
Financialising household water: Thames Water, MEIF, and ‘ring-fenced’ politics

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Since the privatisation of water in England and Wales in 1989, a shift in the pattern of ownership towards more consortia-led, global infrastructure funds has witnessed the emergence of a skewed distribution model of financialised infrastructure in the household water sector. A model of debt refinancing based largely upon the securitisation of household revenue streams, we argue, has engineered benefits more towards investors than customers. Through the example of Thames Water and its purchase in 2006 by an international consortium of investors led by the Australian bank, the Macquarie Group, this article sets out a model of leveraged debt made possible through the predictable nature of revenue streams captured from households who have no choice over their water supplier or the amount that they have to pay.

Keywords: financialisation, privatisation, infrastructure funds, leveraged debt, postpolitical

JEL Classification: G

Introduction

Thames Water is UK's largest water company, with 13 million customers in the South-East of England, of which just under 9 million rely upon them for their water supply. In 1989, along with the rest of the regional water companies in England and Wales, Thames Water was privatised, sold off in 2001 to RWE, a German Utilities company, and then in 2006, after a protracted bidding war, it was acquired by an international consortium of investors led by the European arm of an Australian bank, the Macquarie Group. In the process, Thames Water's households became central to a model of financialised infrastructure that is as far removed from the idea of shareholder capitalism that drove the early privatisations of British Telecom and gas as it is from the

notion that individuals have progressively been turned into financial subjects, 'two-legged cost and profit centres', as Blackburn (2006) claimed. Rather, it is a model where it would seem that the households themselves are the financial asset, a 'human revenue stream', as Meek (2012) intriguingly expressed it, one which has been packaged and sold to global investors through the techniques and practices of financialisation.

The early privatisations of the UK's utilities, railways and airports were conscious political affairs, informed with the rhetoric of deregulation, increased competition and customer choice, designed to give the public a stake in society (Kay and Thompson, 1986). So it is perhaps odd that not only has the public, in the case of privatised water at least, seemingly

began to morph into a valued financialised asset but also it has done so in a manner that has drawn little political attention. As is well known, customers of water companies in England and Wales have no choice—because they have to ‘deal’ with monopolies in private hands—but to take their water from their providers and to pay their water bills on a regular basis for the foreseeable future. As such, the monopoly nature of water provision and the captive income streams involved have the potential to deliver known rates of return over fixed time periods for investors, in agreement with the regulator, OFWAT. For an increasing number of highly leveraged water companies, of which Thames Water is probably the leading exemplar, such revenue streams are viewed more as financial assets, which, through processes like securitisation, are capable of generating funds that appear to have little connection to the operational side of the business and, we would argue, have more to do with a redistribution of value that favours investors over customer households.

Alongside the regulatory ‘ring fence’ that separates the more risky side of the corporate water business from the supply of water to households, there seems to be an equivalent political ‘ring fence’ that places the financial arrangements of consortia-led infrastructure funds outside of the political spotlight. In the language of [Ranciere \(1999\)](#), or more accurately [Zizek \(1999\)](#), it can perhaps be argued that the financial twist to privatisation has been rendered ‘postpolitical’, whereby any political questions over corporate finance have been progressively displaced by a more conspicuous concern with practical issues of sustainability, water security and environmental governance, as well as by the drive to get a better deal for the ‘consumer’.

In the first part of the article, we outline the reach of financialisation into household water budgets and the role of financial intermediaries in the purchase of Thames Water by Kemble Water Holdings in 2006, together with its profile of global investors. Following that, we set out the programme of corporate securitisation adopted

by Thames Water and the use made of leveraged debt by Macquarie’s European Infrastructure Fund (MEIF) to skew rewards more effectively, it would seem, towards investors than customers, as well as to enhance their own fee and commission earnings. In the final section, we show how this model of financialised household water appears to be the subject of a political ‘ring fence’, where the regulatory body brokers agreement with investors over domestic water prices, service quality, water efficiency and the like, yet leave untouched the politics of packaging and selling households as a captive revenue stream.

Financialising the familiar

On the face of it, the profile of the water industry in England and Wales today looks much like it did when the 10 regional water authorities were floated on the stock exchange in 1989. Anglian, Bristol, Northumbrian, Severn Trent, Southern, Thames, Wessex, Yorkshire and Welsh Water (*Dwr Cymru Cfyngedig*) still trade, although under private rather than public ownership. In all, 21 companies supply water to households in England and Wales, most of which are private. With the exception of Veolia Water, a French company with a long history in water management and one of the world’s largest suppliers, few water company logos would turn anyone’s head. At the time of privatisation, the shares of the water companies were massively oversubscribed, in part, perhaps because they were underpriced to ensure that the public took a stake in this familiar, yet newly privatised, industry. Some two decades on, only the trading names remain much the same as before, with the public as a shareholder increasingly displaced by global consortia, pension and other specialist infrastructure funds. Behind the familiar company logos, the likes of Thames, Anglian, Southern and Yorkshire Water are effectively leading the way in the financialisation of household water.

The early movers into the corporate ownership of the nation’s water, after the government

relinquished its 'golden shares' in 1994, were primarily energy companies mainly looking for a suitable operational fit, with America's Enron and Germany's RWE leading the way, alongside a slew of traditional French water management companies (Helm and Tindall, 2009). The energy companies are no longer part of the English water scene, and of the French companies; Veolia recently divested itself of much of its UK water business, selling to a consortia of Morgan Stanley Infrastructure and M&G, the European investment arm of the Prudential, and Suez Environment sold its controlling stake in Bristol Water in 2011 to a Canadian Infrastructure Fund. The fund was advised by Macquarie Capital, who also provided the debt facility to fund the deal. Macquarie, an Australian investment bank, as noted before, led a successful bid to purchase Thames Water in 2006, as part of an international consortium of investors that now involves the sovereign wealth funds of both Abu Dhabi and China. Asian interest in the UK's water set-up is also evident in the capture of Northumbrian Water in 2011 by Cheung Kong Infrastructure, an investment vehicle of the Hong Kong billionaire, Li Ka-Shing, who previously owned the much smaller Cambridge Water.

This changing pattern of ownership in the English and Welsh water sector since privatisation is what interests us here not only because of the shift that has taken place in treating infrastructure as a stable, long-term asset class by pension funds and the like but also because it points to the introduction of a less-familiar funding model in the sector, one based upon debt refinancing largely through the securitisation of revenues streams. The traditional public-quoted water companies, like United Utilities, remain part of the sector, as do the 'trading' companies like Wessex, but they occupy a diminishing role next to those engineering water for financial gain. It is the politics of packaging and selling households as a captive revenue stream that lies at the heart of this model of financialised water, one that reaches directly into the domestic realm, yet

only indirectly reveals itself through the actions of financial intermediaries and global investors who execute the model at one remove from the operational side of the water business.

The 'selling off of the state' (Martin, 1999) and the accompanying rise of 'popular capitalism' that offered 'Sids' throughout Britain the chance to become shareholders has, in many respects, been overtaken by the events of financialisation. Martin's (1999, 273–4) timely observations on the uneven regional incidence of ownership of newly privatised former state assets and the concerns he flagged over share ownership have been outpaced by financialisation's rapid growth in the decades since privatisation. Infrastructure too has continued to develop into a significant international asset class, although at a pace not envisaged by Clark (1999) in his early intervention on the 'rise of pension fund capitalism', since when its attractiveness to a growing range of investors has multiplied, spilling over into the realm of the everyday.

Packaging and selling a public

The pervasive reach of financialisation into everyday life has been well documented (Clark, 2000; French and Kneale, 2009; French et al, 2011; Langley, 2008; Martin, 2002; Pike and Pollard, 2010). Privatisations, in particular, the withdrawal of the state from the routines of urban life and indeed all aspects of the life cycle from mortgages and student loans to health care and personal pensions, have increasingly drawn individuals and households into the ambit of financial risk and calculation. This embedding of financialisation in people's everyday lives, its normalisation as it were, carries with it the assumption that many more experience a world of financial self-hood, with people's lives increasingly exposed to the risks and buffetings of the financial markets (Langley and Leyshon, 2012). For individuals facing ever greater financial responsibilities and personal risk throughout their lives, the consequences of their involvement and the potential pitfalls,

are all too evident. For many households and their water bills, however, the experience of financialisation is invariably somewhat more opaque.

Despite privatisation, the water companies remain monopolies, vertically integrated from raw water abstraction to household tap. The principles of universality, affordability and access to water supply effectively work against the wholesale introduction of price competition and market exchange, so does water's biophysical character (Bakker, 2005). In consequence, as indicated, households have little choice over which company supplies their water or over how much they have to pay for it. Moreover, they have no choice but to pay their water bills on a routine, fixed calendar basis, year in, year out. For the supplier, the private water companies, this arrangement provides them with a stable, predictable revenue stream over time; one that households cannot opt out from or switch suppliers. Conventionally, such an arrangement amounted to little more than a rather dull, safe asset, with earnings to match that profile. Financialisation changed all that, as O'Neill (2009) has argued, by lifting infrastructure such as the water system out of its previously stable operational world and placing it into the risk-taking world of financial calculation.

In the hands of financial intermediaries, as O'Neill has shown, a guaranteed revenue streams over time can be securitised, that is, turned into a tradable financial product, broken up into separate earnings packages, assigned a risk profile and sold onto investors seeking long-term real returns. Crucially, it is not the asset itself that is sold on but the performance of the asset that, in the case of household water bills, is their anticipated ability to pay inflation plus revenues over the long term. That households have little say over the size of their bills or whether or not they pay them makes this value promise a novel way for consortia-led funds to extract a reliable income stream from a captive public, package it up and sell it

on to investors. It is a promise, however, that households, despite being drawn directly into the ambit of financialisation appear, at best, to have scant knowledge. There is something of a rift between the roll-out of financialised water infrastructure by the consortia-led funds and the water bill that lands on the household mat. The everyday world of water and sewerage that speaks to familiar company names that have been around for generations seems far removed from a world of financial intermediaries, securitisable revenue streams and institutional investors.

Institutional investors, as indicated, are increasingly global players who, because of the variable rates of return on infrastructure projects across the globe, seek to build relationships with financial intermediaries who may be better placed to grasp the distributional risks and time horizons of specific geographical projects, often partnering with actors close to the ground, so to speak. In that respect, consortia of institutional investors, infrastructure funds, investment banks and, more recently, sovereign wealth funds are increasingly a feature of water acquisitions, drawn from all parts of the globe. As Torrance (2007, 2009) has shown, the skills and expertise required to put together such consortia are frequently down to the enrolment practices of asset managers who are able to broker and translate the diverse interests and risk profiles of the different investors involved. Well-placed intermediaries, usually fund managers, are in a position by virtue of their knowledge of financial products to piece together investor interests in such a way as to 'fix' an overall orientation that more or less suits all involved. They do the work of bundling up investments so that the value extracted is commensurate with other investment media (Bryan and Rafferty, 2006); that is, they evaluate the performance standard of different types of investment opportunities across the infrastructure market and tailor specific packages to particular types of investor.

It is tempting to see this set of practices as the product of an easy relationship between neoliberalism and financialisation, with the former viewed as a political project that places markets, particularly financial markets, centre stage with the promise to deliver socially optimal outcomes through their unregulated practices. However, we prefer to underscore how the rapid growth of markets under neoliberalism has facilitated the expansion of finance and its infiltration into so many aspects of the everyday (Fine, 2008, 2009). Financialisation, on this view, is more about novel ways to extract value through innovative financial devices and mechanisms that speak to the process of commensuration (Bryan and Rafferty, 2006; Erturk et al., 2008; Froud et al., 2002; Montgomerie and Williams, 2009).

Geography is an integral part of this process, in so far as differences in legal structures, regulatory regimes and operational requirements all come into the financial equation. The ability to mobilise and manage funds across the network of investors in this way is a form of distanced power, where local investment opportunities are 'lifted out' and tailored to meet the needs of investors located in different parts of the globe (Allen, 2010). Mediating professionals draw upon organisational resources to fold in others distant in space and time by enrolling them into arrangements that offer the potential of gains for all involved. The lifting out of investment opportunities from one context to another is made possible not only through the use of real-time technologies to create simultaneous presence but also through an extended network of brokering arrangements. Such opportunities, however, amount to more than simply identifying suitable asset classes for a variety of dispersed investors. Behind the financialisation of water infrastructure for instance is not only the power to mobilise funds at a distance but also the ability to securitise revenue streams in order to channel funds to investors, as well as refinance existing debts. However, such financial engineering is rarely considered as part of

the domestic realm of household water in the UK, let alone part of what makes up a percentage of the nation's water bills.

Engineering Thames Water

Thames Water is one of the more familiar names in the English and Welsh water set-up and a leading proponent of engineering financial returns for its consortia-led owners. When customers in London and the South-East of England pay their water bills, though, it is not particularly evident what happens to this household revenue stream or the nature of the company that is actually Thames Water.

Thames Water, in fact, is owned by the non-descript, Kemble Water Limited, the private company that purchased Thames Water from the German utilities firm, RWE, 2006. It is itself wholly owned by Kemble Water Holdings Limited that, in turn, is owned by an international consortium of infrastructure and pension funds. Kemble Consortium is shown in Figure 1 at the top of the 'wedding-cake' corporate structure that is Thames Water. Each company is a wholly owned subsidiary of the one above, with the parent, Thames Water Limited, and all above, financially and legally 'ring-fenced' from the regulated water company, Thames Water Utilities Holdings Limited. The two companies at the base of the structure, Thames Water Utilities Finance Limited and Thames Water Utilities Cayman Finance Limited, are funding subsidiaries of TWUL. We shall return to the significance of the holding company structure and its separation from the 'ring-fenced' entities in the following section.

Kemble Consortium's largest member is the Australian bank, the Macquarie Group, mentioned earlier, which manages a range of investor funds, over which it has substantial control in terms of how their assets are structured and financed. The remaining investor funds, which are set out in Table 1, are made up of Canadian, Dutch, Spanish and Australian pension funds and, until relatively recently, Santander's private equity arm and Finpro, a Portuguese investment

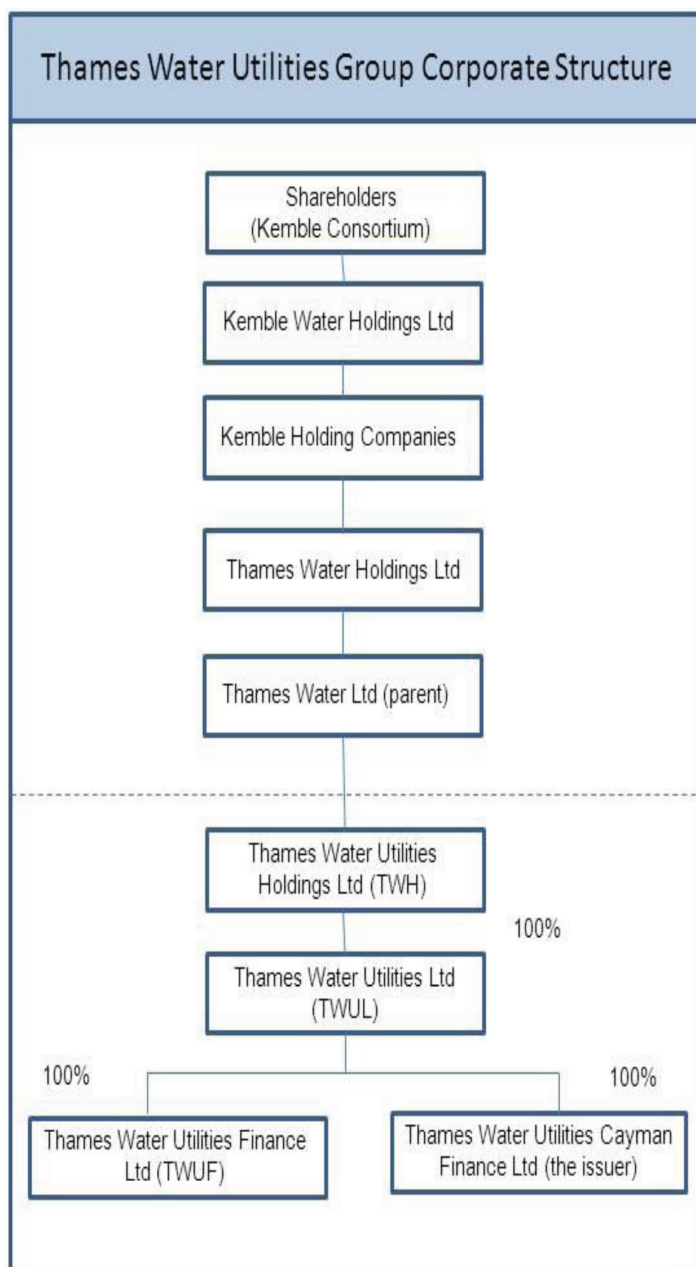


Figure 1. *Thames water utilities group corporate structure.*

Source: Standard & Poor's 25 September, 2008 'Global portal: Thames Water Cayman's Finance Limited', page 4, 25th September Available at: <http://193.111.35.151/cps/rde/xbcr/corp/bonds-report-twucfl-poor-sep-2008.pdf>

vehicle. In late 2011 and early 2012, they were joined by Abu Dhabi Investment Authority and China Investment Corporation, respectively,

both sovereign wealth funds, who between them own just under 20% of Thames Water. The Macquarie-managed assets, some of which were

Table 1. *Kemble Water Consortium 2006 (updated 2012)*

Firm name	Fund name	Equity (MN)	Stake (%)
<i>Investors</i>			
ABP	—	—	—
Alberta Investment Management Corporation	—	—	—
AMP Capital Investors	AMP Capital Strategic Infrastructure Trust of Europe ^a	—	—
Australian Super	—	—	—
British Columbia Investment Management Corporation	—	—	—
Construction and Building Industries Superannuation Fund	—	—	—
Equity Partners Infrastructure Company ^b	—	—	1.24
Finpro SGPS ^c	—	—	4.68
MIRA ^d	LODH Macquarie Infrastructure Fund	—	—
MIRA	Macquarie European Infrastructure Fund	—	—
MIRA	Macquarie European Infrastructure Fund II	—	—
MTAA Superannuation Fund	—	—	—
OP Trust	—	—	—
PGGM	—	—	—
QIC	—	—	—
Santander Private Equity	Santander Infraestructuras	38 EUR	4.00
State Super	—	—	—
Price (MN)			
<i>Sellers</i>			
RWE Group	—	4800 GBP ^e	100.00

^aIn March 2011, AMP Capital Strategic Infrastructure Trust of Europe acquired an additional stake in Thames Water for £27.5 million from unidentified sellers. In September 2011, AMP Capital Infrastructure Debt Fund invested £39.2 million in subordinated debt securities of Thames Water.

^bIn December 2011, Abu Dhabi Investment Authority acquired a 9.9% stake in Thames Water. The stake was bought from Macquarie European Investment Fund I and II and Equity Partners Infrastructure Company.

^cIn January 2012, China Investment Corporation acquired from Finpro and Santander Infraestructuras an 8.68% stake in Thames Water.

^dIn May 2012, British Telecom pension scheme acquired a 13% stake in Thames Water, bought from funds managed by Macquarie Infrastructure and Real Assets (MIRA). Macquarie still maintains a 26% stake in Thames Water.

^eOf the total purchase price of £8 billion, £3.2 billion was assumed company debt and moved into the securitisation ring fence.

Source: Prequin Databank (2012).

sold to accommodate Abu Dhabi's interests, comprise six separate funds; of which, Macquarie's two European Infrastructure Funds (MEIF and MEIF2) account for the largest share although this itself has been diluted recently by the sale of a further 13% of its shares to British Telecom.

As noted above, Macquarie operates considerable discretion over its managed funds,

controlling the purchase and acquisition of assets, as well as the access investors have to their capital. The multiplication of funds allows Macquarie to spread its borrowing and to craft financial packages that mirror the needs of the diversity of investors in the separate funds, as well as lock-in them in over time. This elaborate structure also serves to insulate the parent

company from risk and to earn revenue from the fees it charges investors to handle and operate their infrastructure assets (Jeffries and Stillwell, 2006; O'Neill, 2009). In this way, the Macquarie Group is able to generate their own income stream from investors worldwide, while the Kemble Consortium as a whole, in turn, derives benefit from the financial products engineered by Macquarie to capture the revenue streams generated by Thames Water's households.

As Thames Water's customers have been incorporated into the risk-taking world of financial calculation, they appear to have been inserted into a rather byzantine corporate structure, where the significance of the revenues contributed and what happens to them are far from transparent. The operational side of the water business, indeed the actual cost of water itself, and the amount used do not themselves seem to figure as part of the financial equation. Rather, as we hope to show, it would appear that the debt leverage through financial engineering has become one of the prime mechanisms for infrastructure fund managers and global investors to extract value from the water business, leaving the regulator, OFWAT, in a position of having to adjust to the new financial reality of securitised debt and the overseas ownership of many of the familiar water company logos since privatisation.

Leveraging water

A key factor that drove the privatisation of water in the late 1980s was the perceived lack of investment in the UK's ageing water and sewage system. Access to private sector capital for big infrastructure projects was and indeed remains the means by which governments avoid calls on public sector finances, and with the right regulation in place, it was broadly assumed that the potential political pitfalls over access to water and its affordability, as well as concerns over public health and the environment, could be circumvented. In practice, though, as we have seen, the main challenge faced by the water regulator, OFWAT, has been the process

of constantly adapting to a changing landscape of ownership and finance within the sector in order to maintain a market attractive to the shifting objectives of its investors and asset managers.

In a series of articles, Helm (2003, 2008, 2009) with Tindall (2009) have shown that infrastructure regulation in the UK has been a moving target since privatisation, with regulators having to adjust their financial assumptions to meet the new debt-laden global circumstances while maintaining a monitoring and control function at seemingly ever greater levels of detail and refinement. At the time of privatisation, the balance sheets of the utility companies were relatively ungeared. It was assumed that any debt raised would be used to invest in physical infrastructure, but as Helm and Tindall have shown, the replacement of equity with debt did little to improve the quality of the physical assets and was put to a quite different purpose, primarily, that of engineering a higher 'rate of return' from the regulator. OFWAT determines household water bills on the basis of how much the water companies invest, whether that is raised through equity or debt. When financing through equity is more expensive than that raised by debt, as has recently been the case, the highly leveraged companies were able to exploit the difference between the actual cost of debt and the weighted average cost of capital used to calculate the allowed rate of return. According to Helm and Tindall the resulting gain was passed to shareholders in the form of higher dividend payments at the expense of the amount paid by households for their water (Shaoul, 1997).

What is perhaps more intriguing is that Helm and Tindall claim that the deliberate high levels of gearing that created the financial arbitrage could not have happened without some form of accommodation on the part of the regulators. The ability of the infrastructure funds to alter their capital structure in this way did not, it would seem, in the case of water at least, represent a concern to the regulator so long as their

duty to ensure that the companies could finance their functions was met¹. It is left to the water companies as to how they gear themselves, and if financial outcomes were engineered to boost returns, then that was acceptable, so long as the associated risks do not fall explicitly on the consumer and that the financial engineering itself takes place outside of the regulatory 'ring fence' shown in [Figure 1](#). Whatever financial dangers the companies expose themselves to by leveraging debt is thus at their own risk, and the regulatory 'ring fence' is a means to show potential bond purchasers the limits and relationships of the securitised offerings, as well as assuring OFWAT that the regulated entity is protected from liabilities incurred from external risk-taking of the parent company.

One such risk allowed by OFWAT was the wholesale securitisation of Thames Water's revenue streams in 2007. It enabled Thames Water not only to exploit the arbitrage gained through the process of further leveraging debt, but, crucially for our argument, it also enabled the company to pay sizeable dividends to shareholders, pay interest on loans borrowed through the company group structure and, in the process, allowed significant fees and commissions to be earned, or, as others have suggested, skimmed off, by intermediaries.

Securitising Thames Water

Leveraging debt through securitisation, just to be clear, allows revenue streams from underlying assets, in this case Thames Water's bill paying customers, to be packaged together, bonds issued against them, and then sold on to investors. Importantly, securitisation represents a claim against cash that flows from household water bills in the future, that is, money for which customers have yet to be billed. It is a claim not just on tomorrow's bills but revenues stretching way into the future.

The aim behind the Thames Water's corporate securitisation in 2007 was to 'simplify' its capital structure and reduce funding costs by

transferring all the existing debt of Thames Water Utilities Limited, the regulated entity, into a securitised structure and to issue a tranche of new debt. [Figure 2](#) shows the amount of securitised debt raised by the 'ring-fenced' group of companies, with the majority of existing debt, some £2.9 billion, moved into the 'ring fence' under TWUF and £1.2 billion of new debt issued by TWUCF. Part of the existing debt refinanced stems from the funds originally borrowed by Macquarie to finance the acquisition of Thames in 2006². The total debt under the 'ring fence', some £4.6 billion, was sold to bondholders drawn largely from a broad church of global investors, mainly infrastructure funds, pension funds and insurance companies seeking long-term index-linked investments to match their profile of liabilities, some of whom would also very likely be purchasers of equity in Thames Water's parent company, Kemble. The long-term bonds that were ring-fenced within the revenue streams of TWUL virtually doubled the company's debt at the time and set the pattern for debt refinancing up to and including Thames Water's latest £1 billion debt issue in 2012 ([Thames Water \(Kemble\) Finance plc, 2012](#)).

Customer revenues underpin the whole securitisation process, in so far as they act as securities for Thames Water Utilities Limited, and in order to ensure that the core water business was legally isolated from the financial risks involved, Thames Water Utility Caymans Finance was created to issue the asset-backed securities. A Cayman's Island address has the additional advantage of protecting the securities holder from tax on interest payments or gains made from the disposal of the bonds (TWUCFL Prospectus; [Standard and Poor's 2011, 202](#)). This vehicle, TWUL and TWUF together comprise the legal and regulatory ring-fenced entities that preoccupy OFWAT, and, as can be seen from [Figure 3](#), they are at the centre of Thames Water's 2007 corporate securitisation programme. They are encircled in the diagram by a diverse range of intermediaries,

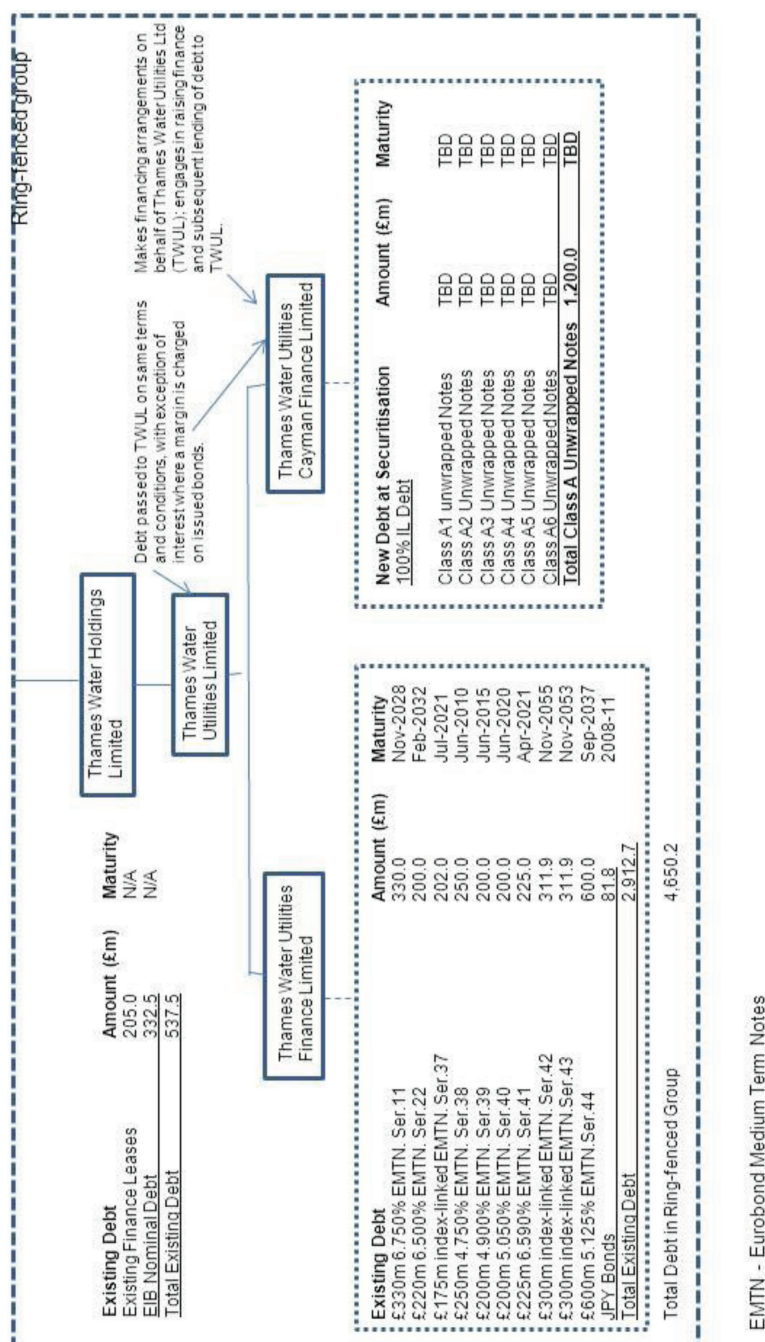


Figure 2. Thames water regulatory ring fence at securitisation, 2007/8.

Source: Adapted from Moody's Investor Service 2007 International Structured Finance Pre-Sale Report Thames Water Utilities Cayman's Finance Limited/Thames Water Utilities Finance Limited, 10th August, Chart 1 'Structural and Legal Aspects', Appendix 1, Page 37 Available at: <http://www.thameswater.co.uk/about-us-financial/bonds-report-twufl-moodys-aug-2007-02.pdf>

from financial dealers and legal specialists to credit facility providers, finance lessors, hedge counterparties and providers of financial guarantees such as monoline insurers, all of whom have a part to play in the securitisation of the customer's revenue streams and all of whom draw fees for their services that ultimately are paid for out of household bills.

The process starts with the issue of bonds under the programme by TWUCF, the Issuer in the diagram. They worked closely with a number of banks, 10 in all, issuing agreements with Barclays Capital and BNP Paribas, at one end, all the way down to The Royal Bank of Scotland and RBC Capital Markets, at the other, with Macquarie Bank Limited also in the fold. To ensure that sufficient credit is in place, TWUCF set-up debt service reserve accounts, debt service reserve (DSR) in the figure, and also an operating and maintenance reserve facility, O&M in the diagram, to cover cash shortfalls, at least 10% of operating and capital expenditure for the year ahead ([Standard and Poor's, 2008](#)). Strictly speaking, the DSR and the O&M facilities are outside the regulatory ring fence, but they are tied in through financial covenants stipulated in the legal ring-fencing documentation. If drawings are made from the DSR facility, one level of the financial covenant is breached and a 'distributional lock-up' comes into play that serves to protect current and future liquidity needs of Thames Water ([Standard and Poor's, 2008](#)). Both types of account attract fees. Moreover, the provision of such facilities, in turn, requires other intermediaries to safeguard against the risks involved, who also levy their own fees from the arrangement.

Multiple refinancing is one such subgroup of risks that move around the programme structure and to limit these, hedge counterparties, located on the left of the diagram, hedge the risks of authorised credit facilities such as DSR, as well as those referred to in the diagram as other authorised credit facility providers, which deliver revolving credit facilities from named lenders to

provide working capital. Financial guarantees are also provided to bondholders, and this task falls to monoline insurers, who assume the credit risk and thus strengthen the credit rating of the bond issue. The monoline insurers charge an upfront premium in the region of 25–50% of the present value of the cash flow over the term of the bonds. Deutsche Bank, the security trustee, located at the top right hand corner of the diagram, also performs a guarantee role.

The financial complexity of the relationships involved and the growing information asymmetry between investor and regulator makes it all the more difficult for the latter to know the full implications of the programme's structure in terms of, say, risk distribution and public versus private gains. Hence, the importance of private sector risk assessors in providing guarantees for the programme as a whole, but also the cardinal significance of the rating agencies to the regulators in determining the robustness of financial entities such as TWUL. In part, it is on the basis of the ratings that the regulator assesses the potential efficiency gains and how future investment can be delivered to the benefit of Thames Water's customers, bearing in mind all of the risks associated with private finance. The relative credit strength of the 'ring-fenced' entities is a prime concern, and the regulator relies heavily on the judgements delivered by the agencies³ or on what [Sinclair \(2005\)](#) has called the 'common sense of the market', which, in his view, obscures the often socially and politically partial nature of such judgements. Ratings agencies are paid for their services by the Issuer, which takes the process full circle, back to the start of the programme and the issue of bonds based on household revenue streams.

As is apparent, there is a considerable degree of financial interaction and calculation that goes back and forth across the legal and regulatory 'ring fence', much of it to do with the debt within the 'ring fence', which has the potential to introduce risk and disruption into the securitisation process and also to make it more difficult to disentangle the distribution of

benefits and rewards for investors and customers alike. While the overall aim of the corporate securitisation, as mentioned, was to reduce the cost of capital and thus eventually benefit the consumer, the actual outcome is less clear cut. A host of financial intermediaries have clearly benefitted from an ability to skim value from the risks associated with private capital and debt refinancing, but there are other reasons for leveraging debt that raise a question mark over the actual redistribution of value between investors and Thames Water's households.

Redistributing value

The restructuring of Thames Water's debts upwards from £3.2 to £7.8 billion in the 5 years up to 2012 (Annual Accounts; TWUL, 2012), could, as OFWAT anticipated, bring benefits to customers through lower household water bills, in part, through the generation of tax 'efficiencies'. However, the leveraging of debt may also be used for other purposes: to pay a higher shareholder dividend and pay-off interest on intra-company and external loans. On the first point, the regulatory accounts for Thames Water, that is, those accounts prepared for OFWAT that relate strictly to the 'ring-fenced' entity, Thames Water Utilities Limited, do not however show a strikingly high pattern

of dividend payments. The statutory accounts, though, which relate to the company as a whole, tell a rather different story.

Table 2 shows the pattern of dividend payments in relation to profits after tax for TWUL over the 2007–2012 period, as well as the corresponding figure for shareholders funds. At a glance, it is apparent that for both 2011 and 2012, as well as for 2007, the year after Kemble purchased Thames Water, dividend payments exceeded those of after-tax profits. For 2008 and 2010, the figures show the converse, but if you add in the additional interim-dividend payments for those years (outlined in the Table 2 footnote), then dividend payments also exceeded profits for both those years. Over the 5-year period, the total dividends declared added up to £1.8 billion; of which, varying amounts were paid to shareholders allocated as external dividend payments, with the remainder used to pay back interest on intra-company loans and interest on external debt, some of which was incurred from the initial acquisition debt.

The use of dividends to pay interest on debt, rather than increase payouts to shareholders, is a feature of Thames Water's statutory accounts. In 2011, for instance, of the £271.4 billion distributed in dividends, over half, £156.3 billion, serviced intra-group debt and external interest on Thames Water's Eurobond Plc debt, with

Table 2. TWUL: dividends, net profits, and shareholders funds, 2007–2012

Year	2012	2011	2010	2009	2008	2007
Figures in £m						
Dividends	279.5	271.4	307.5 ^a	222	102 ^b	656.3 ^c
Profits after tax	247.2	225.2	331	314	278 ^d	240.6
Shareholders funds	1400	1506	1556	1609	1612	1331

^aAdditional £28.2 million interim-dividend payment approved 10 June 2010 for year 31 March 2010 made to TWUHL to settle inter-company interest owing to TWUL. Further £132.3 million interim-dividend to be paid to TWUHL in two tranches in June and September 2010; these payments are in respect of year ended 31 March 2010.

^bAdditional £131 million interim-dividend payment approved on 22 May 2008 for year ended 31 March 2008, noted as 'post balance sheet event'.

^cFor 15 months to 31 March 2007, this was the period that saw the sale of Thames to Kemble.

^dRestated as £380 million in 2009 accounts following change in accounting treatment of energy and national grid reserve service.

Source: Accounts and financial statements for Thames Water Utilities Limited 2007–2012 (<https://www.thameswater.co.uk/about-us/4229.htm>).

£121.4 billion paid to the former and £34.9 billion to the latter (TWUL, 2012). The corresponding figures for 2012, out of the £279.5 billion distribution, were £79.5 and £34.9 billion, respectively. The rationale for using dividends in this manner would appear to work directly against the interests of shareholders, diverting money away from their investment returns, but indirectly the tactic benefits them, as well as many of the companies in the 'wedding-cake' corporate structure. That is because paying down interest on debt, some of it to your own holding companies, serves to maintain a high degree of gearing and thus, over time, enhances the ability of the company to continue paying high dividends over and above profits earned.

This pattern of large regular dividends, as Armitage (2012) has pointed out, is not atypical for privatised stand-alone water companies and is particularly a feature of those companies that are now run by consortia of infrastructure funds that operate on a highly geared basis. What is unusual, however, as he goes on to note, is that companies like Thames Water have been paying out in dividends far more than they actually earn from their cash flows and using the borrowed money to fund the substantial dividends. 'The (water) companies are seen by investors and analysts as natural payers of substantial dividends in relation to profits, even though they lack the cash flows to make such payments' (Armitage, 2012, 489). What is meant by natural in this context is not entirely clear, but the use of leveraged debt to pay dividend payments is a way of bringing forward future income streams that work more to the benefit of investors than customers. The rewards reaped by shareholders from this indebted arrangement, according to Armitage, appear to stem from the fact that water companies are relatively risk free, monopoly enterprises that, not so long ago, before privatisation, were also debt free. As he points out,

Shareholders would not expect most companies to gear up persistently in order to pay dividends, only those companies which are

well suited to do so. The water companies were unusually well suited because of their low business risk, their lack of opportunities for investment beyond the investment agreed by OFWAT, and because they started life with no debt (Armitage, 2012, 489).

A frequent justification given by water companies for high dividend payments is their need to pay down their debts, which, as we have seen, somewhat paradoxically, often benefits their own holding companies through the interest earned. However, they also point to their need to fund long-term capital infrastructure investment. If the latter was taking place at Thames Water and retained earnings were being fed back into the company, this would show up in Table 2, with shareholder funds increasing over the 5-year period. As is evident from the figures, however, shareholder funds or equity has remained notably static over that period and has even declined in recent years. Strikingly, since its purchase by the Macquarie-led consortium in 2006, the net worth of Thames Water has hardly risen and yet its debts have more than doubled, threatening its investment-grade rating and leaving it in a position where the only plausible way that it can raise further funds for infrastructure investment is by raising household water bills. In that respect, the private sector capital that was supposed to be made available for the renewal of London and the South-East's ageing water infrastructure, which now consists largely of a mound of leveraged debt, to put it bluntly, appears to have been used to benefit investors at the expense of households and, indirectly, their rising water bills⁴.

The displacement of politics

The financial practices and techniques used by Thames Water to effectively extract value from privatised water infrastructure have much in common with a number of highly geared consortia-led funds in the sector, such as Anglian, Southern and Yorkshire Water. For this group of companies, together with their assorted holding companies and asset managers, water is not the

driver for investing in the sector; that lies outside the operational side of the business and to a large extent outside of the water regulator's remit. The corporate financial arrangements of the companies, their capital structures, leverage, offshore tax arrangements and size of dividend payments to shareholders are a matter of concern more to the companies themselves than to OFWAT. Although, in practice, OFWAT is made aware of many of these issues, primarily through the activities of the rating agencies, they fall outside of the direct political spotlight.

Politics is obviously part of the regulatory equation, given concern over domestic water prices and consumer protection, but the spotlight does not appear to extend to the financial calculations and practices used by the consortia-led infrastructure funds unless there is an undue risk to consumers. In that sense, it would appear that all things to do with corporate finance and capital structure have been 'ring-fenced' politically, so that financialised infrastructure itself is not a key matter for the regulator. It is not in OFWAT's mandate, as it were. Or, in the words of [Ranciere \(1999\)](#), or more accurately, [Zizek \(1999\)](#), it is as if much of the water supply system in England and Wales has been rendered 'postpolitical'. By that, we mean that politics appears to have been 'taken out' of financialised water, displaced and lodged in the practices of getting price regulation right, of achieving greater water efficiency and of securing large-scale funding to offset an increasingly unsustainable water infrastructure. In this context, it is possible to broadly argue that some kind of postpolitical logic is in operation, whereby the 'shared' predicament faced by households—most notably, climate change, population growth in the South-East of England and a poor water environment—can only be met through private investment, regardless of what that might entail in terms of engineering financial practices.

'Ring-fenced' politics

Earlier we noted that whatever financial dangers the water companies expose themselves to

by leveraging debt is deemed to be at their own risk and outside of the regulatory 'ring fence.' The regulatory 'ring fence' overlaps with the legal and structural 'ring fences' and together they have the task of ensuring that, in the case of Thames Water, the financial activities of the parent company do not prejudice in any way the managerial viability of the operating business. Part of that arrangement extends to the dividends policy, in that it should reward efficiency and the management of economic risk. There is a kind of arm's length concern with what happens in the various holding companies that make up the Thames Water group, but it goes little further than a concern. So long as the company maintains a good credit rating for its corporate debt from the ratings agencies and it has sufficient financial resources to support its water supply business, what happens outside of the 'ring fence' is not of detailed concern to OFWAT. However, the effect of drawing such boundaries is, perhaps unintentionally, also to draw a political line around the financialisation of infrastructure, placing it at one remove from the public eye and the households who, collectively, produce the revenue streams that underpin the possibility of financial engineering.

In the present day, the water infrastructure in England and Wales is as much a financial product as it is a publicly regulated private monopoly, one that is run on principles that mimic the marketplace, but it is the latter characteristic that has drawn direct political attention since privatisation, not the former. In part, this is probably because securitised revenue streams and global debt structures were not part of the initial privatised water offering, and water regulators have had to adapt their frame of reference, making decisions about what is and what is not relevant to the viability of the domestic water business as one set of owners is replaced by another. The incremental regulatory tools used to engage one set of actors have to be adjusted for new entrants although this in itself can throw up situations where simulated market metrics are manipulated for ends other than those they were initially designed to serve. This

is the thrust of Helm and Tindall's argument, when they suggest that the weighted average cost of capital used to calculate allowed rates of return was opportunistically engineered by the new corporate owners of UK water companies, at the expense of household water bills. Markets are not static entities and even simulated ones change over time, although not always in ways that are foreseen politically.

Callon (1998), in *The Laws of the Markets* makes the point well when he outlines the way that markets, once framed for a particular purpose, operate through a series of initial calculations that are factored into the calculations of other participants who, in turn, generate their

own calculations to give a market its dynamic character (Caliskan and Callon 2009, 2010); Callon, 2007; Callon and Muniesa, 2005). Far from a static arrangement, the entry of new actors in a market, such as the shifts in ownership that have occurred in the UK's water sector since privatisation, and the departure of others open up to change how business is done: how assets are calculated; how debt is understood and used; and how the timeframes are assumed. To take one characteristic example, the maturity profile of the bonds issued by TWUL and TWUCFL is quite startling as it stretches well beyond the next regulatory period. Figure 4 shows the bond profile stretching out to 2062.

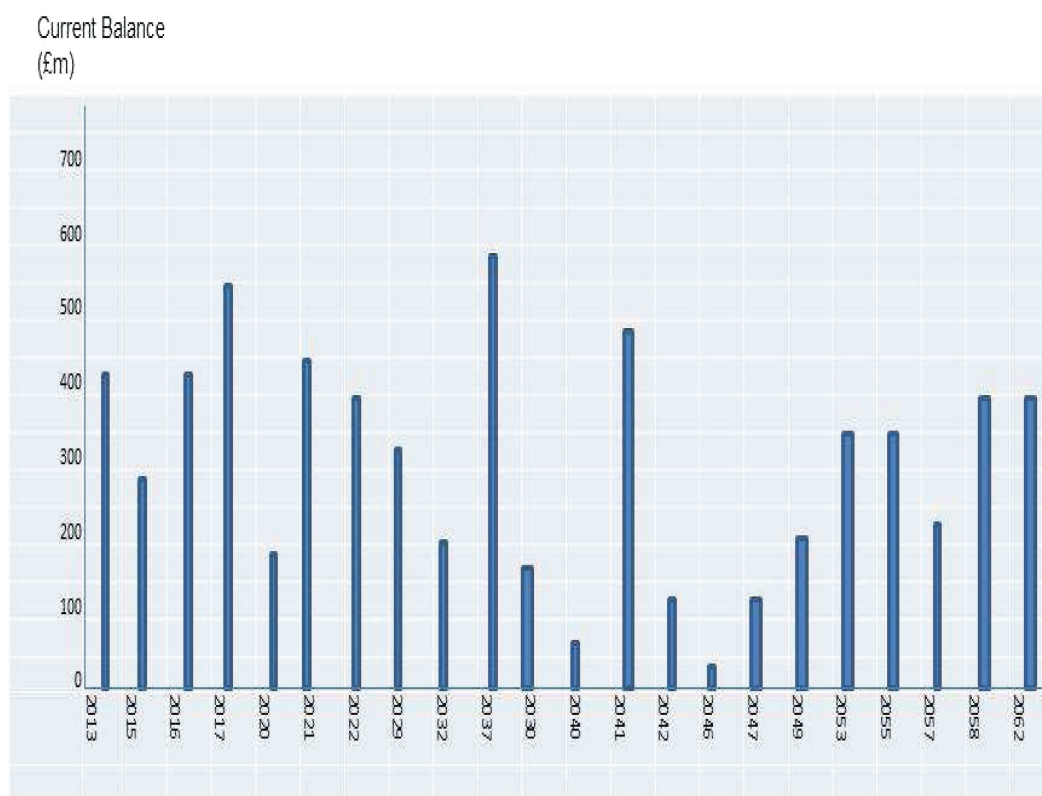


Figure 4. Thames water bond maturity profile.

Source: Adapted from Moody's Investor Service 2012 Infrastructure: Analysis: 'Thames Water Utilities Limited, United Kingdom' April 30th Figure 7, page 9 Available at <http://www.thameswater.co.uk/about-us-financial/bonds-report-TWUL-moodys-apr-2012.pdf>

The bonds themselves are a mix of mainly fixed but with one floating rate issue, some are index linked to the Retail Price Index, and the overall profiles blend US Dollar and Japanese Yen issues with a majority of sterling denominated currencies (Moody's Investor Service, 2012, p9). While the idea of fixing rates and index-linking debt may appear prudent, the concern however lies with one significant unknown, which is the unpredictable temporal dynamic introduced by the sudden re-rating of debt, potentially plunging it from A- to, say, BBB with an immediacy that may well threaten the overall financial structure of Thames Water (and thus potentially impact negatively on its customers). Such a disruptive event would no doubt have its roots in the wider politics of global finance, in some future crisis, but it would nonetheless lie well beyond the regulatory ring-fenced entity.

The ongoing reconfiguration of a market such as water, as regulatory bodies broker agreement with those who enter and exit the sector to their own investment rhythms and cycles, thus poses a dilemma for regulators about the limits of their mandate. If the financial twist to privatisation has to be accommodated, however, because of the imperative for private finance to deliver the water infrastructure required, one way forward is to separate it not just structurally or legally but also politically by placing financialisation outside of the regulatory ring fence. This is not to imply anything devious or any wrong doing on the part of the regulator, merely that the decision to place the highly leveraged capital structures of the water companies outside of the regulatory ring fence has the knock-on effect of taking such issues out of the political spotlight. However, that alone would not be sufficient for privatised water to be considered 'postpolitical' in the current moment.

Postpolitical water?

The sense in which politics can be said to have been largely 'taken out' of water since privatisation or, more accurately, that the politics of financialisation plays no part in the debate over the

rise in household water bills arguably rests upon a series of disavowals. Chief among them is the effacement of any kind of financial engineering from the determination of costs within the water industry. For households, the delivery of a better deal on water is framed almost exclusively in terms of what increased market competition has to offer. According to the influential review of Cave (2009) into competition and innovation in water markets, effective competition in the sector is the clear means by which lower water bills, a better service and environmental improvements can be achieved. In that vein, the UK government's 2011 White Paper, *Water for Life*, drew attention to the claim that, over the longer term, market reforms to increase competition in the sector will limit future price rises (DEFRA, 2011b, 8).

Given the monopoly nature of the water industry and the captive revenue streams involved, the rationale for such reforms is evident, if debatable. What is less clear is why the securitisation of such revenue streams, the bundling up of them into investment opportunities and the sale of them to investors worldwide should fall outside the political equation, as does the financial arbitrage derived from them. As with the framing of markets, so too it would appear, is the politics of water now framed in such a way as to only recognise the figure of the 'consumer', the end-user of the water industry, rather than the figure of the citizen with universal rights to accessible and affordable water. In the government's review of OFWAT in 2011, led by David Gray, it is the consumer, not the citizen, who is presented as vulnerable to the market power of the dominant water companies and in need of protection from the potential abuse of monopoly providers (DEFRA, 2011a). This is a sentiment that finds its institutional counterpart in the DEFRA and Welsh government-sponsored 'Consumer Council for Water', which was set-up in 2005 to replace OFWAT's in-house agency, 'Water Voice' (Consumer Council for Water 2006).

'End-users' are clearly prioritised, and a more direct relationship between consumers and water companies is advocated as part of

good governance. There are no plans, however, in the draft Water Bill of 2012 to legislate for greater choice of water supplier for households. Consumers remain in need of protection from their monopoly water companies, as equally they do from the 'looming environmental challenges' that threaten not only the long-term, sustainable water supplies but also the costs associated with them (DEFRA, 2011b). Together, the threat posed to the consumer from imperfect competition and an endangered environment amounts to a re-presentation of water as an ongoing populist worry or regulatory concern. The establishment of an Environment Agency at the time of privatisation to promote sustainable water management and a Drinking Water Inspectorate to safeguard water quality, together with OFWAT's regulatory role, all speak to a real anxiety over the security of the UK's water supplies. The combined effects of climate change and a growing population, to adopt the tone of the government's White Paper, are presented as posing a real threat to water security that, if no direct action is taken, will endanger all our livelihoods.

This is suggestive of a quite different image for the UK's water industry from the one that was privatised in 1989. Importantly for our argument, its re-presentation as a market-orientated, consumer-focussed, environmental service industry makes it that much more difficult to bring into question the role that leveraged finance now plays in how the sector is managed for different ends. The displacement of the financialisation of water by matters of sustainability, security and consumer fairness does in that sense broadly resemble the postpolitical condition set out by Ranciere and Zizek and elaborated by Swyngedouw (2009). On their account, a populist postpolitics emerges through the appeal to universal themes and groupings that work to occlude particular arrangements that serve vested interests. The common threat of climate change and population growth and the appeal for a more sustainable environment that delivers clean and safe

water to its customers is a scenario that many would find hard to disagree with. Its broad frame of reference, one that outlines a shared predicament, draws its popular appeal from the sweep of its claims and the general agreement that they can command. Above all, the fact of not giving the financialisation of water its proper 'name', that is, the acknowledgement that household water bills have now morphed into a financialised asset, makes it all the more difficult to contest the politics of something as vague as 'Water for Life' or to raise dissent over its largely nebulous claims.

Indeed, one of the hallmarks of a postpolitical condition is the ability to marginalise dissent to the 'givens' of the situation as parochial or regressive (Allmendinger and Haughton, 2012; Swyngedouw, 2009). Disagreement, according to Ranciere and others, is allowed but only among those who are acknowledged as stakeholders and whose voice is recognised as legitimate, principally because, in the case of the UK's water supply, their concerns take for granted the market, consumer and sustainability references that frame the politics of the issue. The appropriate rate of return on capital investment can be questioned, as can the degree of protection afforded the consumer, but not it would seem the politics of packaging and selling households as a captive revenue stream. Likewise, water quality and a sustainable level of leakages can be probed and examined by those who already have a stake, but the desirability of introducing a heavily leveraged financial model into a privatised water industry remains outside of politics proper.

Conclusion

The purpose of this article has been two-fold: first, to draw attention to the emergence of a model of financialised infrastructure in the water sector that has engineered benefits more for investors than customer households and, second, to argue that this financial twist to privatisation has effectively been politically 'ring-fenced', leaving untouched the politics of

packaging and selling households as a ‘human revenue stream’.

On the former claim, we have endeavoured to show how a model of debt refinancing based largely on the securitisation of revenue streams has worked to the advantage of shareholders and financial intermediaries alike, by showing that the sizeable dividend payments over time are largely funded, not out of cash flows but through leveraged debt, and that this indebted arrangement is only possible because of the predictable nature of the revenue streams captured from households that have no choice over their water supplier or the amount that they have to pay for their water. The example dwelt upon throughout was that of Kemble Water Limited or rather Thames Water, which, while not intended as a case study of practices representative of all privatised water companies in England and Wales, does highlight some of the characteristic financial techniques and calculations used by a number of global, consortia-led infrastructure funds increasingly present in the country’s household water sector.

Such funds arguably represent the direction of change, the leading edge of developments in the English and Welsh water business, and signify a shift in the pattern of infrastructure ownership and a move towards treating infrastructure as more than simply a stable, long-term asset class. The ability to engineer household water financially to maintain a high degree of gearing enables a company like Thames Water to transfer value from household to investor not only by exploiting any financial arbitrage created but also by using borrowed money to enrich shareholders, maximise fee income and pay itself interest on its own company loans. The structuring and crafting of such deals are a relatively new development, one which arrived after the onset of the privatisation of the country’s water infrastructure and which has left the regulator, OFWAT, in a position of having to adjust to the new financial reality of leveraged debt and the overseas ownership of many of the familiar names of the UK’s water supply.

The adjustment to that reality by the regulator, however, seems to have taken place at arm’s length, with much of the financial calculation and manipulation subject to a political ‘ring fence’, one that leaves the engineering of household water bills largely out of the political spotlight. This inability to give the financialisation of household water its proper ‘name’ is suggestive of a populist postpolitics where the appeal to universal themes, such as water security and sustainability in the face of climate change and population growth, serve to occlude the enrichment of some interests at the expense of others. Households, rather than the beneficiary of the new financial reality in the water business, seem not only to have lost out but actually to have been turned into the very financial asset that underpins it.

Endnotes

¹ Interviews with senior representatives from OFWAT, Moody’s Investor Services and KPMG broadly confirmed that financially engineered gains accruing to the private sector were not considered an issue, provided they delivered efficiency gains for the running of the regulated entity.

² For example, £875 million of Eurobond debt originating from RWE was repackaged and sold as sterling public sector bonds ([The Treasurer, 2008](#)).

³ At the time of writing, Moody’s provides a corporate family rating of Baa1 to the whole business securitisation that encompasses Thames Water Utilities Limited. Standard & Poor’s does not provide an equivalent rating for whole business securitisations, instead it rates individual bonds.

⁴ As Martin [Blaiklock \(2011\)](#), an ex-senior European Investment Bank figure, noted in his written evidence to the Environment, Food and Rural Affairs committee, “Much of this increased leveraging has come about by the owners/shareholders paying themselves higher annual dividends than the company generates profits, that is, an activity commonly called ‘asset stripping’. Examination of Thames’ accounts over the years demonstrates this trend. Since 2003, there has been effectively zero growth in shareholders’ equity. Any surplus equity value has

been distributed through dividends” (Paras 14 and 15). Over the period 2003–2011, Thames Water’s leverage rose from 55 to 82%. In 1990/1, it was just 7% (Armitage, 2012).

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