

Impact case study (REF3)

Institution: University of Greenwich		
Unit of Assessment: 17 - Business and Management Studies		
Title of case study: Improving management of urban water services around the world for safer and more equitable access, greater efficiency, affordability and sustainability		
Period when the underpinning research was undertaken: January 2000 – April 2015		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Emanuele Lobina David J. Hall	Principal Lecturer Professor	01/08/2001 – present 01/01/2000 – 31/12/2013
Period when the claimed impact occurred: August 2013 – July 2020		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact		
<p>Access to safe, affordable and sustainable water and sanitation is a human right. The question of whether the private or the public sector is better suited to delivering these essential services is therefore highly relevant. By cataloguing qualitative case studies in the global North and South, the research of the University of Greenwich's Public Services International Research Unit has, since 2000, induced a reassessment of the merits of water privatisation and influenced the international diffusion of <i>remunicipalisation (or reverse privatisation)</i>. <i>The impact includes influencing decisions made by public authorities in 5 countries on matters related to the public and private ownership and management of urban water services, to improve service delivery to an aggregate population of 17 million. The impact comprises the following: (1) more efficient, equitable and sustainable water supply in Paris, France; (2) more efficient water services in Berlin, Germany; (3) safer water quality in Pittsburgh, USA; (4) efficiency savings and investment in Valladolid, Spain; and, (5) a court ruling on the validity of two private water concessions in Jakarta, Indonesia.</i></p>		
2. Underpinning research		
<p>The underpinning research has been produced between 2000 and 2015 by Emanuele Lobina and David Hall of the University of Greenwich's Public Services International Research Unit (PSIRU). The six outputs draw on the PSIRU Reports, working papers that form an extensive catalogue of qualitative case studies on the political economy of water service reform both in the global North and South. As acknowledged by González-Gómez and García-Rubio (2018) and Cumbers and Paul (2020), the research has played a globally leading role in redefining the empirical debate on the relative merits of public and private ownership in the urban water sector. In the 1990s, this debate was dominated by assumptions of superior private sector efficiency. In the 2000s, the underpinning research has been instrumental in rebalancing the public vs. private debate. PSIRU's research is regularly cited as a key reference in the policy and scholarly literature on the subject – for example in Estache and Goicoechea (2005), UNCTAD (2008), and Bakker (2010). Also, six articles published between 2019 and 2020 in the Journal of Economic Policy Reform (part of a forthcoming special issue on remunicipalisation) cite Output 5 and/or Output 6.</p> <p><i>The research has made use of contrast explanation as a method to resolve the asymmetry between theoretical expectations and empirical observations. Extensive qualitative case studies have shown the discrepancy between theoretical expectations of superior private sector efficiency and the reality of water service reform. Output 1 alone catalogues case studies on more than 40 private contracts in 22 countries of the global North and South. Conversely, qualitative case studies have been used to investigate the why and how of remunicipalisation as an unexpected outcome of water privatisation [Outputs 3, 5-6]. In both instances, qualitative analysis has allowed for shedding light on the <i>similarities</i> (e.g. the problematic nature of profit maximisation and the redistributive possibilities arising from its absence) and <i>differences</i> (e.g. governance arrangements, socio-economic and environmental conditions) between developed and developing countries. Finally, Output 6 combines the in-depth qualitative analysis of prominent cases of remunicipalisation with what was at the time of publication the most extensive catalogue</i></p>		

of decisions to remunicipalise water services in the global North and South (2000-2015). This with a view to emphasising the significance of this emerging trend in water service reform.

Main research findings

- ***In the last 30 years, water privatisation and Public-Private Partnerships have failed to meet theoretical expectations of greater efficiency and effectiveness in developing water systems.*** It was believed that privatisation would lead to more efficiency, by harnessing financially-driven incentives; and that any negative effects of a private sector monopoly could be mitigated through regulation. As a matter of fact, an extensive examination of case studies demonstrates that under natural monopoly *the private sector's imperative to achieve profit maximisation is incompatible with the need to achieve sustainable water development in developed and developing countries* [Outputs 1-3].
- ***The fact that public enterprises are not inherently subject to the profit maximisation imperative allows them to reinvest all available resources into the development of local water systems by prioritising the achievement of social and environmental objectives – such as extending connections, ensuring the affordability of tariffs, and delivering safe and clean water - over commercial considerations.*** An institutional mechanism for strengthening public sector performance is *in-house restructuring whereby organisational change occurs while ownership and management remain in public hands*. Another such mechanism is the *strengthening of democratic governance through greater transparency and participatory decision-making* [Outputs 3-4, 6].
- ***The growing remunicipalisation trend across developed and developing countries is explained by the private sector's failure to meet theoretical expectations of superior efficiency and effectiveness, greater public efficiency, and comparative advantage of the public sector in pursuing a broad range of social, environmental and economic objectives*** [Outputs 5-6].

Bakker, K. (2010) *Privatizing Water – Governance failure and the world's urban water crisis*. Cornell University Press: Ithaca and London.

Cumbers, A. and Paul, F. (2020) Remunicipalisation, mutating neoliberalism and the conjuncture. Conceptual Working Paper. Output of the ERC Advanced Grant project GLOBALMUN: Global Remunicipalisation and the Post-Neoliberal Turn (H2020-EU.1.1., Grant ID: 789100, 2019-2024) (https://www.gla.ac.uk/media/Media_755971_smxx.pdf).

Estache, A. and Goicoechea, A. (2005) A Research Database on Infrastructure Economic Performance. *World Bank Policy Research Working Paper 3643*.

González-Gómez, F. and García-Rubio, M.A. (2018) Prices and ownership in the water urban supply: a critical review. *Urban Water Journal*, 15(3): 259-268.

UNCTAD (United Nations Conference on Trade and Development) (2008) *World Investment Report 2008: Transnational Corporations, and the Infrastructure Challenge*. United Nations: New York and Geneva (http://unctad.org/en/docs/wir2008_en.pdf).

3. References to the research

The research has resulted in five peer reviewed journal articles and one book. Outputs 1, 2 and 5 are particularly well cited; for example, Output 5 is in the top 1% most cited papers in the *International Review of Applied Economics*.

- **Output 1.** Lobina, E. (2005) Problems with Private Water Concessions: A Review of Experiences and Analysis of Dynamics, in *International Journal of Water Resources Development*, 21(1): 55-87. <https://doi.org/10.1080/0790062042000313304>
- **Output 2.** Hall, D. and Lobina, E. (2007) Profitability and the poor: Corporate strategies, innovation and sustainability, in *Geoforum*, 38(5): 772-785. <https://doi.org/10.1016/j.geoforum.2006.08.012>
- **Output 3.** Lobina, E. and Hall, D. (2007) Experience with private sector participation in Grenoble, France and lessons on strengthening public water operations, in *Utilities Policy*, 15(2): 93-109. <https://doi.org/10.1016/j.jup.2007.01.004>
- **Output 4.** Lobina, E. and Hall, D. (2008) The comparative advantage of the public sector in the development of urban water supply, in *Progress in Development Studies*, 8(1): 85-101. <https://doi.org/10.1177/146499340700800108>

- **Output 5.** Hall, D., Lobina, E. and Terhorst, P. (2013) Re-municipalisation in the early 21st century: water in France and energy in Germany, in *International Review of Applied Economics*, 27(2): 193-214. <https://doi.org/10.1080/02692171.2012.754844>
- **Output 6.** Kishimoto, S., Lobina, E. and Petitjean, O. (eds.) (2015) *Our public water future: The global experience with remunicipalisation*. Amsterdam, London, Paris, Cape Town and Brussels: Transnational Institute, Public Services International Research Unit, Multinationals Observatory, Municipal Services Project and the European Federation of Public Service Unions. ISBN 978-90-70563-50-9 (<http://www.psir.org/sites/default/files/2015-04-W-OurPublicWaterFutureFINAL.pdf>)
[REF2 Submission – Identifier 13265]

Grant: Output 4 has been written with the financial support of a research grant: Project on “Decision making in water systems in European cities” (WATERTIME - <http://www.watertime.net>), European Commission, 5th Framework Programme, Dec 2002 - Nov 2005. Contract No. EVK4-2002-0095 (total value of grant: in excess of €1.5 million; <https://cordis.europa.eu/project/id/EVK4-CT-2002-00095>). David Hall was the PI and Emanuele Lobina was a Co-I.

4. Details of the impact

The impact produced by the underpinning research includes ***influencing decisions made by public authorities in one developing and four developed countries – benefitting an aggregate population of 17 million - on matters related to the public and private ownership and management of urban water services***. The impact resulted in progress towards realising the human right to water by ***ensuring equitable access to safe and affordable drinking water for all; and managing water to enhance economic, social and environmental sustainability***. These challenges take different forms depending on context – for example, developing countries suffer more acutely from lack of access to safely managed water, estimated to affect 2.2 billion globally. However, problems of affordability, equity and sustainability are not exclusive to developing countries.

The impact in all the cities except Jakarta consists in tangible improvements in water service provision under public management – e.g. efficiency savings (Paris, Berlin, Valladolid), and improvements in water safety and quality (Pittsburgh) – relative to the preceding private operations. In Paris and Berlin, the decisions to remunicipalise water services were made before August 2013 and the impact has continued since then. The roots from the underpinning research to the impact described here can be found in a *multi-pronged outreach strategy combining the following approaches: contributing chapters in books edited by local decision makers (Paris); presenting findings at public events convened and attended by local stakeholders (Paris, Valladolid); disseminating PSIRU Reports and outputs via the internet (Berlin, Pittsburgh, Jakarta); allowing stakeholders to translate the research into the local language (Valladolid); co-producing research with stakeholders who would then disseminate the work (Pittsburgh); and acting as expert witness in front of a court of law (Jakarta)*.

Impact 1. More efficient, equitable and sustainable water supply in Paris, France:

The impact consists in improving the performance of the public water supply operator Eau de Paris (EdP) in 2013-2018, after the city of Paris, France (2.2 million inhabitants) remunicipalised the service in 2010. *The price of water decreased by 2.6% from 2010 to 2017, so that in 2013-2017 the price remained lower than would have been the case under private management. In fact, prices had grown by 174% over the lifetime of two private contracts, from 1985 to 2009. Also, EdP nearly trebled the financial resources devoted to improving affordability and access for vulnerable consumers and increased those aimed at protecting groundwater quality – all this relative to the expenditure under private management. At the same time, EdP considerably expanded the rate of infrastructure renewal: from 0.13% in 2010 to 0.25% in 2013 and 0.85% in 2018 [Corroborating Source 1, pp. 7-13].*

With their research, Lobina and Hall validated the political decision to remunicipalise water supply and confirmed the validity of EdP’s business model; a model based on the reinvestment of all profits to enhance efficiency and promote the human right to water and sustainable water

development. They did so by respectively *contributing a chapter in a 2008 book edited by Ms Anne Le Strat, Deputy Mayor of Paris from 2008 to 2014, and making two presentations at a Paris seminar convened by EdP in January 2010*. In Letter 1, Ms Le Strat acknowledges that Output 1 “**proved very helpful in supporting the decision-making process that resulted in the remunicipalisation of water supply**”, and that EdP’s management benefitted from Outputs 2 and 4 as these “confirmed the validity of (EdP’s) business model”.

Impact 2. More efficient water services in Berlin, Germany:

The impact consists in improving the efficiency of water supply and sanitation after the city of Berlin, Germany (3.8 million inhabitants) remunicipalised the services in 2013. As evidenced in Corroborating Source 1, the public water and sanitation company has since **reduced prices by 17% on average for the period to 2018, with water users saving over €440 million**. It also kept **investment levels stable compared to the 4 years preceding remunicipalisation** [Corroborating Source 1, pp. 14-19]. In Letter 2, David Hachfeld – one of the activists who created the civic organisation Berliner Wassertisch in 2007 – states that the preliminary findings of Outputs 3 and 4 “**informed (a) referendum campaign of Berliner Wassertisch**” that became *instrumental to the decision to remunicipalise water and sanitation in Berlin*. More precisely, the PSIRU Reports that contained these findings were “**repeatedly cited**” in *Mr Hachfeld’s master’s thesis; a thesis that informed the material of the campaign*. In 2011, the results of the referendum forced the semi-privatised operator to disclose the content of the concession contract. This was the first in a sequence of events that led to the *remunicipalisation of Berlin’s water and sanitation services in 2013* [Corroborating Source 1, pp. 14-19].

Impact 3. Safer water quality in Pittsburgh, USA:

A 2014 PSIRU Report (www.psiru.org/sites/default/files/2014-11-W-TroubledWaters.pdf) - drawing on Outputs 1, 3-5 and the preliminary findings of Output 6 - has **influenced the decision of the city of Pittsburgh, USA (300,000 inhabitants) not to privatise water utility PWSA**. In turn, this decision enabled PWSA to **improve the safety of drinking water compared to its performance under a private management contract**. To save money, the private contractor used a cheaper corrosive agent from 2014 to 2016 which caused an increase in lead levels [Corroborating Source 2, pp. xxii-xxiii]. Per Corroborating Source 3 (pp. 3-6, 11-15), in Dec 2017, an advisory panel appointed by the Mayor of Pittsburgh issued a recommendation not to privatise the local water utility. The 2014 PSIRU report, published by prominent US NGO Corporate Accountability International, was **cited in (& appended to) a briefing book compiled by consultancy IMG for the Mayor’s panel** [Corroborating Source 4, pp. 183-184]. Under full public ownership and control, in 2019 PPWSA **reduced the percentage of sampled households with lead levels higher than 15 parts per billion to 12%** [Corroborating Source 5]. This compared to 17% in 2016, under the private contractor [Corroborating Source 2, p. xxii].

Impact 4. Efficiency savings and investment in Valladolid, Spain:

The impact consists in **improving the efficiency of water supply and sanitation** after the city of Valladolid, Spain (300,000 inhabitants) remunicipalised water supply and sanitation in 2017. As evidenced in Corroborating Source 6, the new municipal enterprise Aquavall has **invested more in infrastructure renewal from 1st July 2017 to 30th June 2020 than had been invested in 17 years under private management (€28 million vs. €27 million)**. Under remunicipalisation, **tariffs did not increase** whereas, under private management, tariffs rose by 78.7% in real terms from 1997 to 2014 [Corroborating Source 6, pp. 7-13].

From 2015 to 2016, the Spanish association of public water and sanitation operators AEOPAS provided technical advice both to the City of Valladolid and to local civil society concerning the comparative evaluation of remunicipalisation and other institutional arrangements. In Letter 3, Mr Luis Babiano, Manager of AEOPAS acknowledges that the **preliminary findings of Output 6 proved “invaluable in informing the advice that AEOPAS provided to the City of Valladolid”**. These findings were contained in a report co-authored by Lobina that AEOPAS did translate into Spanish in January 2015 (<https://www.tni.org/files/download/heretostay-es.pdf>). Lobina was invited to present the findings of Output 6 at the opening session of a conference convened by the City of Madrid in November 2016, where Mr Babiano was also speaking. At the same conference,

representatives of the City of Valladolid and nine other Spanish cities *adopted a declaration that rejected water privatisation and supported water remunicipalisation. Two months later, the City of Valladolid **formally decided to remunicipalise water and sanitation.***

Impact 5. Informing a successful court ruling to prevent the continuation of poor water service management in Jakarta, Indonesia

In March 2014, **Lobina gave expert testimony to the Central Jakarta District Court in a court case on the termination of two privatised water concessions in Jakarta, Indonesia** (10.6 million inhabitants). The court case was brought in 2012 by a coalition of civic organisations in response to poor contract performance. Abysmal performance in the expansion of connections and reduction of leakage was in fact compounded by steep price increases and cost inefficiencies (<http://www.water-alternatives.org/index.php/alldoc/articles/vol12/v12issue3/534-a12-2-17/file>, pp. 730-735). As evidenced in Letter 4, a testimonial given by the plaintiff's lawyer, **Lobina's expert testimony played a key role in influencing the Court's decision to annul the two private water concessions on the grounds of breach of the human right to water.** The expert testimony was based on a 2013 PSIRU Report that drew on Outputs 1, 3 and 4, and the preliminary findings of Outputs 5-6. *The PSIRU Report was presented as written submission to the court* (<http://www.psiru.org/sites/default/files/2014-W-03-JAKARTANOVEMBER2013FINAL.docx>). The court decision remains to be implemented.

5. Sources to corroborate the impact

Impact 1: see **Letter 1** and **Corroborating Source 1** (pp. 7-13).

Impact 2: see **Letter 2** and **Corroborating Source 1** (pp. 14-19).

Impact 3: see **Corroborating Source 2** (pp. xxii-xxiii), **Corroborating Source 3** (pp. 3-6, 11-15), **Corroborating Source 4** (pp. 183-184), and **Corroborating Source 5**.

Impact 4: see **Letter 3** and **Corroborating Source 6** (pp. 7-13).

Impact 5: see **Letter 4**.

Testimonials

Letter 1: a testimonial by a former Deputy Mayor of Paris, France

Letter 2: a testimonial by a former member of the civic organisation Berliner Wassertisch

Letter 3: a testimonial by a Manager of the Spanish utility association AEOPAS

Letter 4: a testimonial by the plaintiff's lawyer in a court case in Jakarta, Indonesia

Corroborating source links:

Corroborating Source 1: Lobina, E., Wegmann, V. and Nicke, K. (2021) Water remunicipalisation in Paris, France and Berlin, Germany. A PSIRU Report commissioned by the City of Barcelona, March 2021 (<http://gala.gre.ac.uk/id/eprint/31646>).

Corroborating Source 2: Office of City Controller (2017) Performance Audit: Pittsburgh Water and Sewer Authority. Pittsburgh, Pennsylvania: Office of City Controller, June 2017, pp. xxii-xxiii ([https://apps.pittsburghpa.gov/co/Pittsburgh Water and Sewer Authority June 2017.pdf](https://apps.pittsburghpa.gov/co/Pittsburgh%20Water%20and%20Sewer%20Authority%20June%202017.pdf)).

Corroborating Source 3: Mayor's Blue Ribbon Panel (2017) Restructuring the Pittsburgh Water and Sewer Authority. Report of the Mayor's Blue Ribbon Panel, Pittsburgh, 28 December 2017, pp. 3-6, 11-15 (https://apps.pittsburghpa.gov/redtail/images/1279_PWSAfinal.pdf).

Corroborating Source 4: Infrastructure Management Group (IMG) (2017) Briefing Book on PWSA Restructuring Options. IGM report to the Blue Ribbon Panel appointed by the Mayor of Pittsburgh, 28 August 2017, pp. 183-184

(<https://pittsburghpa.gov/mayor/The%20Briefing%20Book%20-%20Blue%20Ribbon%20Panel%20-%20PWSA.pdf>).

Corroborating Source 5: Pittsburgh Water and Sewer Authority (PWSA) (2019) Results show progress using orthophosphate corrosion control treatment. PWSA Releases, 26 July 2019 (<https://lead.pgh2o.com/pwsa-releases-june-2019-lead-compliance-test-results/>).

Corroborating Source 6: Lobina, E. and Planas, M. (2021) Transformative Water Remunicipalisation in Valladolid, Spain. PSIRU Reports, March 2021 (<http://gala.gre.ac.uk/id/eprint/31652>).