

This discussion paper on “For another idea of efficiency in the water sector” presents some results of the ISRF Political Economy Research Fellowship project “Reorienting Industrial Organisation Theory: From Necessary to Possible Outcomes” (<http://www.isrf.org/about/fellows-and-projects/emanuele-lobina>), and is intended to stimulate discussion and debate on these issues. Please send comments and suggestions to [e.lobina@gre.ac.uk](mailto:e.lobina@gre.ac.uk).

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## **Abstract**

This discussion paper makes three distinctive contributions. The first contribution is to offer an immanent critique of bipolar conceptions of organisational efficiency, namely productive efficiency (or, the generation of value through the production of water services irrespective of whether and how this value is redistributed to stakeholders external to the service provider) and distributive efficiency (or, the redistribution of value to stakeholders external to the service provider irrespective of how this value has been generated). The second contribution is to make the case for the development of a new sub-discipline within comparative institutional analysis, that of comparative criteria analysis. This case rests on the twofold promise of clarifying the epistemological foundations of comparative institutional analysis and making more apparent the implications of distinguishing between positive and normative levels of analysis. The third contribution is to conceive a notion of organisational meta-efficiency – called intrinsic organisational efficiency – that integrates the production of value from an economic activity and the distribution of value between internal and external, productive and distributive objectives. This alignment of productive efficiency and distributive efficiency is intrinsic to the achievement of emancipatory outcomes such as the realisation of the human right to water and the enhancement of sustainable water development. In fact, it supports the sustainable reproduction of water service provision better than either productive or distributive efficiency in isolation from the other. Indeed, the production of value does not in itself entail the redistribution that is necessary to realise emancipatory outcomes, whereas value redistribution does not necessarily lead to adequate levels of reinvestment.

## For another idea of efficiency in the water sector

### PSIRU Discussion Paper

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As an institution that projects an ideal of organisational behaviour and informs the evaluation of organisational performance, the concept of efficiency<sup>1</sup> is central to the theory and practice of public service reform. The literature on comparative institutional analysis repeatedly refers, explicitly or implicitly, to productive efficiency as the criterion for discriminating between alternative organisational modes for public service delivery. Also, since the mid-1970s, privatisation and other New Public Management reforms have, to a great extent, been adopted in the name of productive efficiency.<sup>2</sup> However, widespread social resistance against the privatisation of water and other public services in the global North and South (Hall et al., 2005; Lobina, 2018b)<sup>3</sup> calls into question the institutional legitimacy of this dominant notion of organisational efficiency. Not only has social resistance emerged in response to concrete experiences with privatisation. It has also been inspired by normative aims that, like the human right to water, go beyond the emphasis placed by productive efficiency on the extraction of economic value from a technical activity. For example, the human right to water is no less concerned with value distribution than value production.<sup>4</sup> The possibility that productive efficiency might be socially unacceptable may come as a surprise to those who accept this idea of efficiency as a dogma. Yet, the realisation of this possibility opens up new promising opportunities for the evolution of comparative institutional analysis – an area of inquiry where intellectual progress has proceeded at an incremental pace since the turn of the century.<sup>5</sup>

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<sup>1</sup> For the purposes of this paper, I look at two components of organisational efficiency: productive efficiency and distributive efficiency. By productive efficiency, I mean the generation of value through the production of water services irrespective of whether and how this value is redistributed to stakeholders external to the service provider. Some call this internal efficiency; see, for example, Vickers and Yarrow (1988). By distributive efficiency, I refer to the redistribution of value to stakeholders external to the service provider irrespective of how this value has been generated. Some call this distributive equity; see, for example, Mookherjee (2006). There are, of course, other notions of organisational efficiency than productive and distributive efficiency, as well as systemic efficiency. See, for example, Leibenstein's (1966) X-inefficiency and North's (1994) adaptive efficiency. The treatment of these other notions of efficiency is beyond the scope of this paper.

<sup>2</sup> The axiomatic belief in superior private sector efficiency has been an important part of the rationale for the privatisation and liberalisation of water services in England and Wales, and Atlanta, USA, Berlin, Germany and Buenos Aires, Argentina among other cases (Odgen, 1997; Jørgensen and Bozeman, 2002; Lobina, 2017c).

<sup>3</sup> Water services such as water supply and sewerage are typically provided under natural monopoly conditions, so that they present risks of monopolistic behaviour (Lobina and Hall, 2010).

<sup>4</sup> As enshrined in international law, the human right to water can be defined as the right of everyone to sufficient, safe, acceptable, accessible and affordable water for personal and domestic uses. The content of the right is seen as giving rise to the following principles: 1) availability, 2) quality and safety, 3) cultural acceptability, 4) accessibility, 5) affordability, 6) equality; 7) nondiscrimination, 8) access to information and transparency, 9) participation, 10) accountability, and 11) sustainability. In addition, states have an obligation to use the maximum available resources for the progressive realisation of the right, and to ensure non-retrogression in the enjoyment of the right (Brown et al, 2016). In addition to these principles and obligations, the distributive aspect of the human right to water can be seen in the role of financial sustainability and efficiency as a way to promote intergenerational equity (Murthy, 2013).

<sup>5</sup> The Williamsonian tradition of comparative institutional economics – which focuses on internal or firm-level efficiency as the organisational ability to economise on transaction costs (Williamson, 1980) – offers a case in

Medema et al. (2000: 441) note that: “due to the non-uniqueness of efficiency, efficiency is inevitably bound up with distribution”. This observation is key to address the dilemmas raised by the diffusion of social resistance against water privatisation, and to reorient and reinvigorate the field of comparative institutional analysis. In fact, it points to the import of the ontological openness of organisational efficiency, or its multiplicity of meaning, and the related condition of wickedness (Lobina, 2018a) – that is the impossibility, in a pluralist society, to prevent the emergence of disagreement about the meaning of organisational efficiency.<sup>6</sup> In the presence of doubts about the institutional legitimacy of productive efficiency, ontological openness and wickedness militate in favour of expanding the scope of comparative institutional analysis from its current focus on measuring organisational performance (González-Gómez and García-Rubio, 2018) to a comparative evaluation of the epistemological merits of alternative notions of organisational efficiency; for the nature of the measurable matters no less than the accuracy of measurement. Otherwise put, the discovery of ontological openness and wickedness strengthens the case for the development of a sub-discipline within comparative institutional analysis, that of comparative criteria analysis.

It is here suggested that the comparative analysis of alternative notions of organisational efficiency should be informed by the meta-criterion of institutional legitimacy. Consisting in the social acceptability and credibility of institutions (Scott, 2008), institutional legitimacy represents the *raison d'être* of institutions and reveals the epistemological and policy relevance of competing conceptions of efficiency. Comparative criteria analysis therefore serves the investigation of the relevance of comparative institutional analysis as historically conducted by diverse communities of scholarly and policy practice. In turn, the positive assessment of the relative merits of alternative ideas of organisational efficiency becomes – by virtue of examining the limitations and potentials of extant notions of efficiency<sup>7</sup> – a possibility-enabling practice (Amsler, 2015). The possibilities enabled by this practice include moving comparative criteria analysis from the positive to the normative. More precisely, identifying the limitations and potentials of prevalent ideas of efficiency may help to inform the normative proposition of novel and more legitimate forms of efficiency. In this view, hopes of reorienting and reinvigorating the field of comparative institutional analysis rest on a circular and cumulative intellectual process that begins with ontological openness (as openness of the possible meanings and interpretations of organisational efficiency), continues with cultural closure (as closure of the beliefs, norms, values, meanings and routines associated with the idea of efficiency embraced

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point. 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 (Lobina, 2017a; Pratten, 1997). Dagdeviren and Robertson (2016) observe that Williamson’s (2000) a priori assessment of the public sector as the organisational mode of last resort, to choose “when all else fails”, does not reflect the empirical reality of the water sector. This observation is confirmed by Bel et al. (2010), whose meta-regression analysis of water services finds no support for lower costs with private production. In a similar vein, not only does Chong et al.’s (2006) comparative analysis of 5000 French water utilities find evidence of superior public efficiency but also finds in favour of public bureaus. In fact, administrative departments constitute a large share of French public water operators which implies that French public bureaus are more efficient than private water companies (Lobina, 2013).

<sup>6</sup> This impossibility is due to the necessary permanence of differences between the worldviews embraced by distinct social groups. Thus defined, wickedness does not preclude the succession of different notions as the dominant idea of organisational efficiency from one historical period to another. This succession is the result of the paradigm advocacy and conflicts between social groups as these vie to impose their preferred notion over those of rival groups. See Lobina (2018a, 2012), Lobina et al. (2019) and Hall et al. (2013).

<sup>7</sup> This paper does not engage in a purely abstract analysis of the internal coherence of alternative notions of organisational efficiency. Instead, it focuses on the tensions between institutions-in-use, or the practices associated with the pursuit of different forms of efficiency, and the beliefs that underpin these ideas.

by a material culture),<sup>8</sup> and concludes a cycle with enhanced ontological openness (with the addition of novel notions of organisational efficiency).<sup>9</sup>

Against this background, this paper is concerned with assessing the relative merits of the polar conceptions of productive efficiency and distributive efficiency,<sup>10</sup> on the one hand and sketching a novel notion of organisational efficiency, on the other hand. The potentials and limitations of productive efficiency and distributive efficiency are assessed in light of the institutional legitimacy of the idea of organisational efficiency embraced by different material cultures. More precisely, qualitative case studies are used to illustrate the actual possibilities of institutional legitimacy as embodied in the more or less moral outcomes of practices distinctive of the material cultures of water privatisation and bureaucratic water management, and the relative success of these two material cultures in realising the human right to water.<sup>11</sup> The case studies of the material culture of water privatisation in England and Wales from 1989 to date, and the material culture of bureaucratic water management in England and Wales from 1889 to 1989, inform the immanent critique<sup>12</sup> of the theoretical assumptions underpinning the notions of organisational efficiency embraced by these two

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<sup>8</sup> Material culture is here defined as the translation of normative and cognitive institutions into the practice of a community. For a characterisation of the material culture of financialisation, see Bayliss et al. (2017).

<sup>9</sup> Chick and Dow (2005) assert that open systems and closed systems do not constitute a duality, but a spectrum. However, in the circular and cumulative process of ontological openness-cultural closure-enhanced ontological openness described in the present paper – which should be seen as a process of successive approximation (Lawson, 1997) - there is discontinuity between openness and closure because the former occurs at the cognitive level and the latter at the normative level. It is this discontinuity that, much like in Lawson’s (2009) method of contrast explanation or retrodiction, enables the discovery of novelty.

<sup>10</sup> This paper responds to Andrews and Entwistle’s (2014, 2013) call for investigating whether public services produce the right outputs, whether these outputs are distributed to the right people, and the extent to which output production and distribution contribute to social welfare. However, while Andrews and Entwistle (2014, 2013) look at the production, allocation and distribution of portfolios of public services at the macro-analytic level, this paper is concerned with the governance and regulation of a single public service by a (socially embedded) provider at the micro-analytic level that is at the lowest level of provision.

<sup>11</sup> The human right to water can be seen as a non-individualistic social welfare function. Non-individualistic social welfare functions are heuristic tools for planning the regulation, production and distribution of merit goods like water services. Whereby, merit goods are goods whose collective importance provides sufficient grounds for the government to disregard consumer sovereignty – that is the freedom of individual consumers to decide what quantity of a service to buy and at what price, as well as if and when to buy – and “paternalistically” intervene to facilitate resource redistribution (Desmarais-Tremblay, 2016). Drawing on Desmarais-Tremblay (2016), I offer the following characterisation of non-individualistic social welfare functions: a) social value cannot be reduced to individual valuations; b) in devising a social welfare function, planners and policy makers must make social value judgments; c) the social value judgments of planners and policy makers aim at informing governmental interventions in the distribution of merit goods; d) governmental interventions in the regulation and production of merit goods necessarily imply the in-kind redistribution of resources; and, e) collective action may afford opportunities for citizens to influence the social value judgments of planners and policy makers, as well as the directionality of governmental interventions in the distribution of merit goods. Because of these characteristics, non-individualistic social welfare functions may underpin comparative institutional analysis by shedding light on the implications of intervening in the regulation, production and distribution of a given merit good through alternative approaches – for example, the implications of choosing between alternative organisational modes for water service delivery.

<sup>12</sup> The role of immanent critique is, in the philosophy of transcendental realism, that of “exposing internal inconsistencies in beliefs implicit in practices, or demonstrating how beliefs held cannot accommodate practices actually achieved” (Lawson, 1997: 211).

material cultures – respectively, productive efficiency<sup>13</sup> and distributive efficiency.<sup>14</sup> The two case studies show that immoral outcomes may be empirically associated with the pursuit of both productive efficiency (e.g. when regressive redistribution follows value production)<sup>15</sup> and distributive efficiency (e.g. when long-term intergenerational equity is undermined by progressive redistribution in the short term).<sup>16</sup> In both cases, immoral outcomes resulted from an atomistic fallacy (Lawson, 1997), that is the belief that progress towards the realisation of the human right to water or other ideas of development could be obtained by pursuing either form of organisational efficiency in isolation from the other.

The paper then turns to outline a novel notion of organisational meta-efficiency, which I call here intrinsic organisational efficiency, that integrates the production of value from an economic activity and the distribution of value between internal and external, productive and distributive objectives. It does so by integrating the potentials of productive efficiency and distributive efficiency with a view to overcoming the limitations of these bipolar opposites. This alignment of productive efficiency and distributive efficiency is intrinsic to the realisation of the human right to water and the enhancement of sustainable water development. For it supports the sustainable reproduction of water service provision better than either productive or distributive efficiency in isolation from the other. As shown above, in fact, the production of value does not in itself entail the redistribution that is necessary to realise emancipatory outcomes like the realisation of the human right to water and the enhancement of sustainable water development, whereas value redistribution does not necessarily lead to adequate levels of reinvestment. As illustrated below, intrinsic organisational efficiency enables service providers to reinvest the value generated from public service provision for interventions that enhance affordability or mitigate climate change. Otherwise put, intrinsic organisational efficiency is a form of outcome-based organisational efficiency or public service efficiency consisting in the conversion of economic value for the production and distribution of public service outputs with a view to attaining the purposes of public service provision.

The case study of the material culture of water remunicipalisation in Paris, France suggests that the pursuit of productive efficiency is not necessarily antithetical to that of distributive efficiency. After experiencing bureaucratic public management and water privatisation,<sup>17</sup> in 2010 the City of Paris

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<sup>13</sup> The theoretical assumptions underpinning the notion of productive efficiency – particularly in the Austrian tradition that influenced the material culture of water privatisation in England and Wales – include the beliefs that profits are an important inducement in the attainment of productive efficiency, and that the market failure resulting from natural monopoly can be remedied by the introduction of competition. The beliefs underpinning another influential tradition - that of neo-classical economics - include the possibility of remedying the market failure resulting from natural monopoly by resorting to regulation. Also, neo-classical welfare economics remains woefully silent on issues of distribution (Sawyer, 2009).

<sup>14</sup> The theoretical assumptions underpinning the notion of distributive efficiency – particularly in the market failure tradition that influenced the material culture of bureaucratic water management in England and Wales – include the belief that an ex-ante diagnostic of both the likelihood of market failure and the likelihood of bureaucratic failure (in case of government intervention) is a sufficient and necessary condition to define the proper scope of government intervention (Zerbe and McCurdy, 1999). While acknowledging that neoclassical welfare theory was often oblivious to the possibility of government failure - due to a deductivist approach to the workings of market structures and distributive efficiency, Backhouse and Medema (2012) demonstrate in detail that accusations of committing Demsetz' (1969) “nirvana fallacy”, levelled by proponents of government failure against Pigou, can in fact be construed as mischaracterisations of Pigovian welfare economics.

<sup>15</sup> This is the case of private water companies' dividend payments and financialisation practices being a factor of concerning levels of water poverty in England (Bayliss, 2017; Lobina, 2019; Lobina and Hall, 2008).

<sup>16</sup> This is the case of governmental policies that, under public ownership, pursued security of supply and social equity objectives as a way of supporting public health and economic growth in post-World War II Britain. These policies eventually resulted in underinvestment in sewerage infrastructure and growing levels of water pollution (Bakker, 2001; Hassan, 1998; Lobina, 2019).

<sup>17</sup> On the ontological equivalence of water privatisation and public-private partnerships – like the 25-year lease contracts that were terminated by the City of Paris in January 2010 - see Lobina and Hall (2013).

appointed a new municipally-owned water provider – Eau de Paris – that has enhanced both productive efficiency and distributive efficiency.<sup>18</sup> This achievement was the result of collective action – that is, a joint political, managerial and civic effort within the institutional constraints of national legislation - and not only demonstrates the possibility but also the social desirability of pursuing both forms of efficiency. It follows that the case for conceiving of and engaging with the notion of intrinsic organisational efficiency – as a form of organisational meta-efficiency that embodies the integration of the production of value from an economic activity and the distribution of value between internal and external, productive and distributive objectives in the context of a non-individualistic social welfare function - rests on solid epistemological and moral grounds.

First, building on an exercise in comparative criteria analysis, intrinsic organisational efficiency contributes to strengthen the relevance of comparative institutional analysis by answering questions of real-world import. These questions include “to what extent does water service provision under different organisational arrangements result in regressive or progressive redistribution, not only today but also tomorrow?”;<sup>19 20</sup> and, pertaining to the process rather than the outcome of service provision, “how is it possible to distinguish between the resources required for organisational reproduction and the residual resources devoted to systemic reproduction?”. Dominant notions of organisational efficiency like productive efficiency have too often encouraged atomistic thinking – focusing more on the internal attributes of organisations than the social costs of their interventions - in conformity with mainstream views on economics as a technical discipline that insulates economic tasks from social context. Conversely, realism demands that comparative criteria support the recognition that – as indicated by social welfare functions like the human right to water and sustainable water development – economics is first and foremost about systemic reproduction and viability (Cardinale and Scazzieri, 2018; Morgan, 2016). Premised on the hierarchical integration of interdependent production and utility functions, whereby internal process is functional to social benefit, intrinsic organisational efficiency is an analytical tool for a realist comparative institutional analysis.

Second, there is a strong moral case for intrinsic organisational efficiency or – as it is also appropriate to call it - outcome-based organisational efficiency. Consider, for example, how the alignment of allocative and technical efficiency which informs Farrell’s (1957) idea of productive efficiency is instrumental to realising the human right to water. By contrast, the alignment of productive and distributive efficiency that is inherent to the idea of outcome-based organisational efficiency is intrinsic to the realisation of the human right to water because its achievement offers greater possibilities of individual and collective emancipatory outcomes. The societal urgency of intrinsic organisational efficiency becomes apparent by virtue of these possibilities, including the possibility of reclaiming the notion of productive efficiency as part of an emancipatory project for systemic

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<sup>18</sup> In the first year of operations Eau de Paris made efficiency savings of €35 million, which allowed for an 8% reduction in tariffs, while maintaining a high level of investment. This contrasted with a 174% tariff increase under private operation from 1985 to 2008. Eau de Paris also took important initiatives to strengthen accessibility, affordability, equality, access to information and transparency, participation, accountability, and environmental sustainability (Lobina, 2018b; Petitjean, 2015; Sinai, 2013, 2014; Gamberini, 2017).

<sup>19</sup> See Lobina (2017b) for a discussion on the theme.

<sup>20</sup> An ancillary question then becomes “does it make sense for a service provider to allow water poverty to grow in the name of productive efficiency and expect that the welfare system remedy the situation thus caused, when the service provider’s pricing policy could mitigate if not prevent water poverty in the first place?”. Relevant discussions are offered in Lobina and Hall (2008) and Lobina (2013, 2019), particularly the treatment of “Lorrain’s paradox”. Lorrain’s paradox can be illustrated as follows: a) Lorrain (1997) argues that the plurality of objectives pursued by the public sector, including social justice, goes to the detriment of productive efficiency and finds in favour of private over public ownership; b) Lobina (2013) observes that the private sector’s profit maximisation imperative represents a strong incentive to extract value to the detriment of distributive efficiency, whereas the public sector – being less constrained by high-powered incentives to extract net gains - can more easily align productive and distributive efficiency; and, c) Lobina (2013) concludes that the public sector has a comparative advantage to promote sustainable water development in all its dimensions.

reproduction and viability. As noted, the circular and cumulative process of ontological openness-cultural closure-enhanced ontological openness enables to move from a positive comparative analysis of organisational efficiency to the normative case for intrinsic organisational efficiency. Accepting the validity of this case has a transformative effect in that it leads to new possibility-enabling practices not only in terms of scholarship but also in the realm of policy. More to the point, in consideration of its ability to investigate dilemmas at the interface of production and distribution as well as the commensurable and the incommensurable (Brown et al., 2016; Boelens et al., 2018),<sup>21</sup> intrinsic organisational efficiency promises to support the institutional, deliberative and moral activity by which the surplus is decided (Morgan, 2016). It is on this basis that I lay claim to the institutional legitimacy of intrinsic organisational efficiency.

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<sup>21</sup> The fact that Mookherjee (2006) refers to distributive equity and not distributive efficiency is symptomatic of the belief, diffuse among mainstream economists, that redistribution is a political rather than economic concern. The prevalence of this belief has been noted by Le Grand (1984) among others, but Andrews and Entwistle's (2013: 255) remarks are particularly pertinent: "While some economists dismiss (distributive efficiency) as a purely 'political question that can be answered only at the ballot box' (Samuelson and Nordhaus, 2005: 39), it is of course core business to every public manager who makes judgements about who gets services and how much of them they are entitled to receive".

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