

The evolution of private provision in urban drinking water: New geographies, institutional ambiguity and the need for political economy

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Abstract

Empirical research paints a dynamic picture of the evolution of private provision in urban drinking water. A second wave of privatisation is clustered in a key group of countries, distinguished by the rise of new domestic private and quasi-private providers. This is, however, taking place in the presence of a counter-dynamic of remunicipalisation. In response to the complexity in provision arrangements revealed, three case studies are used to illustrate how different power balance configurations in the state-society-capital complex inform particular institutional arrangements. In Germany, civil society pressure challenged private capital resulting in the reinstatement of municipal control in Berlin, but at high long-term costs. In Russia, disempowered civil society has watched as the ruling regime exploits the support of international public agencies and foreign investors, while carefully safeguarding the interests of domestic private capital. In China, different levels of the state have promoted quasi-state actors into global corporations, managing the entry of international capital in order to bolster domestic support for desired political reforms. Public responsibility, and equally the re-assertion of public control after a period of private provision, may not in itself secure net social benefit where the right of capital to profit is put before broader social considerations.

Keywords

Water, urban drinking water, privatisation, remunicipalisation, public services

1. Introduction

The first systematic wave of privatisation of urban water supply took place in the 1990s; however by the early 2000s, popular opinion in many of the early adopters had turned against private provision, leading to what has been called a 'strategic retreat' (Bakker 2009) of both public authorities and private companies from the pursuit of a strategy of private provision. Lobina and Hall (2008) attempted to quantify what has since become termed 'remunicipalisations', revealing that the transfer from public to private provision was not irreversible. The remunicipalisation/renationalisation of the urban water supply occurred in a number of what had been flagship cities for the proponents of privatisation (Kishimoto *et al.* 2015, Lobina *et al.* 2014, Pigeon *et al.* 2012).

Privatisation here refers not to the outright transfer of ownership rights, but to arrangements where responsibility for water supply is held by a company controlled by private owners. This includes all concessions, leases and management contracts under which a private company is responsible for the operation of urban water distribution. However, one unifying element of many of these arrangements is that the public sector holds the ultimate liability for ensuring overall investment levels as well as profit margins stipulated in private contracts. In this way, even where public responsibility is reasserted, private companies may continue to receive public funds according to contractual stipulations, and thus extend the period of *de facto* privatisation.

There is now a debate in the literature over whether the first wave of privatisation was the high water mark, with inevitable if uneven retreat to public provision; or whether private providers have responded to the failures of the first wave, and have embarked upon a strategy of 'shallow expansion' (Pierce 2015). Research presented in this paper contributes to this debate in two ways. First, it provides new empirical evidenceⁱ on the evolution of provision arrangements in the urban water sector. In a nutshell, claims that privatisation has peaked may be premature. Providing evidence to support the anecdotal observations of Pierce (2015), we find that a new wave of privatisation is clustered in a key group of countries. To Pearce's list of China, India and the Gulf states, we would add Russiaⁱⁱ. In these countries, one of the most important changes observed has been the rise of domestic private and quasi-private providers. At the same time, campaigns for public control of urban water, centred in Latin/North America and Western Europe, have made significant progress in rolling back private provision in places where it had taken root. In short, urban water provision remains contested terrain populated by an increasingly diverse range of organisational forms which blur the boundary between public and private provision.

Second, through the use of case studies, we supplement the empirical summary with an examination of why provision arrangements assume the particular form that they do. To do this we build upon Nicos Poulantzas' theorisation of the state to illustrate how various combinations of agencies across the state-society-capital complex lead to equally various outcomes and institutional configurations. The first case study looks at the remunicipalisation of the urban water supply in Berlin, where, despite the relative strength of civil society campaigns for public control, the costs of remunicipalisation hang over attempts to ensure greater citizen control over the management of the utility. Thus privatisation of public money carries on even after *de jure* remunicipalisation took place. The second case study looks at the recent history of reforms in Russia. We argue that the assertion of state control that has been interpreted as a protectionist exercise

restricting foreign capital entry, has, in fact, been used to obfuscate the transfer of assets and income streams to private agents close to the state regime. The final case study looks at the symbolic importance of the handling of urban water provision in Shenzhen, revealing the desire of state officials to build both economic and political power through the promotion of a globally-competitive “public” utility.

In the next section, we detail the methodology employed to construct our database of urban water supply provision as well as its limitations; this is followed by the presentation and discussion of our empirical findings. In the third section we elaborate our political economy framework for unpacking the reasons for and complexity of particular provision arrangements, followed by discussion of our three case studies. The final section concludes.

2. Empirical findings on urban water provision

a. Methodology

Lobina and Hall (2008) marked an early attempt to quantify the scale of the privatisation of urban water supply worldwide. Their snapshot was based on the status quo in 2006; the current exercise re-visits the data nearly a decade later in order to be able to describe not just a static snapshot, but the dynamics of water privatisation.

In recognition that an exhaustive survey of water providers, large and small, would be practically impossible, Lobina and Hall chose as their representative unit of analysis those urban agglomerations (hereafter cities) with a population over one million. As of the 2004 census exercise of the Population Division of the UN Department of Economic and Social Affairs (UNDESA 2004), 409 conurbations met the criteria, with a total population of 1.15 billion, or about 38 per cent of the world’s urban population of 3.04 billion (see table 2.1). The same criteria has been used in the current exercise; as of the 2014 census of UNDESA (2014), there are 496 cities that cross the threshold of one million inhabitants, or about 40 per cent of the world’s urban population of 3.9 billionⁱⁱⁱ. To set this in context, 54 per cent of the world’s population in 2014 lived in urban areas (UNDESA 2014, p. xxi), thus making the proportion of the world’s population living in cities with more than 1 million inhabitants greater than 21 per cent of the world’s total population.

Table 2.1: Cities with a population over 1 million by region, 2004/2014

Source: UNDESA 2004, 2014

The more difficult question from a methodological point of view is how to discriminate private from public provision. Once again for consistency, the current paper has employed the same criteria as Lobina and Hall (2008, p. 87).^{iv} The base year was chosen as 2000, as this is generally considered to mark the end of the first era of privatisation, referred to as the Washington Consensus era. The designation of an urban water provider as either public or private was accomplished through a desk-based survey based on four data sources. First, the PSIRU archives on water privatisation, including the detailed data compiled for the Lobina and Hall (2008) exercise were consulted.

Second, the Pinsent-Masons water yearbook (Lloyd Owen 2012) (hereafter, PMWY) was checked. PMWY, self-described as ‘the essential guide to the water industry’, has exhaustive coverage of cases where there is private sector involvement. Third, where they exist, the websites of the water providers themselves were referenced. Finally, the authors used the Nexis news service and general web searches to complement and triangulate the data.

We accept that there are a number of limitations of such a methodological approach. First, for numerous cities, there is no information available from any of the sources described above. In such cases, the default assumption was public provision. Second, processes of urbanisation do not evolve at the same speed and with the same effects across the globe. Many countries are absent from our list because they lack large urban centres. We recognise that the problem of safe and accessible water provision goes beyond these centres and that, furthermore, large cities’ water usage often affects extra-urban populations by disproportionately tapping into shared water resources. Third, and most crucially for the second part of our argument, there is an increasing blurring of the boundary between public and private provision as far as the delivery of service is concerned,^v and an even greater blurring if one is to consider the distribution of costs and benefits those arrangements deliver. How to treat, for example, cases where costs are socialised but profits are privatised and guaranteed by the contracts that public bodies have signed with private companies? Or cases where the intertwining of the interests of the state and domestic capital take priority over citizens’ interests? Or cases where the water provider is technically public, but run as a for-profit enterprise, issuing market securities, and prioritising market pricing over universal access? Recognition of this complexity points to the necessity of the political economy analysis which underpins the case studies in section three. We believe that such analysis can complement and inform, rather than negate the benefits of, large-scale comparative exercises such as that presented in the subsequent section.

b. Findings and discussion

i. Global picture

Eighteen per cent of cities (and 18 per cent of population) with a population over one million worldwide are served by private providers, increasing from 11 per cent a decade earlier. Lobina and Hall (2008) predicted that the percentage of cities of over one million inhabitants with private providers would fall. What happened to contradict that prediction? First, in a number of key countries political support has swung behind privatisation, including those where demographic trends have added to the number of large cities (China, India, and Saudi Arabia), as well as those where demographic growth has slowed (Russia and Mexico^{vi}). In the rest of the world, struggles to reverse privatisation in high-income countries may be counterbalanced by a shift to pro-private centre-right governments in key countries in the LAC region, including Brazil, Argentina and Chile. Second, in developing countries, changes in corporate behaviour in the water sector have been misinterpreted as essentially post-neoliberal. Bakker (2013, p. 253) argues that ‘the continued growth of private-sector activity, combined with the strategic retreat of private companies from certain countries and regions, should be interpreted as a partial intensification of—rather than straightforward retreat from—neoliberalisation.’ The case studies in section three confirm the changing nature of the

dynamic in the public-private relationship rather than retreat from privatisation altogether.

Table 2.2: World snapshot 2015 and movement 2000-2015 (cities > 1mn)

During the 15-year period under examination, 2000 to 2015, there were 56 cities that switched from public to private provision (see table 2.2), while 21 cities moved in the opposite direction^{vii}, for a net change of 35 privatisations (that is, nationalisations minus privatisations).

On initial inspection this may suggest a new wave of privatisations; however, such a conclusion is tempered if we view the net changes as a proportion of the total relevant population. During the period 56 cities switched from public to private out of a total initial population of 443 public providers (as of 2000), or 13 per cent; 21 cities switched in the opposite direction out of a total population of 53 private providers (as of 2000), or 40 per cent. This latter view, although at best an approximation due to the change in the sample over time, suggests a rolling back of private provision.

There is some indication that the pace of privatisation may have slowed after the global recession which began in 2008. There were 16 privatisations (or 8 net privatisations) in the period 2000 to 2004; this rose to 25 privatisations (or 19 net privatisations) in the period 2005 to 2009; and then fell back to 15 privatisations (8 net privatisations) in the period 2010 to 2015.

Table 2.3: World snapshot 2015 and movement 2000-2015 (cities > 5 mn)

In mega-cities with populations over 5 million, 16 per cent of cities (17 per cent by population) are served by private providers (see table 2.3), down from 20 per cent in Lobina and Hall (2008). This runs counter to their assumption that the proportion covered by private providers would be higher in the largest cities, and complicates any attempt to extend the picture to the global population. It should also be noted that, at the opposite end of the population spectrum, many high-profile re-municipalisations, as well as an increasing number of privatisations, have occurred in cities under one million and in peri-urban regions.

In this paper we have not addressed the governance of rural water supply systems. Based on the slow pace and reluctance of private providers to extend supply networks to the rural poor (Bakker 2013), it can be assumed that rural populations remain overwhelmingly served by the public sector, including international development agencies (WHO/UNICEF 2015). With some 75 per cent of the developing world's poor population still living in rural areas (Ravallion 2007), this brings into question any strategy to provide safe drinking water to the poorest which focuses on private provision.

ii. Variation by region

The regional picture, both in terms of the presence of private providers and the dynamics of management change, is heterogeneous. In Europe and Central Asia (ECA – excluding HICs) and East Asia and Pacific (EAP – excluding HICs), one-quarter of large

cities are served by private providers, followed by Latin America and the Caribbean (LAC) at 19 per cent, the Middle East and North Africa (MENA) at 18 per cent, Sub-Saharan Africa (SSA) at 18 per cent, High Income Countries (HIC) at 14 per cent, and South Asia (SA) at 10 per cent (see figure 2.1). This is a different picture from that captured by Lobina and Hall (2008) a decade earlier, with the private presence in EAP and SA increasing significantly, and further increase in MENA and ECA.

Figure 2.1: Percentage of cities with private provision by region, 2006/2015

The dynamic picture is dominated by changes in key countries. In EAP, over the fifteen year period 2000-2015, 26 cities in China have changed from public to private provision. In South Asia, where public provision had previously been completely dominant, five cities in India moved to private provision. In MENA, three major cities in Saudi Arabia have moved to private provision in the last decade. Notable remunicipalisations in the USA, France and Germany were outnumbered in the HIC by the five cities which privatised in Russia. The only region to see a net increase in public provision was LAC; looking forward this may be challenged by an uneven shift in regional governments to the right that tends to favour private over public provision.

A number of observations shed some further light on this differentiated regional picture. First, the picture in East Asia and the Pacific is dominated by what happens in China. Transformation of the urban water supply picture in China is reflective of sweeping legislative changes and the emergence of major domestic water corporations, both of which are further discussed in the case study below.

Second, South Asia, largely down to changes in India, has witnessed inroads by the private sector. This has coincided with a rightward shift in Indian politics, either explicitly in the election of the Bharatiya Janata Party, or, implicitly, in the market-oriented reforms led by the Indian National Congress. Prior to this, a number of Indian states had pushed ahead more aggressively with privatisation into what had previously been blanket public provision. The Jawaharlal Nehru National Urban Renewal Mission (JNNURM), part of the Eleventh National Development Plan (2007-2012), was launched in December 2005 for a period of seven years with a commitment to significant investment in water and sanitation. Public-private partnerships were endorsed as a solution to shortcomings in water provision, and subsidies were made available to water projects that involved private investors. Subsequently PPP contracts in water and wastewater grew in the late 2000s, peaking in 2009 (Vedachalam *et al.* 2015, p.15). The twelfth national development plan (2012-2017), including a JNNURM-II, maintains the emphasis on the private sector, insisting that PPPs can raise 13-23 per cent of total necessary investment in urban renewal (2013, p. 333). The term 'people-public-private partnerships (PPPPs)' has been coined, and a key state level reform is the preparation of 'implementable PPP policy for cities' (Planning Commission 2013, p. 356). However, staunch opposition to privatisation remains in many cities. The fluid nature of the situation is captured by the return in mid-2016 of Mysore to public management after a five-year interlude of private operation^{viii} (The Deccan Herald 2016).

Third, the trend in the Middle East region reflects developments in Saudi Arabia, where the Ministry of Water and Electricity's Strategic Transformation Plan mandated in 2005 that privatisation would play a central role in performance improvement in the water sector (Ouda *et al.* 2014, p. 108). Since that time, contracts have been awarded to

international companies for water provision in Riyadh, Jeddah and Mecca, with Medina and Dammam (the other two cities in Saudi Arabia with populations over one million) currently under consideration.

Finally, in Europe and Central Asia, a number of high-profile remunicipalisations in Western Europe are overshadowed by developments in Eastern Europe and Central Asia, led by Russia. Private sector penetration into Russian urban water provision is marked by the peculiarities of a state approach which combines embezzlement at both local and national levels with a programme of protectionism. This will be discussed in detail in the case study below.

3. Political economy analysis

a. State theory and service delivery

The empirical exercise has highlighted both the increasing complexity in provision arrangements and the need to critically assess how and why particular forms emerge. Drawing upon the state theory of Nicos Poulantzas (2014; 1978; 1975), we argue that identifying the underlying essence of any provision arrangement requires that we unpack state, power, and class relations. The state is where the results of social struggle crystallise in institutionalised regulatory forms only to be challenged again in the future, that is, each momentary form of each state is a snapshot of the balance of power relations in its state-society-capital (SSC) complex. Crucial to this is an analysis of social relations that crystallise in each individual political unit as an institutional construct as it is they that ultimately determine the nature of the relationship among each given state, society, and capital.

The state is a social relation; one where “the balance of forces also changes with shifts in the strategic terrains of the economy, state, and wider social formation as well as with changes in organisation, strategy, and tactics of specific forces” (Jessop 2016:56 et passim). This necessarily includes international (and transnational) relations, including the role of foreign capital, that variously enable or curtail the agency of concrete social forces in the given SSC as ‘societal power relations and hegemonic orientations of state apparatuses are institutionally condensed on different spatial scales’ (Brand *et al.* 2011, p.150). In Poulantzas’ state-capital framework, the ‘internationalisation of capital neither [suppressed], nor [by-passed] the nation states... [I]nternationalisation... deeply affects the politics and institutional forms of [all] states by including them in a system of interconnections which is in no way confined to the play of external and mutual pressures between juxtaposed states and capitals’ (1975, p. 73). Understanding the role of external actors is critical due to the transnationalised nature of corporate functioning, split and overlapping authority between national and supranational institutions, and, as Bayliss (2016) shows, the increasing financialisation of public services by powerful forces of global finance.

State and society are not separate entities but rather are deeply interconnected. They constitute what Cox (1981, p. 127) refers to as the ‘state-society complex’. Van der Pijl (1998) builds upon Cox’s unit of analysis in his theory of transnational class formation that allows one to understand how and why certain states appear to act contrary to their ideal-type Weberian role of serving their own society, instead aligning with the interests

of transnational capital. As Overbeek (2000, p.175) argues ‘... relations among states are, as it were, embedded in a wider context of evolving transnational social relations’. The restructuring of the state as a neoliberal institution during the era of the Washington Consensus, which has featured an offensive against public service provision, reflects a growing entanglement of domestic social relations in transnational power structures; interlacing control over water resources and utilities through financialisation (Bayliss 2016) and ownership into a wider framework of social control by capital (Ekers and Loftus 2008).

This leads us to talk of the state-society complex as a unit of analysis which, Cox argues, prevents a fixation on the centrality of the state, treating it as an empty ‘bureaucratic entity’ deprived of connection to society. Indeed, the cases presented in this paper confirm the intimate and varied relationship between the state and civil society. We also suggest that capital must be treated as a force that is shaped by and shapes the state and society alike yet has its own degree of autonomy. Thus we shall be extending the ‘state-society complex’ to the ‘state-society-capital complex’. Society and the autonomy and power it has and exercises in each SSC plays a crucial political role (that is, accepting/rejecting private provision at the level of ideas), and practical role (that is, accepting/opposing private provision via campaigning, protest, and so on). Indeed, what neoliberal transformation brought to public services, including water provision, is the increasing power of capital relative to the state and non-state actors thus changing the ‘geometry of social power’ (Swyngedouw 2005, p. 93).

In light of the framework outlined above, we must study the role and locus of social forces in each case in order to identify the reasons for and essence of any change in the provision arrangements of urban water. Bakker (2013) has argued that remunicipalisation of a water utility does not always mean a victory for the civil society pressure groups or the consumer. On the contrary it may result in an intensification of accumulation rivalries (van der Pijl and Yurchenko 2015), signifying that corporate actors are shedding less profitable assets or potential liabilities while socialising the losses, a common trend in the years following the Great Recession (Konings 2010, p. 3-30). More generally speaking, what we see in the sector is “the emergence of an historically specific socio-environmental relation: one which increasingly seeks to articulate the value of all social and environmental relations, including water, in economic terms” (Roberts 2008:538). This occurs via direct full or partial ownership, or indirectly via financialisation.

b. Case studies in the political economy of urban water provision

i. Germany: Berlinwasser costly re-municipalisation hampers citizen control

The German water market is characterised by a mix of private and public provision. Private suppliers Gelsenwasser, RWE and E.ON along with some local companies serve some 9.5 million people (Lloyd Owen 2012, p. 38). The combined provision system is representative of ongoing ideological battles that surround public services ownership in Germany. The system of water provision in Berlin is one key example here.

Privatisation of water in Berlin started in 1994 with commercialisation – that is, the introduction of market-based incentives – of Berliner Wasserbetriebe (BWB) when the

Berlin Senate coalition between the Christian Democrats (CDU) and the Social Democratic Party (SPD) decided to convert it into a public law corporation; one justification being that this would allow it to access private funds needed for infrastructure works (Lanz and Eitner 2005, p. 10). The Berlinwasser project became the biggest Public Private Partnership (PPP) in German history by 1999 facilitated by the commercialised structure of the Berlinwasser Holding AG (Berlinwasser Holding being the owner of Berlin's water operator, that is, Berliner Wasserbetriebe Anstalt öffentlichen Rechts (BWB)) (Petitjean 2013). In 1999, 49.9 per cent of the shares were sold to a consortium that included RWE and Veolia for DM 3.3 billion (€1.69 billion). Private managerial control over the enterprise was secured through the appointment of the Chief Executive Officer and Chief Financial Officer. The contract with RWE and Veolia guaranteed that the return on equity for the private shareholders would be 8 per cent, and this level of profitability would be guaranteed by the state of Berlin for 28 years. This guarantee came largely at the expense of household water prices (Händel 2013) that rose by 23 per cent by 2006 and were projected to rise by 30 per cent by 2010 with profits going disproportionately to the private party (Passadakis 2006, p. 15). Guaranteed under contract law between 1999 to 2003, €366.6 million 'were flushed into the registers of the companies, while the [municipality] of Berlin only received €133.2 million [even though it held] 51.1 per cent of the shares of the BWB and Veolia and RWE together 49.9 per cent' (Passadakis 2006, p. 17). Moreover, BWB infrastructure was continuously eroded 'due to severe under-investment' which 'generates future financial and technological pressures in terms of infrastructure rehabilitation which will be most difficult to resolve' (Lanz and Eitner 2005, p. 21)

Table 3.1 Organisation of water supply in Germany, 2005. In per cent weighted by water quantities

Source: Kraemer, Pieler and de Roo (2007, p. 24), adapted from Wackerbauer (2007)

BWB privatisation was met with opposition; by 2004 Attac Berlin began to scrutinise the legitimacy of the partial privatisation of BWB (European Water Movement 2013). By 2005, the supply landscape of Germany's water was mixed, utilities fell under compound forms of supply and were regulated by a mix of public and private law. Table 3.1 shows the complex organisational structure of water supply weighted by quantity supplied. In May 2006, Attac held an event that created the Berlin Water Table (BWT) – a network constituted by Attac, several other environmental justice organisations, parties (e.g. Piratenpartei, Alliance 90/The Greens), the Council of Catholics in the Berlin Archdiocese, and other associations and activist groups - to campaign for water as a human right (Environmental Justice Atlas 2014). The process included a lengthy battle for remunicipalisation with two rounds of mass petitions for the disclosure of privatisation documents, attempts by the Senate to block disclosure legislation, and a historic court victory over the same (Beveridge and Naumann 2014). The apex of the campaign was the popular referendum in 2011 where 666,235 Berliners voted in favour of the proposition 'Berliners want their water back' (Terhorst 2014). This did not instantly translate into political action. The private contract was, however, so unpopular that, in the city elections of September 2011, remunicipalisation '... was in the manifesto of three of the four major political parties, despite the fact that Berlin still has huge debts' (Beveridge *et al.* 2014, p. 66).

The contract was terminated and the state of Berlin bought back the shares of RWE and Veolia in April 2012 and September 2013 respectively. While the enterprise was returned into public ownership, the final accurate figure of the buyback cost to the taxpayer is unknown. Due to German and EU regulations, investment protection mechanisms and Investor-to-State Dispute Settlement in EU agreements (EC 2013), the repurchase of shares alone cost Berlin €618 million paid to RWE and €590 million to Veolia (plus €54 million from a range of financial operations), all financed by 30-year loans (European Water Movement 2013; Petitjean 2013). This was in addition to the payout for the loss of future profit that was guaranteed in the initial contract and was paid out in cash on repurchase. Even though the municipality was paid for its shares initially, it later had to top up the companies' profits to match the level specified in the contract. Customers would have to pay higher water prices for 30 years after the remunicipalisation (Lobina et al 2014, p. 8), a process that still carries on as the loans taken to buy out the investors need to be repaid.

In 1999, when the decision to engage private capital was taken, two factors played an important role. First, there was 'strong ideological motivation of some politicians to privatise as many public enterprises as possible' (Lanz and Eitner 2005, p. 11), and second, Berlin city public finances were very strained at the time (Ibid). Considering the cost of privatisation that has been borne since, it becomes clear that only ideological motivations for privatisation as a solution to budgetary shortages survive. The full negative financial consequences of the BWB affair are still to be felt (Petitjean 2013).

The battle between ex-private capital owners, the state, and civil society is not over. The next step is democratisation of public control over the water supply. With that in mind the Berlin Water Council was founded in November 2013, as an open forum 'for everyone who wishes to become involved in the planning and implementation of this new Berliner Wasserbetriebe under the citizens' control' (Terhorst 2014). Public cooperation in the campaign resulted in the drafting of the Berlin Water Charter which seeks to 'democratise both Berliner Wasserbetriebe and water policy as a whole, and so achieve transparent, socially just and environmentally sustainable domestic water management in Berlin' (Berlin Water Charter 2013, p. 1). The charter is being used as 'a means to propose and discuss political, economic, ecological and legal principles for a new public water utility in citizens' hands' and withstand future privatisation pressures (Ibid).

In Germany's case social actors such as social movements, platforms and NGOs play a relatively strong role in deciding how water services are governed. These actors are politically active and the state is characterised by societal responsiveness. It is the politicisation of citizenry and the relative balance in SSC relations (it varies across the economic sectors) that allows for remunicipalisation battles to be waged. At the same time, the state and capital are intimately intertwined where the state holds ownership stakes in private companies and supports investor protection at the regional and international levels, later translating such protections into domestic contractual law. This can lead to conflicts between, on the one hand, the state's support for private provision and commitments to investment protection, and, on the other hand, its commitments as a public entity to quality, affordability, and universality of supply.

ii. Russia: State-oligarchy nexus subverts universal commitments

Russia has witnessed a fundamental shift in approach to water provision since the demise of the USSR in 1991. The Soviet approach was based on providing universal access to what was considered a basic resource crucial for social reproduction. The state held a monopoly on both water resources and the supply system, and delivered water services at symbolic rates.

For nearly 20 years there has been a push for the commercialisation of water supply and sanitation. Private oligarchies entered the Russian water and wastewater treatment market in 2002. Prior to that private sector participation in Russia's water provision had been relatively low; since that time it has been dominated by domestic oligarchic groups. Komarov *et al.* (2008) argue that commercialisation and privatisation are diametrically opposed to the state's rhetorical commitment to universal access. This contradiction is at the heart of Russia's state discourse and praxis alike, and it became institutionalised with Putin's 'Politburo 2.0', a centralised state-economy control apparatus in the likeness of the Soviet Politburo (Minchenko and Petrov 2014), spreading its grip over the country since the early 2000s (Nemtsov and Milov 2008).

In 2003, soon after coming to power, President Putin declared that universal access to 'our national treasure' constituted an 'absolute and basic priority' (Komarov *et al.* 2008, p. 42). Reflecting the gap between declaration and praxis, by 2004, 50 large city water supply and sanitation enterprises were already in private hands. Ownership transfer was usually accompanied by gross procedural violations and the assumption by the state of the high risks associated with the new owners' ability to fulfil contract obligations (Hall and Popov 2005). Procedural violations included: direct transfer of ownership without a tendering process; lack of financial reporting; lack of concrete investor obligations for the operating enterprise; and lack of concrete rules on tariff change (OECD 2006, p. 42).

According to Komarov *et al.* (2008, p. 47): '... the water supply and wastewater management sector "playing field" is characterised by manipulations of Russian oligarchic groups and local authorities. The two create joint enterprises to operate in the sector which then use market mechanisms for economic and political gain. The mechanisms include appropriation, (re)sale, formation of subsidiaries, restructuring, diversification, etc.' By 2005 a few of the main private players in the water utility market held the majority of market shares and some 70 per cent of total market revenues (Padmanabhan 2005). By 2008 these new private operators supplied some 15 million customers, a two-fold increase compared to 2004. The largest financial-industrial groups involved in Russian public water utilities, illustrative of their close links with the Russian state, are: RAO UESR (Russian Joint Stock Company - Unified Energy System of Russia)^{ix}, Russian Public Investment (RKI)^x, Alfa Group^{xi}, and Eurasian Water Partnership (EWP)^{xii}.

The Russian market has been as attractive as it has been difficult to enter for foreign companies for reasons of political and economic instability, lack of transparency of the market and state administrative procedures, and the role of the state and oligarchic companies in the market (Danilov-Danilyan *et al.* 2015, Hall and Popov 2005). Foreign investors are more often engaged in the sector on a contractual/project basis or as a co-investor in a Russian group. Veolia, for example, after being in Russia's market since

1991, was allowed to purchase 49 per cent of the shares of the Eurasian Water Partnership (EWP) in 2006 (Danilov-Danilyan *et al.* 2015, p. 379).

However, peculiar contradictions arise when partnerships are formed where capital – domestic and foreign – and the state negotiate using controversial legislation. One such example is the case of Tomsk, where water supply infrastructure plans were withheld from the operator. This was justified with the explanation that the plans were a ‘military secret’ (Kryvoshapko and Shchadrina 2013) and therefore could not be shared with Veolia, a foreign company. Analogous plans are readily shared with domestic operators, despite the fact that as market actors they are bound by the same degree of contractual confidentiality as Veolia. Such differential legislative treatment can be interpreted as a careful policy of economic protectionism conducted in the interests of domestic oligarchic capital.

Infrastructural inefficiency is an ongoing issue as 50 per cent of water is wasted during transportation due to the aging infrastructure (Danilov-Danilyan *et al.* 2015, p. 378). The shortage of funds for maintenance and investment leads Russia’s government to increasingly rely on international aid agencies such as the World Bank’s International Finance Corporation (IFC), and the European Bank for Reconstruction and Development (EBRD). The European Union has provided funds to encourage market solutions to these problems (Padnumabhan 2005). It appears that since 2012 Russia’s government has taken an approach where the attraction of IFI funds and foreign private firms is combined with formal state ownership of utilities with a close eye on performance indicators and tariff levels. The approach is selective and does not apply to previously privatised water utilities predominantly owned by domestic oligarchic firms.

As of 1 January 2013, a law came into force which represents a partial reversal of the policy approach adopted in the previous decade. The new law bans new privatisations and allows remunicipalisations in cases where existing contracts have been violated. Only unitary, that is fully state-owned, water utilities can now be floated (Godsuma 2015, 2012)^{xiii}. As a result of the reforms, the state maintains inalienable ownership rights over water utilities but with a clear preference for private capital operating the utilities, and a skewed tendering procedure invoking selective state secret access licensing for private investors. More positively, tariff limits have been made part of concession contracts; guarantees of supply continuity and quality have been introduced; and environmental responsibility has been included in legislation. In order to understand who is the main benefactor of the contracts one needs to look into individual cases to examine how contracts are priced.

The state approach in Russia reflects the strong link between the state and domestic capital. An increasing shortage of funds for maintenance and investment, due to economic sanctions over Russian military engagement in Ukraine, will continue to put a strain on the water provision for the foreseeable future. This suggests an ongoing reliance on IFIs’ funds combined with subsidies for mainly domestic private operators. With no meaningful civil society opposition in sight, the dynamic is likely to continue to be determined by the state-capital nexus.

iii. China: Shenzhen establishes privatisation model under public aegis

Private actors in water provision are a new phenomenon in China. Until recently the

state held full control over all elements of water provision. After a decade-long pilot period, foreign investors were formally permitted to enter the Chinese municipal water service sector in 2002 (Jiang and Zheng 2014). The respective rights and duties of both public actors and private enterprises were spelled out in legislation promulgated in 2004; this specifies procedures for involving the private sector through the awarding of concession rights (Gun 2008). By the mid 2000s, China had become the largest water PPP market in the world (Jensen 2016, p. 2), and Jiang and Zheng (2014) estimate that by 2007, 22 per cent of 208 urban water utilities had majority private ownership.

In water supply projects involving private investors, the dominant form of private participation is through either share transfers or joint ventures (Jiang and Zheng 2014, p. 9). In the former mode, payment made by the private firm goes to the local government, while in the latter, the funding stays in the joint venture company. Joint ventures have been a method through which domestic water utilities have increased their influence. Leading domestic state-backed firms, such as Beijing Capital Company (BCC) and Beijing Enterprises Water Limited (BEWG) have witnessed spectacular growth in their revenues and assets under management. BCC's assets rose from 14,445 million CNY in 2009 to 24,326 million CNY in 2013; during the same period, BEWG rose from 1,198 to 7,133 million CNY (Marketline 2015).

Shenzhen has played a pivotal role in laying the groundwork for the rolling out of the joint venture model in urban water supply. To understand this, it is important to understand Shenzhen's unique role in China's development plans. Shenzhen was established as a new, experimental city in 1979, and was allowed to operate a market economy under China's open-door policy (Chou and Ding 2015). Until that time, Shenzhen had been a modest market town known by the name Sham Chun Hui, its population of 30,000 tiny in comparison to the neighbouring metropolis of Hong Kong.

In the four southern districts of Shenzhen (Luohu, Futian, Nanshan and Yantian) China's first Special Economic Zone (SEZ) was established. The SEZ was designed to allow Hong Kong firms to move their production lines to mainland China in order to access cheaper labour. Many of the usual benefits of free trade zones, such as cheap land, lower taxes, and greater flexibility on profit remittances, were made available to investors. In the intervening years, Shenzhen has become a major manufacturing centre, hosting many of China's leading multinational firms. It has attracted a large inflow of rural migrant labourers, with its population exploding to over ten million. In 2010, the SEZ was expanded to cover all districts of Shenzhen, and authorities are in discussions with Hong Kong with the aim of forming a single metropolis which would rank third in the world behind only Tokyo and Shanghai.

From its establishment as an SEZ, Shenzhen was allowed to operate its water works with greater autonomy than was normal practice in China. From the 1980s, the former Shenzhen Tap Water Group strived for low profits rather than delivering water below cost as was common in other cities (Wei 2014, p. 59). Wei (2014) describes how in 2001, the Shenzhen Municipal Government merged assets from the Municipal Drainage Management Department into the Tap Water Group, establishing Shenzhen Water Group (SWG). In 2002, SWG was identified as a pilot for investment and financing reform by the municipal government, opening the way for international tender for the

water concession. By the end of 2003, the formerly state-owned SWG had been transformed into a Sino-foreign joint venture. The equity structure maintained 55 per cent with the state, 40 per cent held by General Capital Investment, a joint venture of Veolia Water and Beijing Capital Shares, and 5 per cent was held by Veolia Water. In 2004, SWG became a listed company on the Hong Kong and Shenzhen stock exchanges.

In a third stage of reform, starting in 2005, SWG established the Shenzhen Water Investment Company (SWIC), a joint venture with the Tianjian Group, specialising in investment in water works. By this time SWG had a presence in 17 water projects in Shandong, Jiangsu and 7 other provinces. Finally, in 2007, permission was given by the municipal government, municipal party committee and municipal SASAC (State-Owned Assets Supervision and Administration Commission) to acquire controlling shares in four water works outside of the SEZ in Shenzhen (Shenzhen Bao'an, Longgang Water, Yantian Water and Meisha Water).

Wei (2011, p. 100) argues that foreign investors weren't needed to address either a funding shortfall or operational inefficiencies; instead, strategic investors were brought in for policy reasons so that Shenzhen could serve as a model of investment and financing reform. Globalization Monitor (2009, p. 14) argues that this was part of a strategy on behalf of the local government to develop its firm into '... a competitive transregional, or maybe later transnational, corporation'.

This highlights the difficult question of how to classify Chinese majority state-owned enterprises, as discussed in Jensen (2016). The World Bank's PPI database, for example, makes the assumption that the public nature of an SOE no longer applies when it wins contracts outside of its domestic jurisdiction. However, this problematises the treatment of an SOE when it operates in a municipality other than that in which it is headquartered. The PSP water database makes the very different assumption that what matters when classifying an operator as public or private is not ownership, but the contract form. In addition to SWG, this debate is central to our understanding of the operations of a number of partially-privatised SOEs, including two of the world's largest water operators, Beijing Capital and Beijing Enterprises Water Group.

4. Conclusion

The first part of our research has given evidence that a new wave of privatisations has occurred in large cities especially in a cluster of countries, albeit at a slowing pace and in the presence of a new counter-dynamic of remunicipalisation. From 11 per cent a decade ago, 18 per cent of cities with a population over one million worldwide are served by private providers. The presence of private providers has increased significantly in East and South Asia, dominated by changes in China and India respectively; increases have also been seen in the Middle East, particularly in Saudi Arabia and in Eastern Europe and Central Asia. Outside of high-income countries, one of the most important changes observed has been the rise of domestic private and quasi-private providers.

We have argued that a context-specific critical political economy approach is needed to inform our understanding of how and why particular forms of provision are assumed. Herein we have adapted Nicos Poulantzas' theorisation of the state and Robert Cox's state-society complex, in order to unpack the nature of different arrangements and

explain why and how states tend to favour capital over societies in assigning costs and benefits of water provision.

The case of the Berlin water remunicipalisation demonstrates how strong civil society pressure can rebalance power towards challenging capital and result in the reinstatement of municipal ownership. Specificities in the SSC in Germany meant that civil society was able to exert a strong influence on the state. However, due to regulatory commitments that assigned primacy to the rights of capital to profit, the municipality had to pay high compensation costs to the private supplier, with financial effects that will be felt by the municipality for years to come. Even with Germany's strong civil society institutional bargaining power, achieving democratic control over the enterprise is an ongoing battle.

Underlying the rise in private provision in Russia highlighted by the empirical exercise is an attempt by the ruling regime to exploit international agencies' support while at the same time carefully safeguarding the interests of its own domestic private capital. The specificities of the SSC complex in Russia favour the state-domestic capital nexus at the expense of the end user, both directly through poor services and tariff increases, and indirectly via budgetary subsidies to private firms. The connection between domestic capital and state institutional forms allows for both protection from foreign capital in the water market and exploitation of aid funds to be used alongside or in combination with state budgetary subsidies. Civil society being institutionally and historically disempowered, this dynamic is likely to remain intact for the foreseeable future.

Finally, the Shenzhen example illustrates the ambition of public authorities which lies behind the rise in quasi-private provision in China. Multinational water firms were permitted entry in order to bolster domestic support for the desired political reforms in the foreign investment framework. The municipal state then took advantage of this development to promote a utility which could expand first domestically, and ultimately become one of the largest global players in water supply and sanitation, all the while maintaining foreign capital participation, albeit as minority stakeholders. The impact of the playing out of this strategy on Chinese citizens' access to water requires further study.

The new ontological complexities pose new challenges for researchers, policy-makers, and social movements alike. The Weberian perception of the role of the state, associated with post-WWII welfare state public services provision in high-income countries, needs to be revisited and questioned in the light of the shifts that occurred during the neoliberal retreat of state control over the economy and the resulting effects on the modes of public services provision. An account of the uneven history of global institutional geography within and beyond the high-income countries is critical. Public provision does not automatically mean public interest but can conceal different combinations of interests that must be scrutinised if the public interest is to be protected.

ⁱ While Lloyd Owen (2012) estimated that over a billion people receive water services from the private sector, this estimate includes wastewater services and governance arrangements where the private sector is a minority stakeholder. Marin (2009)

documents the expansion of PPPs in urban water for the years between 1990 and 2007, however the study is limited to an analysis of 65 large PPPs that had been in place for a minimum of five years.

- ii It should be noted that Russia has re-regulated control of water utilities in 2015 and thus final results of the reforms at the time of writing remain to be seen.
- iii Despite the use of the same unit of analysis, strict comparability is not possible. Due to both shifting demographics and geographical boundaries, comparison between the two periods should be understood to be indicative only.
- iv Cities are assigned to the private sector if the responsibility for the operation of the water supply services is held by a company which is controlled by private owners. This definition includes all concessions, leases and management contracts under which a private company is responsible for the operation of water distribution services in cities. The definition of 'operation of water distribution services' excludes cases where operating responsibility clearly remains with a public sector entity: cases of contracting-out of specific functions [...]; BOTs and other contracts for water or wastewater treatment plants, where the private presence is clearly limited to a defined bulk water supply or treatment function; and excludes any contracts solely for sanitation. The definition of 'private' includes all operators which are more than 50 per cent privately owned, or a joint venture between a public authority and a private company where the private company has effective management control: but does not include operations where a minority of shares have been sold to the public, but without a private company buying a controlling stake. Where cities are split, with one part operated by the private sector, then the city is treated as private.
- v This is partly due to the increasing corporatisation of the sector. Lobina and Hall (2014, p. 2 *et passim*) identify two types of corporatisation – weak and strong. 'Weak' corporatisation is characterised by short distance between the public owners and the managers that leads to the utilities being governed by the public law. 'Strong' means longer distance between the owners and the managers that gives more autonomy to the corporate operators and leads to the utilities being governed by the private law.
- vi The election of Andrés Manuel López Obrador in Mexico in July 2018 may signal a change in direction.
- vii There were a handful of cities that switched from public to private and back to public again which has been recorded as no net change.
- viii According to how temporal boundaries have been drawn for our empirical study, Mysore has been classified as private.
- ix The company which owns Rosiiskiye Komunalniye Sistemy (Russian Communal System/RKS). Russian Communal System was established by the state-owned

Gazprom bank and large oligarch-owned conglomerates. Minchenko and Petrov (2014) provide evidence of its close links to Russia's state administration and preferential access to funds and tender auctions.

^x RKI is a subsidiary of the Basic Element Group owned by Oleg Deripaska, one of Russia's most notorious oligarchs and member of the Politburo 2.0 state economy control network (Minchenko and Petrov 2014).

^{xi} Alfa Group was formed by Mikhail Friedman through privatisation of one of the key Soviet public utility enterprises, RosVodokanal (Padmanabhan 2005). This allowed Alfa-Eco to gain access to technology and infrastructure of the sector across Russia. Its ex-president Gleb Fetisov then became a member of Russia's Federal Council.

^{xii} EWP was formed in September 2004 by former associates of RKS. Simultaneously the special investment fund Euraziyskiy was reinstated. It was initially formed in 1994 and is infamous for breach of contract (GWI 2005), ownership ties with Cypriot shell companies and use of transfer pricing for tax evasion (Oleynik 2015).

^{xiii} Under law 416-F3 on water supply and sewerage, article 41.1.1 states that 'ownership and/or operation right transfer over centralised municipal or state water utilities must occur in accordance with antimonopoly legislation, civil law... on lease/concession basis in accordance with Article 9 of current legislation...' (Gosduma 2012, amended 2015). The latter bans alienation i.e. full privatisation, of municipal or state owned water utilities. Article 9.2 of the same law secures 50+1 per cent share ownership by the state or municipality. Concessions, leases, and partial privatisation up to 49 per cent are allowed. Concessions are now to be agreed via an open tendering procedure. However, in cities with populations over 300,000 where infrastructure information is deemed to be a state secret, only enterprises with necessary access licenses may operate.

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