to continue.

The value of the approach undertaken may be seen in this exposition of the potential functioning of the PSP programme. Utilising a framework of analysis which considers the underlying rationalising theory and its associated critique, it is possible to expose the particular aspects of contract design and administration contributing to the process of dispute and renegotiation characteristic of the sector. Furthermore, it exposes the process of increasing distortion of risk and concession to private sector – and the subsequent implications for institutional functioning and capacity, which provide the potential to undermine the operation of PSP programme where implemented.

The above discussion demonstrates the problematic implementation of a policy programme founded on such incoherent and invalid theory, as well as the implications of the power of associated theoretical concepts for the mode of implementation realised. The privatisation programme as implemented in developing countries, and of which Ghana is a coherent yet particular case, has a considerable history of failure to improve water service provision. It has been demonstrated in this thesis that the particular theoretical framework upon which the programme is based is significantly incoherent with conditions found in this context, and validity for sector programmes should be questioned. Consequently a reappraisal of sector policy appears necessary. It has not been the purpose here to provide a value judgement as to the preferred mode of service provision, public or private. What has been intended, and to this extent achieved, is the better understanding of the value of underlying theory for the service provision reform programme that is widely implemented in developing countries. Subsequently it is possible to consider the implications for the future course of policy development. It is the case that the particular mode of privatisation programme implemented in developing countries, as rationalised by such underlying theory, has significant deficiencies in capacity to provide a coherent and workable solution to improved service provision. It is not the case that privatisation itself is inherently unworkable where applied in the water sector: this is demonstrably true when considering other applications in developed countries such as the UK. What has been shown however, is that the application of such programmes in developing countries hold such commitment to underlying concepts - in part ideologically compelled - that there results a mode of implementation that has inherent and unresolvable problems. Therefore without significant reappraisal of the mode of implementation, which forces a detachment from these underlying theoretical concepts, it may be maintained that wherever privatisation is applied in this context it is likely to encounter problematic implementation with disputes and renegotiations likely (in this sense the evidence from Ghana is both a particular case but also emblematic of the broader trend in developing countries water sector privatisation).

It can be maintained that where privatisation is to be attempted, there should be greater attention paid to prerequisites necessary for the better operation of such a programme. Deriving from evidence revealed in the Ghanaian case, this may be considered to be true for the contract and terms, condition of information and distribution thereof, institutional capacity, infrastructure condition and the commercial viability of systems, coherence with both host environment and broader reform agendas being employed within that environment. Within each of these various aspects of service provision there are means by which revision of approach may be identified.

It is obvious from the experience of privatisation in Ghana that the form of contract established contributes significantly to the ex-post performance and outcomes, in particular in terms of delay and dispute between parties. The apparent means by which to improve this problematic implementation of the

programme may be identified as increasing the specificity of contracts, thus reducing the potential for opportunistic behaviour through the execution of the contract. Following from this, it could be inferred that future PSP policy and contracts should improve specificity consequent to the implementation in Ghana. This is certainly true in the sense that there is, firstly, unnecessary ambiguity, and secondly, problematic haste in the implementation of the contract under consideration. The very basic requirement to establish baseline data from which performance may be assessed and incentive structures applied, absent in the case of Ghana, is an obvious recommendation to be made where PSP policy is implemented elsewhere. In this instance a more highly specified contract would reduce the likelihood of dispute and renegotiation, this through the reduced requirement for the interaction of parties outwith contract terms and the increased strain which this places on the relationship between these parties. The experience of Ghana thus demonstrates that the designing of the contract to intentionally incorporate a significant number of unspecified terms is likely to lead to extensive ex-post dispute and negotiation, and elimination of this likely to better align implementation with that proposed.

It remains the case however, that the specification of all aspects of operation of the service provider would be extremely complex, and as such some means of the resolution of unknowns is required ex-post. Where attempts were made in the Ghanaian contract to define an ex-post means of resolution of these unspecified terms, they have proven to be inadequate – for example with regard lack of penalties relating to transfer of data between parties. The failure to specify more precisely the method by which data was to be agreed ex-post has likely been the most significant factor in the problematic implementation of the programme in Ghana. It may be maintained that the contract contained an unnecessary number of unspecified terms that have contributed fundamentally to the problems in implementation and divergence in operation. Yet where unknowns are inevitable, the Ghanaian experience demonstrates the importance of highly specified procedures for resolution ex-post. Where such a PSP programme is to be implemented, therefore, in addition to the adequate specification of contract terms, the specification of means of resolution and negotiation between parties ex-post is also critical to implementation. The Ghanaian case demonstrates that ambiguity in the requirement of each party for the resolution of, for example, baseline data, in addition to the lack of penalties for this, contributes significantly to the instance of dispute and renegotiation. This requirement to integrate the means of ex-post resolution within the contract structure is contrary to the underlying assumptions associated with the rationalising theoretical framework. Underlying assumptions include the completeness of contracts, and thus ex-post relations between contract parties are not integrate at this basic level. The case as researched here demonstrates the importance of such means of resolution, including the role of sector institutions in this resolution of unspecified eventualities, and the essential nature of such considerations for the implementation of policy where ex-post complexities are inevitable. In turn, the sequencing of implementation, so that adequate means of resolution - and the institutions involved in this process exist to provide this function.

Further implications that follow from the form of the contract established in Ghana relate to the apparent attempt to permit flexibility to the private firm. In practice the design of the contract in such a way permits the private sector increased freedom to operate as they please: the sponsors of the contract describe this as a means by which to extract maximum efficiency from the operator, in reality however it is a further means by which to distort risk transfer - shifting risk towards the government. This mode of risk transfer is however evidently problematic: the desire to permit flexibility for the private sector is tacit consent for the private sector to behave opportunistically. With regard this mode of privatisation, it may therefore be maintained that, if this is the chosen approach of sponsor agencies for other privatisation programmes, it is both inherently flawed and biased toward the private sector. In addition to these particular aspects of the Ghanaian experience, the short period of the contract as is typical of the trend of water sector contracts - in itself inhibits the likely resolution of disputes. It as been the case in Ghana that disputes deriving from the contract have extended until at least three years into the five year contract. Thus, should a resolution be found, the contract is in fact only applicable from the resolution date onwards: the penalties and incentives for performance rely on this resolution. At best, therefore, the terms of the contract apply for two of five years - were a longer contract established this resolution would at least have a longer period to have the purported effect.

It has been noted in chapter three that the commercial viability of privatisation in the water sector has been questionable, with various firms expressing the opinion that service provision in developing countries typically is not viable for private enterprise. The experience of Ghana demonstrates that this is true in this context: the identification of snag items, and subsequently systems which are excluded from contract terms, demonstrates that where systems require investment for their operation on a commercial basis they are rejected by the private sector. This indicates therefore that, in the Ghanaian context, there is a requirement for functioning systems as a prerequisite for the operation of the private sector. The attempted application of a privatisation contract to systems that are inadequate at the inception of the contract will be deemed not commercially viable.

Finally, the implementation of a privatisation contract in an environment with political, social and institutional conditions that contradict those assumed may be likely to encounter problems which contribute to divergent performance and operation from that proposed. It has been noted here that the implementation of the privatisation programme in Ghana appear to contradict some of the purported objectives of the broader reform agenda sponsored notably by the IMF. The mistrust of national state institutions is evident in the mode of implementation: parallel systems of administration for the contract are established – such as those relating to procurement procedures, or the PMU – alongside agencies of the national state. Such systems are contradictory to the rhetorical commitment to reform of the institutional environment. Furthermore, where this rhetorical commitment is made, the basis of reform is particularly limited in its conception of the state, and meets with local resistance and a lack of commitment, as well as differentiated local reception and mutation.

As noted above with reference to the role of the institution environment in the ex-post resolution of non-contracted factors, the sequencing of programme implementation is critical where reforms of the institutions are attempted. The Ghanaian case demonstrates the problematic implementation of a programme which assumes a certain condition of this institutional environment and relies on this for implementation as proposed. Where broader reforms are attempted to better align institutional conditions to those assumed, the progression of such attempts is underdeveloped relative to the requirements of the PSP programme. As such, the Ghanaian case further indicates that where such PSP policy is attempted, sequencing relative to attempted broader reforms, which may provide a coherent host environment, is critical. While in Ghana attempts to revise, for example, procurement procedures or staffing selection may be ongoing, their development is not in line with requirements of the PSP programme. As such, prior to the furtherance of these broader reforms, it may be considered that sector policy should follow a form more appropriate to developments in the host environment. It may of course be argued that the development of parallel systems of PSP administration are a means of doing just this, but in practice it has the effect of undermining the development of such institutions within the national state institutional framework.

The promotion of a particular nature of the state in Ghana is not the purpose of this thesis, a value judgement is required for the preferencing of the continuation of nationally or international derived and developed state structures, or some combination of these. What may be considered here, and therefore contribute to the development of subsequent sector policy, is the potential revisions which may contribute to the implementation of this form of PSP which better aligns to that proposed. In this sense the nature of the host institutional environment and its relation to the PSP programme, and the implications of the Ghanaian experience, should be noted. The approach to the incoherence of the host environment in Ghana has been, as been noted above, to operate a parallel administrative structure while broader governance reforms are instigated. However, there is a demonstrated resistance to reforms in the mode of operation of sector institutions to attempted revision to better align with an idealised 'enabling state'. In addition to the parallel operation of administrative element such as the PMU, this demonstrates the fallacy of the implementation of short term programmes with extensive requirements in institutional revision. Ghana demonstrates the problematic implementation of what may be considered an indeterminate state between an idealised form of programme and existent governance structures, where rhetorical commitment with parallel administrative structures provides a basis for problematic and delayed implementation. Prerequisites and sequencing are, once again critical.

Of course, to what degree these particular aspects of the PSP programme may be modified for the more successful realisation of the purported benefits of private sector operation is determined in parallel with the perceived and actual private sector interest in investment. Where, as noted above, the trend for decrease in such interest determines increasing distortion in risk transfer and

increased permitting of opportunism to the operator, the concessions evident in Ghana may be repeated. Where this is the case, the trend for dispute and subsequent renegotiation and cancellation is likely to continue, together with the divergence in performance and operation from that proposed. To this extent, PSP in the water sector in developing countries may be considered as something of a vicious circle, whereby problematic implementation (having a basis in the incoherence with sector conditions) determines reduced investment, in turn determining greater concessions to the private sector, with consequences evident in the increased role of (insufficiently equipped) institutions with associated costs.

Appendix A:

Fieldwork implementation: data selection, collection and analysis

Research design and methodology, and the basis thereof, have been described in chapter four. Subsequently, the background to privatisation in the water sector in Ghana is provided in chapter five, with the scope of programme implementation and responsible agencies described. It is the purpose of this appendix to provide information regarding the implementation of the research design and methodology in the context of Ghanaian water sector privatisation. Fieldwork in Ghana was undertaken in 2009, three years into the five year management contract which commenced in June 2006. This appendix contains information on the particular agencies and actors which provide the data sources for the research undertaken: including the selection and sampling process for interview participants and the various forms of documentation relating to programme implementation. It is further described here the administration of data collection, the means by which data was collected, the means of recording, and the difficulties and limitations encountered in the process. Finally, the appendix considers the mode of analysis of data and the identification of themes and issues pertinent to the research questions and hypotheses established in chapter four.

A.1 Data sampling and selection

In the context of this research, data sampling and selection is determined by the research design and questions, and the methodology which follows from this. In the context of researching privatisation in developing countries, it has been determined in chapter four that the most valuable and coherent approach is that of the case study. It follows that the sampling and selection of data sources is occurs at multiple levels and in multiple spheres, such triangulation providing breadth and depth in the construction of a case intended to be an instructive example of more general phenomena. The utilisation of the case study approach, together with the research design of a hypothesis testing nature, further determines that sampling and selection is purposive: the bulk of the population, and the particular actors and agencies of interest and relevance, are known prior to research. Considering the purposive nature of investigation, and the utilisation of triangulation in this endeavour, the following discussion reviews the particular sources utilised in research, and the sampling and selection decisions made. Included here are the sources and their relation to the research questions and hypotheses developed in chapter four, and subsequently the implications of selection for generalisability and reliability of research.

The scope of research is defined in chapter four: as is coherent with the theoretical framework established in chapter two, and subsequently the review of implementation as described in chapter three, the scope of research can be considered by reference to two broad spheres of exploration. Firstly that relating to contract performance and compliance, and secondly that relating to the extra-economic determinants of performance and operation of the

programme. It is noted in chapter four that performance and operation in each of these two broad spheres may be considered by reference to, respectively, their technical, and their political, social and institutional nature.

Regarding the first sphere of investigation, technical factors contributing to performance and operation divergent from that associated with the rationalising theory, this is considered in contrast to the extra-economic factors. Thus, the contract established, the particular terms therein, the capacity for the administration of the contract, and the contracted relationship between parties are of particular interest here, noted in chapter four:

- An understanding of the specificity of contractual terms
- Performance and operation, and compliance relative to contract terms
- The potential for opportunism, ex-post and thus possible ex-ante
- Capacity (technical, financial, human resources) for administration of contract
- Aspects of provision where information is incomplete, or deficient, and therefore subject to dispute
- Means, and extent, of transfer of risk and liability including distortions incorporated as a means of attracting private sector investment
- Incorporation of means by which to reconcile commercial operation (full cost recovery) with social objectives (service expansion), thus the consideration of public opposition

A framework for sampling is thus established: documentation relating to performance, compliance, the establishment of requisite institutional environment, in addition to the contract, defines the scope of enquiry here. Considering the nature of the contract, however, and its status of implementation (third year of five years), the requisite documentation may not exist or be available. It is advantageous therefore to complement available documentation with evidence acquired through the interview of those actors engaged in the sector in various roles. The actors and agencies responsible for implementation or otherwise engaged in the sector are described in chapter five.

Similarly, regarding the second sphere, political, social and institutional factors which contribute to performance and operation divergent from that associated with the rationalising theory, these extra-economic factors are selected purposively by reference to the actors and agencies engaged in the sector. As is noted in chapters two and three, the environment within which privatisation is implemented is critical to the performance and operation of the contract, in particular where there are significant information deficiencies and asymmetries. The particular aspects of the political, social and institutional environment which require exploration are the following, from chapter four:

- The establishment of a regulatory agency
- The incorporation of the regulator as component to the privatisation programme, and the prioritisation made thereof
- The capacity of the regulator in its monitoring and price setting role
- The potential for regulatory capture, political or commercial

- The legal and legislative framework enabling regulatory decisions to be implemented
- Commitment or otherwise of actors in the national state institutional framework to privatisation and its mode of implementation
- The extent and nature of transaction costs associated with the administration and monitoring of privatisation
- The incorporation of public consultation in the privatisation process and the impact of public opposition
- Evidence and impact of contradictory motives for action: public service and universal service provision
- The impact of contradictory tendencies of commercial operation and universal service provision or expansion of services

Sampling and selection of data sources is thus determined by the above scope of exploration of the extra-economic factors relating to performance and operation of privatisation. Research of actors and agencies therefore requires to be coherent with these aspects of the research design. While indications as to the nature of the issues and their prevalence in Ghana is possible through documentation, it is more likely that factors relating to the attitudes, perceptions and reception of the privatisation programme is to be acquired through the interview of actors engaged in the sector.

The information acquired from the relevant actors and agencies, relevant to the evaluation of both technical, and political, social and institutional factors contributing to performance and operation, are as follows, initially here the secondary data sources:

- GWCL (Ghana Water Company Limited): performance and other data in Annual Reports to 2003 (GWCL, 2000, 2001, 2002, 2003); Management Contract with AVRL (GWCL, 2005); 2006 documentation relating to the institutional redesign of the company (GWCL, 2006a, 2006b); 2009 presentation to coalition of water sector NGOs (CONIWAS) concerning the status of contract operations (GWCL, 2009).
- PURC (Public Utilities Regulatory Commission): Annual Reports covering the operation of the agency since inception 1998 (PURC, 1998, 1999, 2000, 2001, 2005d, 2006, 2007); various policy documents concerning social water tariffs and provision, and activities of the agency (PURC 2005b, 2005c, 2008, undated); 2005 review of GWCL performance (PURC 2005a; unpublished data regarding various aspects of performance and operation of GWCL and AVRL to 2009 (PURC, 2009).
- AVRL (Aqua Vitens Rand Limited): Annual Reports for period of operation from 2006 (AVRL, 2007, 2008, 2009a); 2009 presentation to coalition of water sector NGOs (CONIWAS) concerning changed modes of operation (AVRL, 2009b, 2009c, 2009d, 2009e).
- Fichtner (technical auditor of contract, as established within the programme documentation): 2007 report of technical performance and operation to date (Fichtner, 2007).
- World Bank: documentation relating to the development of programme prior to implementation (World Bank, 2004a, 2004b); documentation

- relating to status of financial disbursement associated with the programme, covering years of implementation (World Bank, 2007, 2008, 2009).
- GII (Ghana Integrity Initiative): various documentation relating to the activity of the NGO in monitoring developments in transparency and accountability in the sector and public service more generally, including initiatives associated with the GPRS implementation (Azeem, 2007, undated; GII, 2007a, 2007b, 2008a, 2008b).
- Water Directorate, Ministry of Water Resources, Works and Housing: national water policy and various associated documentation (MWRWH, 2004, 2007, undated).
- ISODEC (Integrated Social Development Centre): various documentation relating to the response and interaction of NGOs and community groups with the government and programme (e.g. ISODEC, 2001a, 2001b).
- Parliament Library: various Acts; Hansard reports, parliamentary debates.
- GACC (Ghana Anti-Corruption Coalition): documentation relating to the prevalence of, and attitudes to, corruption practice in the Ghanaian public sector.
- Press reports: concerning various aspects of the programme, including the relationship between parties, public interaction, labour relations and so on.
- Public Procurement Authority: agency monitoring procurement in public bodies, general reports concerning conditions and trends in this area.
- Project Management Unit: contract frameworks documents; public relations material concerning development and implementation of the programme.

In addition the following agencies were also engaged in the process of interview, some agencies with multiple respondents:

- PURC (Public Utilities Regulatory Commission): two interviews with two representatives responsible with regulation of the water service provider and the sector more broadly, including alternative modes of provision (PURC Representatives, 2009).
- World Bank: interview with two representatives associated with programme design, implementation and administration (World Bank representatives, 2009).
- PUWU (Public Utilities Workers Union): two interviews with representative associated with workers at GWCL and seconded to AVRL, and the proposed reforms of the company (PUWU representative, 2009).
- NCAP (National Coalition Against Privatisation): interview with representative associated with activities related to introduction of private sector (NCAP representative, 2009).
- Member of Parliament: interview with Member of Parliament, former Minister associated with development and implementation of programme (MP, 2009).
- GII (Ghana Integrity Initiative): two interviews with two representatives associated with research on transparency in service delivery, and

- accountability and transparency in the broader Ghanaian public sector (GII representatives, 2009).
- Consultant to Water Directorate: interview with representative associated with consultancy to the Water Directorate through the period of the development, implementation and operation of the contract (WD Consultant, 2009).
- Water Directorate, Ministry of Water Resources, Works and Housing: interview with representative associated with the administration and implementation of the programme (concurrently Managing Director of GWCL, although recently appointed at time of research) (Ministry representative, 2009).
- ISODEC (Integrated Social Development Centre): interview with representative associated with the interaction of NGOs and community groups with government through the period of development and implementation of the privatisation programme (ISODEC representative, 2009).
- CONIWAS (Coalition of NGOs in Water and Sanitation): interview with representative associated with the interaction of water companies (GWCL and AVRL) with NGOs and community groups (CONIWAS representative, 2009).

The data sources utilised therefore comprise a broad framework encompassing relevant actors and agencies responsible for the design, implementation and administration of the privatisation programme. It has been attempted to incorporate representation from all relevant parties, including the service provider, the sponsoring agency, sector institutions, political representation, labour representation, and the representation of NGOs and community groups. In this sense they are coherent with the scope of research determined in chapter four, and subsequently the theoretical framework to which results may be generalised. It is obvious that these agencies are particular to the Ghanaian context. However, considering the review of privatisation across developing countries more generally (chapter three), the replication of actors and agencies across different contexts appears typical. In this sense, when combined with the research design and hypotheses developed, application of the same approach across different contexts, for the purpose of understanding divergent performance and operation of privatisation from it's validating theory. This is true for example for the regulator, for the sponsor agency, for the sector institutions, for the NGOs and community groups engaged in the sector, for labour representatives etc. What is perhaps unusual in the Ghanaian case, and this is noted in chapters seven and eight, is the continued existence of the state holding company, and the relationship between this and the private company and other sector institutions including the regulator. It is noted in these chapters that such a structure is a result of the reduction of risk transfer to the private sector, and as such may be indicative of other future sector privatisation programmes, considering the trend of reduced interest in investment by the private sector: replication of this structure may therefore be replicable in future programmes.

Where available, subjective experience, local interpretation and reception of the privatisation programme have been acquired through interviews with relevant actors engaged in the sector. Through such interviews it has been possible to approximate an explanation for the divergence between performance and operation of the programme and that proposed within the rationalising theory. Interviews further provide evidence which fills gaps in documentary evidence, or explanatory factors where these are absent or questionable within documentation. In addiction this documentation contextualises the opinions, subjective interpretations and local reception of the programme as expressed in interviews. In the case of Ghana the sampling and selection of documentation has been determined significantly by availability of data. As has been noted in chapters six and seven, the capacity of sector institutions for the administration of service provision is inhibited by financial, technical and human resources constraints. Typically this results in the failure to generate information on the performance of service provision, including both that relating to water production and distribution but also that relating to financial performance. This is particularly true for the state water company, and has been for some period in time, and there are inevitable repercussions for other agencies engaged in the sector. Regardless, where data has been generated it has often been made available – for example that through the regulator. Elsewhere, sector institutions' libraries have provided various documents relating to performance and operation of those institutions.

Sampling of data has been at least in part determined by the ethical dimension of selection of participants with requisite authority to engage in research and provide information. Thus, were an individual active in the sector, junior in their institution, to be relevant to research relevant authority should be sought. In practice however, through the course of research in the sector in Ghana, this has not been necessary. By the nature of research, those individuals with relevant experience and knowledge are those in positions of authority within their institutions: they are the individuals who have been, and who are, instrumental in the design, implementation and administration of the programme.

As described in chapter four, ethical concern further determine selection and sampling to the extent that consideration should be made of the potential harm, the requirement for informed consent, and the potential invasion of privacy. The requirement for informed consent has been observed in sampling through the selection of participants willing and able to provide this, research required no incorporation of those unable to provide consent, and where unwilling research was not undertaken. Invasion of privacy, as described in chapter four, has been limited by the necessary inclusion of participants in research only in their professional capacity. The nature of potential harm is not conceptualised as physical, but more likely professional or personal in the nature and extent of information that is revealed, and the potential repercussions thereafter. The consequent approach involves the assurance of maintaining confidentiality and anonymity in records of research. Research is thus guided by these considerations and those in chapter four, and by associated requirements under the relevant ethical approval process of the University of Hertfordshire.

Approval for research from the ethics committee of the University was acquired prior to fieldwork (protocol number BS/R/029 08).

A.2 Data collection

Subsequent to the sampling and selection of interviews and documentation, it is necessary here to describe the process of data collection. Fieldwork was undertaken in a six week period in August and September 2009, thus in the fourth year of the five year management contract. The various actors and agencies necessary for requisite data collection, as defined above, typically exist in Ghana in the capital Accra, or have offices here, and this location therefore provided the hub for fieldwork. The implementation of interviews, as is described below includes the process of contact, development and design of interview framework and questions, the recording of data, and a record of any limitations and difficulties encountered in this process. Similarly, the documentation regarding privatisation in Ghana requires consideration of the potential access and publication issues that may be associated.

Collection in the field: interviews and secondary data

The purposive sampling and selection process determined a majority of participants could be contacted prior to entering the field, primarily through email. The degree and frequency of email usage in Ghana does not compare equally to that in what may be termed developed countries, with the technological factors and the persistence of alternative modes of communication providing a basis for this. Frequently therefore, specific arrangements were made while in the field; this was also true for those participants whose identity and relevance was revealed through the research process, and the data provided Following initial contact and arrangement of through other participants. meeting, letters were submitted prior to interview concisely describing the nature and intentions of research, the right to refuse participation and the anonymisation of data in research (an example text is shown below). Interviews were generally conducted in the participants place of work, or alternatively in a neutral venue such as a café or restaurant, at times convenient to the participant. Recording of interviews was undertaken by means of digital voice recording with consent of the participant, with accompanying written notes where appropriate.

"Re: PhD Research

I am a PhD student at the University of Hertfordshire in the UK, and I am conducting research into provision of water services in urban Ghana. My research focuses on the restructuring of the sector from the late 1990s onwards, and considers operators, regulator, alternative service providers and the broader institutional environment, including governmental policy. The research is of an academic nature and is not associated with any commercial organisation.

I would be very grateful if you would permit me to interview you at a time that is convenient. The interview would last approximately 45 minutes.

The research complies with ethics protocol at the University of Hertfordshire. Any data that you provide me with will be treated in total confidence and the interviewees are treated anonymously. You should also be aware that participation is absolutely voluntary and that you have the right to not take part and also that you may withdraw at any time." (Example of text of consent letter)

The interviews, as described in chapter four, take a semi-structured form, permitting the incorporation both of those issues raised in the research design, hypotheses and questions, but also interests and perceptions which the participants choose to raise through the course of conversation. In this sense, the structuring of interviews is consistent with the research design: aligning closely with reasonably well defined scope of research – that which follows from the theory and practice of privatisation outlined in chapters two and three, while including sufficient flexibility for the expression of subjective interpretation and local reception of the privatisation programme as is necessary to explore the divergence between this theory and practice. Questions used in the interviews inevitably varied by relation to the role and experience of the participant. Therefore, representatives of the regulator were questioned on the capacity, means of operation, relationship with state and private company and so on, and furthermore specifics regarding performance of the service provider over the period in question. Similarly, representatives of the sponsor agency, those of the consultants to the water directorate and the directorate itself, and the Member of Parliament, were questioned about the details of the contract development, disbursement of funding, performance of the operator, the future form of water service provision and privatisation in Ghana etc. NGOs and associated coalitions were questioned on the interaction of such organisations and community groups with the formal privatisation programme, broader public interaction with or opposition to the programme, the performance of associated programmes of accountability and transparency and their manifestation in and implications for the water sector, etc.

Further to the more specific questions, various themes frequently appeared and were common across the various actors and agencies represented. Of particular note here, and this is central to some of the conclusions drawn in chapters six, seven and eight, is the relationship between contract parties. Prior knowledge of the sector in Ghana determined the particular structure established in the country: the continued existence and relevance of the state water company, working in parallel with the private sector company. What was revealed however through the course of fieldwork was the extent to which the nature of this relationship determined the performance and operation of the programme. Thus, the subjective interpretations and local reception of the programme, made apparent only through the interaction with those working in the sector, reveals this critical factor in the privatisation programme in Ghana, that not appreciable through documentation relating to the programme. The revelation of this theme, and others relating to the extra-economic factors

determining performance and operation, through interviews of those engaged in the field demonstrates the value of the constructivist and interpretivist approach in research in this context. Repeat interviews were occasionally necessary to follow up such themes revealed in initial meetings.

Documentation relating to the implementation of the privatisation programme in Ghana has been obtained from a variety of sources. Purposive sampling and selection means these various sources are across a spectrum of actors and agencies with various roles in the water sector. As noted in the previous section, these include the service providers (state and private), the regulator, sector institutions, NGOs and community groups, sponsor agencies etc. In practice this has entailed accessing the libraries of these various agencies, typically publicly accessible by arrangement, this is particularly true of sector institutions, parliament and NGOs and community groups. Documentation acquired here includes annual reports, consultancy documents, various studies and so on. Other data not publicly available or unpublished was acquired from various agencies, through contacts made through the course of fieldwork. Included here are, for example the data on performance and operation made available through the regulator, presentations made to NGOs and community groups etc.

Access to data in the field: sensitivity surrounding the PSP programme

Considering the nature of provision of water services, its nature as public and merit good, combined with the history of failure in implementation, it is was not unexpected that data collection should entail some problems. As has been described in chapter three the history of privatisation in the water sector in developing countries has been the subject of public controversy where attempted, primarily due to the nature of the resource, and the qualities which contribute to the characterisation as a public and merit good. Subsequently the history of attempted implementation contributes further to potential controversy, where the record of the programme demonstrates significant divergence from proposed improvements, as is the subject of this thesis. Therefore, where attempted these two factors play a role in the process of implementation, and this has certainly been the case in Ghana. Chapter five describes the process of PSP design and implementation, changes in the form of contract, and the public opposition that developed through this process. It is within this environment which research is undertaken, and thus these factors have a bearing on the process of data collection.

The nature of the environment in this respect was most evident, as may be expected, where the research of executors of the programme were concerned. While proponents of the programme were receptive to interviews, for example the World Bank, Minister and Member of Parliament, the state and private companies were resistant to engage in the research. Attempts were made to incorporate the perspective and experience of the private company, beyond that information available in publications such as their annual reports. In practice however, despite attempts through various means of contact, there was no willingness to participate in research. Similarly, the state holding company,

despite attempts through various means of contact, were not willing to provide information or participate beyond information available through publications and data made available through the regulator. In each case there may be varying reasons for this resistance. The private company will inevitably resist supporting exploration of such a programme, the performance and operation of which diverges from that proposed and contracted. The state company, and this has been noted in chapters six and seven, have a history of failure in production of required data for other sector institutions (e.g. the regulator), and resist the exposure of such failings and those of the administration of service provision more generally. It is the case therefore that representation in interview has not been acquired for these agencies. While this is regrettable, it is possible to construct a reasonable picture of the relationship between these parties through other interviews (often involving individuals who have previously worked for either party, or who are close to or involved in contract reviews) or documentation.

Just as these factors impact the incorporation of a totality of actors and agencies in the interview process, a similar effect is seen in regard the acquisition of documentary data. As with the interview process, the two agencies most liable are the state and private companies, for those reasons noted above. Regarding the private company annual and monthly reports have been acquired, demonstrating performance and operation as considered by the company itself. Regarding the state holding company, as is noted above, the capacity of the company for the generation and publication of data has been seriously limited from approximately 2004 onwards. This is noted in chapters six and seven with respect to the implications for the regulator. It has further implications with regards the availability of reports, investment plans, and other data relating to performance and operation of the service provider. Beyond these agencies the availability of data and documentation has been less restricted. The regulator has provided more extensive unpublished data relating to performance, including the various aspects of operation of the service provider which factor into the regulatory decision making process. The active NGO and community group sector in Ghana provides further means of accessing documentation and data relating to privatisation. This is true, for example, where the report of the technical auditor is concerned, with this data having been previously utilised in the public domain and being publicly available through an NGO library. Finally, one further limitation is the degree to which Hansard reports are up-to-date, with some delays inhibiting the appraisal of parliamentary process where privatisation is concerned.

It is therefore true that the nature of the programme as implemented in the water sector proved inhibitive to data collection in those areas noted. It is also true however that the condition of institutions and governance found more generally in the developing country context is likely to have an impact on the capacity for data collection. The quality of data recording in the country, noted above with regard parliamentary records, is indicative of this. In this instance the quality of data is more likely to be due to capacity in terms of finance, human resources and technology for the recording of data. This is replicated at least in part where the state company is concerned, with capacity in these various

respects likely to be inhibiting data recording and production – although the publication of data is likely limited further by sensitivity regarding the performance of the company historically.

Sensitivity regarding the performance of the state provider is replicated elsewhere in this context, and this is associated with the concern of sponsor agencies supporting broader revisions in the mode of governance. Transparency and accountability are key themes in this attempt at more general revision in Ghana (see chapter five), and subsequently data recording and management are bound up with these concerns. Without such a framework being established in the country, there is the potential for an inhibiting effect on the ability to acquire sufficient data for research. While the broader standard of accountability, transparency and data recording and monitoring has not directly affected the present research, it remains the case that the norms and modes of operation in terms of public sector governance will inevitably have a concurrent effect on the standard of data recording and availability in the water sector. These issues are evident in the sector where data production and transfer between service provider and sector agencies is considered in chapters six and seven.

A.3 Data analysis

Following data collection, analysis was undertaken comparative to intended research goals expressed in chapter four. The research design developed in chapter four incorporates the theory rationalising privatisation and its critique as reviewed in chapter two, with the typical performance and operation of the programme as reviewed in chapter three. It is described in chapter four that the performance and operation of privatisation may be assessed by reference to, firstly, technical, and, secondly, political, social and institutional factors which contribute to the divergence from that proposed within the rationalising theory. This is consistent with the critique applied to this theoretical framework; where, firstly, there are inconsistencies and problematic assumptions within the theory itself which contribute to principal-agent problems for example, with potential moral hazard or adverse selection associated with the contract implemented; and, secondly, the extra-economic factors associated with transaction costs and the broader critique of the neo-classical model which impact the operation of privatisation, deviating from the idealised economic model proposed. research design developed therefore provides a means by which analysis of data may be undertaken: considering the linear, hypothesis testing nature of research the alignment of results with this framework is consistent.

Analysis of data is therefore undertaken thematically with reference to the research design developed in chapter four. This is the case initially with regards the two broad spheres of exploration: technical, and political, social and institutional. Within these two spheres there are further themes determined in part by, and consistent with, those issues raised in chapter four, but also determined significantly by the data revealed in the course of fieldwork. Thus, within the sphere of technical factors contributing to divergence in performance and operation from that proposed, includes themes including those related to the

distortion of risk transfer, the attempted limitation in public sector intervention, evidence of asymmetry and incomplete information, and the implications of these factors in terms of principal-agent and associated moral hazard problems. Within the sphere of political, social and institutional factors, incorporated themes include the relationship between grantor and operator of the contract, the prevailing institutional culture, and the normalised politicised modes of operation within the sector.

Through the course of fieldwork and the data revealed therein, various themes are identifiable which correlate with the questions raised in the research design. Regarding the technical factors impacting performance and operation, these typically derive from the contract and lack of specificity of associated terms. This includes firstly, the significance of the failure to establish baseline data for the contract, from which performance is to be measured. This appeared repeatedly in evidence from various sources across the sector: NGOs, regulator, labour representatives, sponsor agencies and the grantor itself. Similarly, the attribution of control of revenue accounts, in addition to maintenance funding, to the operator was frequently cited as a significant obstacle. Information flow, and responsibility for data reporting between operator and grantor was further cited as an important factor in inhibiting operations. These issues arose in numerous interview and documentation sources, including those of the regulator, the state holding company, labour and sponsor representatives, and so on. implications of these factors for the validity of the theoretical framework are assessed in greater detail in chapters six and eight, though it may be noted here that they substantiate aspects of the critique which highlight problems deriving from incomplete or asymmetric information, consequent principal-agent and moral hazard problems.

Regarding the political, social and institutional factors which contribute to divergence in performance and operation from that proposed, there are similar recurrent issues arising in the data acquired in fieldwork in Ghana. It is noted by various sources in interviews and documentation that the relationship between contract grantor and operator provides a significant obstacle to the smooth operation of the programme. Representatives of various agencies, including the regulator, water directorate consultant, labour union, and the Member of Parliament note the difficulties caused by an acrimonious relationship. Causes are attributed to both the development of privatisation and the rhetorical characterisation of each party, and subsequently the incomplete information and contract implemented - and this is supported in documentation from the technical auditor and state company. Furthermore, the nature of the programme as implemented in Ghana entails the parallel operation of state and private companies, with the latter operating with seconded staff of the former: the consequence is a contrast in modes of operation, organisational structures and staff advancement, creating resistance to proposed reforms (noted by various sources including the labour, consultant, sponsor ministry representatives). This apparent incoherence with local modes of operation is continued in the broader institutional environment with politicised management being typical and contradictory to the idealised independent operation of sector institutions including the regulator and stat company, and affecting processes including for example procurement (from representatives of the consultant, ministry, labour, NGOs and Member of Parliament, and various documentation including that of the state company, regulator and NGOs). As is noted in chapters seven and eight, these themes revealed in the course of fieldwork in Ghana align with various aspects of the critique of the rationalising theoretical framework of the programme, including: the failure to incorporate institutional significance and variance into the underlying rationale, with associated significant costs and obstacles; the apparent contradiction between commercial operation and universal service provision, with the inevitable political interest and intervention in the sector.

Themes identified in data analysis therefore provide a basis for the substantiation or otherwise of hypothesised connections between the divergence in performance and operation of privatisation from that proposed within the rationalising theory. It further provides a basis for the analysis of the potential contribution of weaknesses, inconsistencies and problematic assumptions to this divergence. It is therefore the case that the subjective experiences revealed through research in Ghana, and the recurrent themes identified in data analysis, provide a means by which to reveal the relevance of such aspects of the underlying rationalising theoretical framework for likely outcomes in implementation, with potential implications for the revision is future programmes.

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