Water regulation – what's next?

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As the next periodic review of the water industry (PR19) approaches, government and regulators are going through the usual "reform" process. The temptation to meddle is just too great to resist, and this time there are *some* good reasons for change – and some bad ones. The Treasury has promoted retail competition, and OFWAT has variously come up with a general unbundling agenda, a change to the treatment of debt and new ways of setting the efficiency targets. A third option is to introduce a System Operator model for river catchments, incorporating not just water, but flooding and some aspects of land management.

The Treasury approach is radical – very radical – and with lots and lots of nasty predictable surprises. The OFWAT approach is detailed, often muddled and in a number of cases confused. The System Operator model is part of a wider environmental agenda, and has benefits not only for water customers, but also for the river catchments.

1. The question: why reform?

What exactly is the question to which the Treasury, OFWAT and System Operator proposals are supposed to be answers? What are the various protagonists trying to achieve? What's wrong – and what's right – about the existing model based upon the Regulated Asset Base (RAB)? How do the main models of regulation – the current RAB-based, retail competition and switching, and the System Operator – meet the customers' interests?

In the case of the retail competition proposals, this is actually quite hard to fathom. Whilst it would be conventional to assume that competition is a means (one means) to the end of meeting consumers' interests in a sustainable way

over time, the idea that competition is an end has gained ground. The clues to this are not just the usual cliqued bold assertions about the general merits of competition, but the fact that the policy of rolling out retail competition is not dependent on the evidence. The Treasury requested OFWAT to do the analysis, but stated that it will go ahead anyway. Progress is not therefore conditional on the evidence. As the Treasury put it in *A better deal: boosting competition to bring down bills for families and firms*, November 2015:

> "Ofwat will provide an assessment by summer 2016 of the costs and benefits of extending retail competition to household water customers. Following this, the government will work with water companies to begin the transition to household retail competition before the end of this Parliament."

There are a host of areas in the economy where competition is replaced by internal allocations. That is why companies exist, to internalise. Perfect competition never applies. Competition is always attenuated by circumstances – costs in particular. So when after two attempts to estimate the net benefits OFWAT could only produce a possible gain to customers of £8 a year, and then only in its most optimistic (and unrealistic) scenario, this still leaves the Treasury committed to ploughing on regardless.

Competition comes in many shapes and sizes. It always has unintended consequences – indeed that is partly the point of relying on competitive processes rather than planning. Information is imperfect and incentives in competitive markets reveal new ways of doing things. But its impacts are not completely uncertain. There are lots of predictable surprises. In the case of water, where the marginal costs are very low relative to the average costs, where the system as a whole matters, and where duplication of pipelines tends to be expensive, the nature and types of competition are necessarily constrained. It is no accident that much of this industry is characterised by monopoly. It is natural. Any rational water reform agenda should therefore first sort out who might

benefit, who might lose, and whether better outcomes could be better achieved by other means.

This calls for a much more sophisticated examination of the costs and benefits of competition (and there are costs), and to identifying the different types of customers and the different types of competition. Whilst the legislative and licence framework points to the overriding objective of promoting consumer interests, which consumers matter? And: how are their interests traded off?

The PM told the Conservative Party Conference that her's was "a government for everyone". So "everyone" must be better off. That is more easily said than defined. If we take the example of electricity supply competition, it is very clear not only that everyone is not better off, but also that competition is explicitly designed to make some people better off *at the expense of others*. Loyal customers who do not switch because they are too ignorant, lazy or poor are to pay the penalty of a £200-£300 premium over the switchers. Poorer customers on re-payment meters have been especially hard hit. The point about competition, as George Orwell famously pointed out, is that there are "winners" and "losers". So much for the PM's "everyone" in electricity, and hence she also explicitly referred to the unacceptability of current practices in this industry. Despite all the hype, competition in electricity supply has not been a success, and despite it being a much more fertile territory to that of water.

A similar and potentially even more embarrassing prospect of winners and losers arises in water. OFWAT's September 2016 study of retail competition *Costs and Benefits of introducing competition to residential customers in England*, makes this point explicitly. It is the switchers who will gain, not those who don't. Yet it is not even true that in electricity supply the *net* impact is a positive for everyone – the Treasury's "boosting competition to bring down bills for families and firms" is a hollow claim. It is hard to describe an industry in which 70% of customers have received no benefit from the large-scale fall in wholesale costs over the last 4 years, and that margins on customers are at times over 5% (for selling electricity!) as a success.

It is not only about the different sorts of customers - poor, rich, and switchers - at a point in time. It is also about future customers. When water was privatised, the nationalised industry approach of pay-as-you-go (current customers paid for current capital investment) was replaced by pay-when-delivered. This was part of the broader creation of a *private sector borrowing requirement* – to get the investment off the government's books, and to make sure that current customers (and therefore current voters) did not pay now.

That accounting game is reaching its conclusion. The water companies were privatised with a green dowry so that their balance sheets could support the investment. Increased debt would be matched by increased asset creation. This was not exactly what happened: instead the companies engaged in a large scale exercise in financial engineering, gearing up to exploit the difference between the cost of debt and the cost of equity, given they were regulated against an average cost of capital. The companies understood what this split cost of capital meant, and they engaged in widespread special dividends and other mechanisms to exploit this opportunity. Now the balance sheets are largely exhausted, and we are effectively back to pay-as-you-go, but with the added handicap of paying for the debt as well, which has been used in part to pay out the share-buy backs and dividends (special and otherwise).

A huge opportunity has been wasted and future customers will pay for both the CAPEX done for their benefit and for the pay-as-you-go CAPEX for the generation after them. These future customers matter: their interests will include the investment, the quality of their supplies, and the environmental impacts. The RAB-based and the System Operator models take these into account: the Treasury's approach in the November 2015 paper is all about getting bills down *now* for the benefit of *current* customers.

Finally, there is the question of what exactly the customer base is. The users of the water and sewerage systems are much broader than those who receive water bills, and the services provided to the bill payers are wider too. Water

catchments have multiple users, most of whom are interdependent. Without proper flood defences, water and sewerage services are disrupted and sewers overflow, and houses are foul-flooded. Without proper land management and drainage, water supplies are adversely impacted. The application of fertilisers, herbicides and pesticides, and farming practices all impact on the costs. Then there are the multiple users of the waterways. What this indicates is that focussing on the narrower existing customer bases of the water companies is likely to be at best incomplete.

These issues of domain of interest and objectives are contextualised in a wider public policy context. OFWAT and the Treasury are focussed on economic efficiency. But this is not the only public objective. Indeed it is a *means* to a wider end. Before privatisation, water – and other utilities – were essential social primary goods, which citizens were entitled too whatever their circumstances, just like health and education. As a result, and quite deliberately, there were widespread cross subsidies. These persist today. But competition at the retail level will unwind these. Prices will be related to costs – *specific* customer costs. Aside from the political ramifications of unwinding these subsidies, competition can be at odds in the water case to the PM's concern for "everyone" – best interpreted as citizens rather than narrow economic consumers.

2. The options

There are three main regulatory options – the existing RAB based model, retail competition and the System Operator. The first and the third overlap, and the second undermines the first. Let us take each in turn.

(i) the existing RAB based model

When the privatisation programme started in the 1980s, the search for a regulatory model was focussed on mimicking what the designers saw as the principal features of competitive markets. In particular, it was argued that in competitive markets firms are price-takers, and with prices fixed, they would

maximise profits by minimising costs. The task of the new regulators was to periodically fix the prices for as long as monopoly persisted, but in the meantime to promote competition to gradually narrow the monopoly elements, and eventually eliminate them.

In the case of BT, the price cap was deemed to be temporary, embedded in a licence for an initial 7 year period. After that it was assumed that competition would take over, as the newly created Mercury Communications (and other entrants) would attack BT's market share.

As with many political and regulatory interventions, the temporary turned out to be more permanent that the architects had in mind, though breaking up the incumbents remained a key feature of the privatisations – either before or after the sale to the private sector. Neither BAA, not British Gas survived in their original integrated structures, the electricity industry was broken up, and railways were splintered into numerous parts.

In the case of water, the publicly owned authorities were also broken up after the simple transfer from public to private sector proved unacceptable, splitting out a number of environmental functions in their river catchments and handing these over to the newly created National Rivers Authority, later merged into the Environment Agency.

In all these privatisation cases, the functions of operating the systems of which the companies were a part was either ignored or downplayed – to return in all cases after 2010 as a serious public policy problem. We address this is a later section below.

The core monopoly elements have proved resilient in most cases, and thus the price caps have continued to need to be set. In the early days, it was assumed that regulators would face such serious price asymmetries, that it would be hopeless to try to predict the costs upon which prices would be based. So instead, in Austrian economic style, it was suggested that what really mattered

was not the particular price selected, but rather that the regulator should stick to it, so that the incentives to minimise costs were strong, and hence the regulated utilities would reveal their (efficient) costs. So whilst the original price cap might be "wrong", subsequent ones would approximate the "right" levels, and hence the efficiencies from the incentives would pass to consumers – howbeit with a lag.

This deceptively simple rule proved impossible to stick too. The price cap for the electricity distribution review had to be reopened, and the original 10 year price cap for water collapsed to 5. The idea of a fixed price contract assumed that the capital expenditure requirements could also be fixed in neat periodic chunks, and that financial conditions would be stable. It was quickly realised, as with any competitive market, that as costs change so too do prices. There was nothing remotely similar to competitive markets in 5 year fixed priced contracts.

The first water regulator, Ian Byatt, built on the experience with the 1980s privatisations, and also on his early work at the Treasury on nationalised industries accounting (the Byatt Report). He tried to make an estimate of the costs going forward, and in the process addressed two specific problems in price setting – identifying the stake of the investors' in past investments; and the cost of capital to be applied.

On the initial investment, there was an inevitable arbitrariness. Was it what investors paid for their initial shares, or the market value after they had traded for a while (in the water case 200 days)? Or was it the modern equivalent valuation of the assets themselves? Taking a market price had attractions, but there was an inevitable circularity, for the value of the shares should equal the discounted value of the future stream of dividends, and that depended on the RPI-X price cap. On the latter, this was hopeless because on this current cost basis the assets were worth about ten times the issue price, and this reflected the facts that in the public sector prices were kept low, and customers could reasonably be argued to have already paid for them out of their bills (given that CAPEX was on a pay-as-you-go basis).

This initial value had to be updated through time, for the new investments made in CAPEX, provided that these were deemed efficient. Combining the initial value and the updating created the Regulatory Asset Base (RAB), one of the great – and unintended – consequences of privatisations.

The great merit of the RAB – and why regulators should be wary of undermining this concept (as OFWAT has variously suggest in recent years) - is that it solves the time inconsistency problem endemic to utilities, and recognises the system nature of their networks. Time inconsistency arises because the average costs are (much) higher than the marginal costs, and any regulator can expropriate these sunk costs *ex post* once investments have been made, by driving prices towards marginal costs.

The RAB solves this problem very effectively: it is a commitment to honour the sunk costs. At a stroke, utilities are rendered relatively safe assets, and with a very low cost of capital. Given they are capital intensive industries and in almost all cases high levels of investment are required to create twenty first century infrastructure, this is extremely important. 1% on the cost of capital typically dwarfs operating efficiency gains - a fact few regulators are willing to acknowledge.

Creating a stable regulatory framework is a big achievement, and it should not be thrown away lightly. This is one area where the regulators' urge to meddle should be treated with great scepticism. Yet there are lots of ways in which this urge gets translated into reform proposals. The first is the attempt to exempt some customers from the costs of the system, which the RAB underpins. This leads into attempts to unbundle and allow customers to bypass the system. It also leads to encouraging some more marginal cost pricing of the networks. In the pressure to be seen to "do something" about short-term populist demands for lower bills, chipping away at the RAB is an obvious target. OFWAT finds it hard to avoid this incremental but dangerous meddling.

Instead, there are three areas where OFWAT might instead focus in building on the RAB rather than undermining it. The first is in respect of capital maintenance and depreciation. The second is in regard to the cost of capital, and the third is ensuring that the *ex ante* CAPEX decisions reflect competitive, market prices.

Capital maintenance aims to keep the value of the assets intact, either in a physical or an operational sense. Water is a case of assets-in-perpetuity – or at least over any relevant time period. This means taking both a long-term view of the maintenance of the assets, and making sure that there are no short term expedients in aid of populist bill cutting of the kind pointed to in the Treasury paper. This has been an issue that plagued the nationalised industries, especially those caught in the three year Comprehensive Spending Review cycle. It still plagues flood defences and road maintenance. Falling back into pay-as-you-go because the balance sheets are exhausted further raises the incentive to take the short term route. Allowing historic cost depreciation to slip in, and in particular the temptation to depreciate the RAB, is a particular danger that competition might bring – or even opportunist stranding.

On the cost of capital, despite OFWAT's approach at PR14, there really is no reason not to index debt, and the split cost of capital remains a better approach, especially if and when the regulators want to encourage rights issues, notably for the still publicly quoted companies.

On the CAPEX, competitive tendering for the investments of the natural monopoly system offers considerable opportunities to enhance efficiency, without requiring customers to switch. This is maximised under the System Operator model discussed below. But let us look at the retail model alternative to both the RAB-based one.

(ii) The Retail Competition model

The retail competition model has at its heart two claims: that competition allocates resources efficiently and is better than regulation; and that utilities and

network system can meet the conditions necessary for a retail competitive market to operate.

The first is normally taken for granted, yet it is important to recognise that it takes no account of distributional issues, and citizens' entitlements. Giving access to all for what some regard as basic social primary goods is no part of a competitive market's design and outcomes. Yet access of clean water, electricity, broadband and transport is required for all citizens to be able to participate in society. This is the best interpretation of the PM's "for everyone" focus and it is a principle that is accepted for education and health, and was extended to other utility services in the set up of the welfare state after the Second World War, through the cross subsidies embedded in the nationalised industries. It remains an uneasy bedfellow of the competition model, and this is especially relevant in considering the extension of competition to domestic water and sewerage supplies. It is no accident that disconnection is prohibited in water.

The second claim flies in the face of the cost structure of the water industry. It is a system, not a set of tradable parts. It requires coordination and therefore at least implicitly a System Operator (see below). The marginal costs for water and sewerage are very low, and often effectively zero. The average costs are much higher than the marginal costs, giving rise to the time inconsistency problem identified above and natural monopoly. These endemic market failures make a nonsense of the idea of the competitive model as the ideal for water and sewerage supplies.

To these obvious – yet apparently ignored – market failures there are others to add. Public health is a public good. Sewerage pollution is a crucial externality and often a public bad. Water from different sources has different chemical characteristics, which make river transfers environmentally damaging. And so on.

It is amazing that the OFWAT and the Treasury analyses of the competitive model do not start with an explicit recognition of these market failures. Unless

these are all corrected, the competitive model would lead to serious economic inefficiency, and it is therefore unsurprising that OFWAT could not find many benefits from retail competition. As noted above, it could only stretch these to £8 per year on the basis of what should be regarded as wildly optimistic assumptions and the neglect of at last some of these downside risks. Other more realistic scenarios yield negative returns. Yet even these estimates do not take account of the impact of competition on the other market failures noted above. There are good reasons to believe that it might encourage opting out of bits of the *systems* and so raise system risks and hence the cost of capital. Retail competition requires access to wholesale water, and this is as noted not homogenous. That water might be provided for the moment from the incumbents, but it is clear that the advocates of retail competition have wholesale competition in mind too.

The OFWAT analysis is therefore a very incomplete assessment of the costs of competition. Even within the costs and benefits it does consider, there are serious weaknesses. The most glaringly obvious is the inability to disconnect customers who do not or cannot pay. No competitive market can operate in such conditions: it is the essence of a market that demand is defined as the willingness and ability to pay. For a competitive market to function without the option of disconnections, the state and the other non-switching customers would have to pay. The incentive to game the market without payment would mean that competitive entrants would try to avoid any customers likely to be in this category. A lot of regulatory intervention would be required to blunt this powerful incentive.

This distortion is reinforced by how switching might work. As in electricity (where the gains are claimed by the CMA to be often over £200) switchers tend to be a minority. Most do not avail themselves of these opportunities, and for good reason. In a world of multiple tariffs, serious incentives to missell and where consumers need to track and speculate on the options, most electricity customers (around 70%) stick with the devil they know. Even elementary and basic conditions may not be met – for instance access to decent broadband in

some areas. Electricity provides other salutary lessons. As the CMA has condoned, the switching leads to the exploitation of loyal customers in favour of the switchers. The former lose, the latter gain. “Everyone” is not a winner.

In a near zero marginal cost world, commodity competition gives way to service competition. It is the network and the capacity to which consumers want access. The core of a competitor’s offer is that it can do the billing, metering and debt collection better than others – for the network is part of the system to which all have equal access. It is a very small part of the full value chain.

No doubt some companies can read a meter better than others. Yet even here water competition runs into problems. Many customers are not metered. Indeed it is probably not economic to extend the metering to all. In many areas there is no commodity scarcity, and use of less water may even leave sewerage more concentrated. For the metered customers, as with electricity metering, there is as yet little or no integration with broadband hubs. Indeed remarkably there is little coordination between the utilities at all. This may change: the broadband hub may in effect become the metering point for all the household utilities, and these can be bundled, and hence a range of service costs can be reduced.

These are services that other entrants could provide, from the communications companies to new utility service businesses. *But this does not require commodity competition and switching*. Rather it is trivial to require the incumbent water companies to put these services out to tender as part of the regulation of the networks. Note too that metering has its own system public good characteristics: at points of stress, my consumption of water may effect yours, and the meters offer considerable benefit to the system to coordinate and manage demand, for the benefit of the other customers. This is another reason why metering should remain a system activity. The water industry should learn from the fundamental mistake in the electricity industry of putting metering in supply and not distribution – and hence seriously damaging the opportunities for demand side response management.

There are other problems with the OFWAT analysis, which undermine even the claimed £8 net benefits in the most optimistic scenario. OFWAT uses the Treasury discount rate of 3.5%. Whilst this might be right for society as a whole, it has no relevance at all for the individual consumers. Why would anyone think the social discount rate equals the private discount rate? Evidence from the failed Green Deal points to very different (higher) discount rates, as does the behaviours in the electricity supply market. A higher discount rate reduces the net present values. Yet OFWAT claim that the £8 is independent of the changes in the NPVs.

There is therefore no good reason for thinking the retail competitive model will improve the commodity efficiency of the water industry. This is however only one part of the problems with this competition model. Whilst the end point can be described, what also matters is how to get from here to there, and what the costs and benefits of the transition might be. The starting point is one of widespread cross subsidies, and conventional monopoly regulation. The transition requires the unbundling of these cross subsidies and the creation of a whole new raft of regulation for competition. The former has obvious distributional consequences: unwinding cross subsidies will create losers as well as gainers (the switchers). There will be an income effect as well as a substitution effect. The politics of this are obvious: losers shout louder than gainers, and in this case they can simply not pay without the consequence of disconnection. The latter means that the transition to competition leads to an *increase* in regulation. Access regulation, the deployment of regulatory handicaps, dealing with tariffs and misselling and complaints are all very familiar in electricity supply.

It is hard to avoid the conclusion that the case for retail competition is not made. Indeed it will probably create higher costs, more regulation, and little benefit except to a small group of switchers who will gain at the expense of the rest. Only ideology can lead to the Treasury's enthusiasm to push on regardless of the evidence from OFWAT – or indeed the evidence more generally.

None of this means that competition does not have a significant role to play in water. But it is a different sort of competition – competition to provide the services to the System Operator – to which we now turn.

(iii) The System Operator model

The System Operator model recognises two key features: that water and sewerage services are provided by systems and not by the sum of the individual assets considered each in isolation; and that the operation of the system is *the* core natural monopoly.

These two characteristics point to the nature of competitive markets. They do not happen spontaneously, but always within the context of market institutions. For water, the type of competition that is most efficient is for the provision of the assets and services, coordinated and controls by a System Operator. Competition requires a core element of control.

In the current structures, the System Operator is embedded within the water companies and the EA. It is not defined in a clear and distinct way, and as a result the management of the catchments is often muddled and confused.

The domain of the System Operator is the domain of the system. For water this includes elements of land management, raw water resources, flood defences as well as the treatment and supply of clean water and the disposal of sewerage. This is much wider than the current structure, and the regulatory reach of either OFWAT or the EA.

As a result, the catchments are unlikely to be efficiently run in an integrated way. On the contrary, there is little or no coordination of flood defences, the management of the CAP and land use, and the conventional activities of water companies.

The case for creating explicit river Catchment System Operators, and the associated catchment system plans is set out in my paper on *Catchment management, abstraction and flooding: the case for a catchment system operator and coordinated competition* (Helm, 2015[1]). In its ideal form, it requires formal restructuring of the water companies, the EA and the ways in which agricultural policy and subsidies are administered. This will in due course require a new Water Act.

Whether this can be achieved in time for PR19 is questionable, so there is a need to consider how evolutionary steps can be achieved, and how the PR19 outcome can provide the context in 2020-2025 to make the transition to a more efficient System Operator model.

Fortunately, there is an emerging framework to set the System Operator model within. This is the 25 year plan to enhance the natural environment. It is a manifesto commitment for the government (and it was in the manifestos for Labour and the Liberal Democrats at the last election too). The plan is being developed through series of "pioneers", one of which is the river catchments of Cumbria.

Taking each catchment in turn, the requirements are for natural capital accounts to cover all the main assets and liabilities, the identification of renewable natural capital at risk of falling below critical thresholds, and the identification of those improvements in natural capital which provided the greatest net benefits. Compensation is also required for any natural capital that will be damaged by developments, which are projected to be many and various.

A subset of these requirements falls within the current ambit of the water companies. OFWAT could, as part of the drawing up of business plans for PR19, require each company to identify its System Operator functions (as currently in National Grid's system operator). In the absence of legislation, this can be done

[1] Catchment management, abstraction and flooding: the case for a catchment system operator and coordinated competition - http://www.dieterhelm.co.uk/natural-capital/water/water-catchment/

as part of the regulatory guidelines and the informational demands that OFWAT requires as part of the periodic review process. Each water company would then be required to create natural capital accounts alongside its physical and other capital, and incorporate these it to its regulatory balance sheet.

The EA could be required to carry out a similar exercise for its flood defence activities, and a condition for agricultural subsidies could be a similar catchment exercise for farmland (either by individual farmers as part of their claims for subsidies, or by DEFRA).

The System Operator model lends itself to both building on the RAB model and to increasing competition. The floods defence assets are part of the full set of river catchment assets, and therefore could enter into the catchment balance sheet as part of the 25-year plan. This in turn dramatically improves the flood defence financial and regulatory framework. Flood RAB assets provide a basis for a long-term development and financing of the catchment systems. By taking the water model approach to these assets, they enter a balance sheet and can be financed by borrowing, with the new assets set against the liabilities. They can be treated as assets-in-perpetuity and be supported by capital maintenance rather than depreciation. It then matters less whether they are private or public assets. As with water more generally, control remains public, whilst delivery can be private. Such a RAB based model for flood defence was considered in the first National Infrastructure Plan. Even within the current funding arrangements, this would be markedly more efficient.

The competitive opportunities in the System Operator model are considerable. The various activities within the catchment can be opened up to competitive tender, bringing cost efficiencies and innovations. Flood asset investments, flood service operations, environmental services, land water management, the use of chemicals and fertilisers and a variety of stewardship schemes can be opened up to bidding to provide the various catchment public goods.

The System Operator model also opens up many of the current activities of the water companies to a competitive bidding process. Thus not only can the water companies bid to carry out other catchment activities, but new players can tender for some of the current functions. This is possible because the System Operator remains in control, and indeed would in this model have the main licence responsibilities for ensuring the functions are delivered.

Consider the contrast with the retail competition model. Retail competition is all about competition to do the meter reading and debt collection. It is a very small part of the value chain, and under the System Operator model, entrants (including broadband hubs) can bid for the provision of the services to the System Operator. The System Operator model crucially does not require switching – and all the costs that go with this identified above. Contrast these small possible gains from retail competition with the bigger prize of getting competitive bidding into the core functions of the water companies. The scale is an order of magnitude bigger.

The result is to simplify the regulatory functions too. In the System Operator model, the job of the regulator is to oversee the competitive bidding processes. Crucially the need to scrutinise and validate individual costs is markedly reduced. These are now whatever the market competitive bidding process determines. This, rather than trying to second-guess the efficiency frontiers (and employ lots of consultants) is where OFWAT should concentrate its efforts in PR19.

It remains to decide where the catchment RAB would be located. Some years ago, I proposed that RABs should be tradable: in other words they could be separated for investors and be a tradable financial instrument *Infrastructure investment, the cost of capital, and regulation: an assessment* (Helm, 2009[2]) and in *Tradable RABS and the split cost of capital,(*Helm, 2008[3]*).* Currently they are supported by

[2] Infrastructure investment, the cost of capital, and regulation: an assessment. Oxford Review of Economic Policy, Volume 25, Number 3, 2009, pp.307–326

[3] Tradeable RABs and the split cost of capital - http://www.dieterhelm.co.uk/regulation/regulation/tradeable-rabs/

debt and that debt is owned by pension and infrastructure funds as well as specific investors.

The tradable RAB model is challenged by some who argue that RABs have equity as well as debt risk. This is because it is argued that the RAB is at risk if the functions are not properly provided, and the licence is revoked and a special administrator is brought in. As I have argued in response in *Special administration, financing functions and utility regulation (*Helm. 2008[4]), the special administrator function does not undermine the RAB. In the event of failure to fulfil the licence functions, the licence is sold on to another company, and as part of the new company the accounts include the RAB. What the company loses is the cost of remedying the faults, and this is an equity and not a RAB cost.

3. PR19 – what should be done?

There is a good case for regulatory reform in water, and there is a good case for competition. But there is also a bad case, and this arises from a misdiagnosis of the problem to which the reforms are supposed to be answers, and in choosing a model of competition which simply does not fit either the objectives (including the wider concerns about citizens' entitlements and fairness), and the underlying system nature of the industry and its cost structures.

In the name of the good intentions of the reformers, a lot of damage can be done, and there can be nasty predictable surprises. The first and most important conclusion is that OFWAT and the Government should do nothing to undermine the RABs, and they should abandon the simplistic retail competition model (and not simply kick it into the long grass). Even on the basis of the most optimistic scenario in the OFWAT analysis, the possibility of £8 per annum saving for some is not a credible prize to motivate much change when £200-300 does not work in electricity for the bulk of the customers.

[4] Special administration, financing functions and utility regulation - http://www.dieterhelm.co.uk/regulation/regulation/special-administration/

Rather than go down the Treasury's path, competition can be significantly increased within the water industry by adopting the System Operator model, thereby opening up not just the costs of the water companies to market forces, but also bringing in flood defence and other catchment activities. The gains from a catchment based approach to water and sewerage and flooding and agricultural land use dwarf those of the possible £8 per annum from retail competition. The broadband hub opportunities to bring together metering, billing and margins are better maximised in this model too, instead of going down the tortuous and expensive route of trying to get customers to switch.

Better still, the System Operator model preserves the RAB, and thereby keeps down the cost of capital. Indeed it extends it to include other catchment assets. The RABs themselves can be traded and quoted, seeking their natural home alongside index-linked gilts in pension and other comparative portfolios.

These reforms build on what exists, keep the best bits in place, take no risks with the system integrity, improve the environmental options and in consequence have the best chance of meeting current and future customer interests. This is the sort of competition that should not only work, but is also targeted at the right places. They would together provide a sound and stable basis for the next 25 years, following on and building upon the lessons of the first 25 years after privatisation.