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Abstract

While government failure and market failure theories respectively predict the necessity of private and public efficiency, both fail to predict the public and private inefficiencies which are empirically pervasive. This failure of prediction is due to deductive reasoning that insulates explanatory claims from the real-world duality of agency and institutions. Oliver Williamson lays the foundations for recognising organisational failures of all kinds, by acknowledging this duality, but remains hamstrung by the limits of deductive reasoning.

To resolve this impasse, this project develops a theory of organisational failure that illuminates the multiplicity of the possible organisational efficiency outcomes, explaining how public and private water utilities become more or less efficient under varying circumstances, and reveals the social and economic factors leading to these outcomes. It does so by revisiting Williamson's comparative institutional analysis from a critical realist vantage point, using inductive reasoning as a method of theorising, adopting multiple rationality as agency model and the duality of agency and institutions as the key to explanation.

The theory is developed through a new "remediable institutional alignment" framework, which operationalises the duality of agency and institutions by exploring the interplay of actors' motivation, power, organisational arrangements and institutional environments. This framework is used to analyse the evidence from 30 qualitative case studies produced in 15 years of research on water service reform. Each case illustrates how path-dependency causes the temporary lock-in of organisational efficiency. The cases are then compared to formulate hypotheses on the causality of variations in relative efficiency. Throughout this process, inputs from industrial organisation, economic sociology, and political and policy sciences contribute to the emergence of socialised, historical and non-reductionist accounts of relative efficiency. The enhanced explanatory power of this theory promises to better support organisational reform and serve social justice in a sector vital to social and economic development.

A better future for water: what role for theory?

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It is difficult to overstate the importance of urban water services for sustainable development across developed and developing countries. Water supply and sanitation satisfy basic human needs and prevent public health hazards, are central to reducing poverty and promoting economic development, not to mention their contribution to social cohesion and a cleaner environment. As more than half the world's population currently lives in cities and this percentage is projected to grow, the importance of urban water services is unlikely to diminish in the foreseeable future. Against this background, water sector reform appears to be crucial for making progress towards social and environmental justice. Because urban water services are delivered under natural monopoly, choosing the type of service provider – for example, choosing between such diverse organisational forms as public and private enterprise and their respective ethos, modus operandi, and institutional setting – will not only have implications on organisational efficiency but also on the prospects for mitigating the adverse consequences of monopolistic behaviour.

The policy relevance of organisational reform in the urban water sector has fuelled my interest in this area for the best part of the last 20 years. Having engaged with empirical evidence as a consultant and academic researcher, I have grown increasingly dissatisfied with the conventional theory of organisational economics and its failure to provide accurate predictions and socially acceptable prescriptions. This dissatisfaction constitutes the motivation behind my ISRF-funded project on "Reorienting Industrial Organisation Theory: From Necessary to Possible Outcomes". The project aims to rebase the theory of organizational reform on a critical realist paradigm so as to enhance our understanding of the complexity of organisational reform and inform more progressive policies in the sector. In the following sections, I first identify the rationale for my work by discussing the limitations of conventional theory and mainstream policy. I then sketch how I intend to innovate conceptually to address these limitations, before reflecting on the role of theoretical advances in shaping the policy reforms of the future.

The problem with conventional theory and mainstream policy

The explanatory limitations of current research reference points – market failure, government failure, and Oliver Williamson's comparative institutional analysis – all originate from deductivist theorising. Urban water services offer a case in point. While government failure and market failure theories respectively predict the necessity of private and public efficiency, both fail to predict the public and private inefficiencies which are empirically pervasive. For example, market failure theory has little to say on the occurrence of public inefficiency, whereas government failure theory cannot explain the increasing termination of private contracts due to unsatisfactory performance. Rational choice theories of government failure like public choice and property rights theory became dominant by accusing market failure proponents of deductivism. However, the same accusation can be levelled at government failure. In fact, due to deductive reasoning and the assumptions of instrumental rationality and linear causation, rational choice accounts of relative efficiency assume that actors' motivations and capabilities persist as if the duality of agency and institutions was ineffectual. This aprioristic stance, I argue, is better suited to portraying ideal states of affairs than comprehending organisational performance in the real world.

Importantly, Williamson's comparative institutional analysis lays the foundations for recognising organisational failures of all kinds, by acknowledging the duality of agency and

institutions and the importance of path-dependency. However, his analysis remains hamstrung by the limits of deductive reasoning and the retention of a rational choice agency model. For example, it has been observed that Williamson's a priori assessment of the public sector as the organisational mode of last resort, to choose "when all else fails", effectively reiterates the predictions of government failure and does not reflect the empirical reality of the water sector. Although Williamson offers a healthy dose of realism by focusing on contract instead of choice, conventional theory remains unable to account for the full variety and dynamics of possible organisational efficiency outcomes. Also, this failure of prediction can be attributed to deductive reasoning and the fictitious insulation of explanatory claims from the real-world duality of agency and institutions.

The knowledge gap on the comparative advantage of public and private organisational forms in urban water services is problematic. While conventional theory offers little helpful guidance to decision-makers on what organisational reform to adopt under different circumstances, the pervasiveness of public and private inefficiencies is cause for social concern. Also, policies of privatisation inspired by government failure theory have prompted widespread social resistance, iii stressing the urgency of arriving at better understandings of relative efficiency. Hence, my ISRF-funded project aims to develop a theory of organisational failure that departs from extant theory both methodologically and substantively.

Reorienting the public vs. private debate in the urban water sector

The project develops a theory of organisational failure that illuminates the multiplicity of the possible organisational efficiency outcomes, explaining how public and private water utilities become more or less efficient under varying circumstances, and reveals the social and economic factors leading to these outcomes. It does so by revisiting Williamson's comparative institutional analysis from a critical realist vantage point, using inductive reasoning as a method of theorising, adopting multiple rationality as agency model and the duality of agency and institutions as the key to explanation. This critical realist explanatory strategy promises to offer more accurate and reliable guidance on reforming urban water services than incumbent theories do.

As a philosophy of science, critical realism supports non-reductionist accounts of relative efficiency, intended as the organisational capability to further the equal redistribution of social wealth. The assumption of multiple rationality incorporates instrumental and bounded rationality, on the one hand and social, political, moral, and professional rationality, on the other hand. Concerns with the duality of agency and institutions facilitate the understanding of path-dependent, circular and cumulative causation, because institutions enable and constrain agency and are shaped by agency in return. This interaction produces a perpetual cycle that, due to contingency and irreversibility, results in nonlinear trajectories of events. Finally, inductive reasoning is a method of theorising that informs historical modelling, thus representing an antidote to reductionism.

Going beyond Williamson's mere acknowledgment of the duality of agency and institutions and the importance of path-dependency, iv the project operationalises path-dependent causation to identify the possible trajectories of organisational performance and the multiple organisational efficiency outcomes that these trajectories entail. This operationalisation is achieved by refining a new "remediable institutional alignment" framework, which supports the investigation of the duality of agency and institutions by exploring the interplay of actors' motivation, power, organisational arrangements and institutional environments made of rules, norms and customs. Because path-dependency is a historical and dynamic process, the perpetual interaction of agency and institutions determines a variety of organisational efficiency outcomes subject to lock-in, understood as a temporary rather than permanent condition.

The "remediable institutional alignment" framework is used to systematically analyse the evidence contained in 30 qualitative case studies produced in 15 years of research. These

investigate the relative efficiency of public and private water utilities in developed and developing countries, looking at variations in efficiency with and without changes in ownership. Examples include the efficiency outcomes associated to changes from public to private to public ownership in Grenoble, France, and improved performance under public ownership in Phnom Penh, Cambodia. Each case illustrates how networks of events lead to the more or less temporary lock-in of organisational efficiency, categorised as strong and weak lock-in of public efficiency/inefficiency and private efficiency/inefficiency. The causal feedback between actors' motivation, power, and ability to respond to institutional and historical constraints and opportunities, is catalogued.

Generalised observations are then compared across cases to formulate hypotheses on the causality of variations in efficiency. Throughout this process, inputs from industrial organisation emphasise the importance of asset specificity in shaping principal-agent relations. Inputs from economic sociology reveal organisational efficiency as a multilevel social mechanism whereby coalitions of actors strategically engage in relationships of conflict, collaboration or transaction, and agency is embedded in institutions. Inputs from political and policy sciences illuminate the explanatory power of path-dependency by showing how history interacts with a stratified social reality. These complementary perspectives facilitate engaging with the data in a way that supports the emergence of socialised and historical accounts of multiple organisational efficiency outcomes.

Can better theory herald a better future for water?

The theoretical strategy sketched above promises to address the explanatory limitations of conventional theory by focusing on the possibility instead of the necessity of organisational efficiency. It remains to be seen whether better understandings of real-world organisational efficiency will translate into more progressive policies that further enhance sustainable water development. This uncertainty is due to the inherent unpredictability of the policy process and the interdependence of power, interests and the diffusion of ideas in a relational context. However unsettling, this uncertainty should not weaken the resolve of those who see theoretical advancement as instrumental to fostering social and environmental justice. As historic peers of future generations we have a moral duty to point towards the possibilities of a better future for water service reform.

ⁱ Lobina, E. 2015. Introduction: Calling for progressive water policies, pp. 6-29 in Kishimoto, S., Lobina, E. and Petitjean, O. (eds), *Our public water future: The global experience with remunicipalisation*, Transnational Institute, Public Services International Research Unit, Multinationals Observatory, Municipal Services Project and European Federation of Public Service Unions, Amsterdam, London, Paris, Cape Town and Brussels, http://www.psiru.org/sites/default/files/2015-04-w-OurPublicWaterFutureFINAL.pdf, last accessed 14 September 2016

Dagdeviren, H. and Robertson, S. A., 2016. A critical assessment of transaction cost theory and governance of public services with special reference to water and sanitation, *Cambridge Journal of Economics*, vol. 40, 1707-24

iii Hall, D., Lobina, E. and de la Motte, R. 2005. Public resistance to privatisation in water and energy, *Development in Practice*, vol. 15, nos 3-4, 286-301; Lobina. E. and Corporate Accountability International. 2014. Troubled Waters: Misleading industry PR and the case for public water, Corporate Accountability International, Boston, http://psiru/sites/default/files/2014-11-W-TroubledWaters.pdf, last accessed 14 September 2016

^{iv} Williamson, O. E. 1993. Transaction Cost Economics and Organization Theory, *Industrial and Corporate Change*, vol. 2, no. 2, 107-56

^v Lobina, E. 2013. Remediable institutional alignment and water service reform: Beyond rational choice, *International Journal of Water Governance*, vol. 1, nos 1-2, 109-32; Lobina, E. 2015. *A comparative institutional analysis of public and private operations in the urban water sector*, thesis submitted in partial fulfilment of the requirements of the University of Greenwich for the degree of Doctor of Philosophy by Published Work, University of Greenwich, August 2015