

# **The Draft Water Bill—a critique**

**Dieter Helm<sup>1</sup>**

**7<sup>th</sup> September 2012**

## **1. Introduction**

The Draft Water Bill has been published, following on from the Water White Paper in 2011, which in turn followed on from the Cave and Walker Reviews, and the development of arguments for a competitive approach and the unbundling and disaggregation of the regulatory formula of the water companies by the regulatory body OFWAT.

There have been other contributions that have fed into the process leading up to the Draft Water Bill. These include responses to the drought, floods, considerations in respect of valuing nature and the National Ecosystem Assessment (NEA), and concerns about the water bills in particular areas, such as the South West. Large project proposals have also featured, notably the Thames Tideway, but also plans for large-scale regional water pipelines.

Such a mix of concerns provides the backdrop to the focus of the Draft Bill, and this critique starts off by considering what the aims and objectives of the proposed legislation are, before turning to its central contention that competition is the primary answer to them. The different kinds of competition will be considered, alongside the merits of the regulated asset base (RAB) model and the critical role of the cost of capital.

---

<sup>1</sup> The analysis and arguments in this paper are solely those of the author. All errors are unfortunately mine.

It will be argued that the Draft Bill:

- Does not address the core issues left over from privatisation, including abstraction, the basis for charging, floods and environmental regulation.
- Does not address the new investment agenda.
- Has the potential to raise the cost of capital by potentially undermining the regulated asset base of the industry.

The form of competition promoted by the Draft Bill relies on a significant increase in regulatory discretion, and that discretion may be used to weaken the regulatory commitment to the underlying assets, by the way in which the system costs are allocated. The unintended consequences of what is superficially attractive may turn out to be serious. The paper concludes by suggesting a better way forward.

## **2. What is the question to which the Draft Water Bill is supposed to be the answer?**

More than two decades after the water industry was privatised is a good point to consider whether the water legal and regulatory framework is fit for purpose. In order to merit new legislation, there has to be sufficient reason for thinking the current arrangements are sub-optimal, and further, that the proposed changes to the law are likely to render significant benefits—in excess of the claimed detriments. Since the Draft Bill does not provide a credible analysis of the costs and expected benefits of the proposed legislation (and in particular no credible estimate of the impact on the cost of capital), it is necessary to work through what a proper analysis might conclude.

The starting point is the claimed “problems” with the existing structures. Contrary to the main thrust of the Draft Bill, the White Paper and much other analysis suggests that these problems lie with the needs to cope better with droughts and floods, to prepare for climate change and to cope with growing populations. As the Secretary of State highlighted in the White Paper, “only a

quarter of our water bodies are fully functioning ecosystems” and “in the coming years, the combined effects of climate change and a growing population are likely to put increasing pressure on water quality; and on our water supplies”. Behind these concerns is the need to plan, coordinate and integrate on a regional basis—the river catchment approach.

These problems are not new, though their form and intensity may be changing. The water industry has developed in the twentieth century on a local and then regional basis, designed around integrated monopolies. Prior to privatisation, the regional water companies integrated both regulatory and production activities, in cooperation with local government. Though flood defences remained in significant measure separate, they were nevertheless taken into account within the river basin catchment areas.

The question to which privatisation was the answer was how to provide finance for the necessary investment, free from the constraints of short term cash-based government funding, which had been organized on a pay-as-you-go basis. It was also how to improve the efficiency with which operations (OPEX) and the capital expenditure (CAPEX) were delivered. These problems had become acute in part because legislation—in the main from Europe—mandated a steep rise in investment.

To make privatisation work, a number of steps were taken which have led to longer term difficulties that the current government is now struggling to cope with. The first was the failure to address the abstraction rights and hence control over the management of the core water resources. The 1963 legislation, in effect, granted these rights in perpetuity (or at least until enough money was offered to buy them out). Reforming the abstraction regime remains a key objective identified in the White Paper—one to which, as we shall see, the Draft Water Bill adds nothing of substance. Rather reform is promised *later*, with its impacts in the *next* decade.

The second failure was the ways in which some environmental activities were split off from the regional companies, and placed in the parallel National Rivers Authority (NRA), blurring the responsibilities for catchment management. The public water boards had contained both activities, and these would have been privatised jointly in the original proposals developed by Nicholas Ridley. The subsequent rethink created a large scale NRA, with around 6000 employees, which in turn merged into the even larger Environment Agency after privatisation.

Whilst the separation of regulation from production was sound, in fact the NRA had lots of production activities too, including but not limited to flood defence. It is a blurred distinction that remains a problem today, but on which the Draft Water Bill is largely silent.

A third failure stemmed from the second. Economic and environmental regulations were split, and in practice what happened was a battle between OFWAT and the NRA (and subsequently OFWAT and the EA), a battle that OFWAT tended to win. Whereas the privatisation legislation had assumed that the NRA would agree the environmental quality with the government, and then OFWAT's job was the technical one, to make sure this quality was delivered efficiently, in practice OFWAT invented the "affordability" criterion and ran rings around the environmental regulators. Whilst affordability matters greatly, the integration of considerations of the ability to pay, particularly for poorer customers, into the analysis of environmental requirements directly was replaced by a battle between competing regulatory institutions. It is therefore not surprising that so much lacks "fully functioning ecosystems".

A fourth failure arose because of the way water and sewerage bills were calculated. Water had been assumed to be too cheap to measure—as indeed, for most of the time, it largely is—and hence billing under the public monopolies could be on the basis of ability to pay. The result has been the linking of water bills to forms of local taxation, on the basis of rateable value and now Council Tax. For as long as water was in monopoly supply, this distributionalist approach

could be taken, and indeed since the marginal costs are close to zero most of the time, the recovery of fixed costs was a matter of choice.

So great had been the taxation basis that cross subsidies existed not only within water board regions, but between them too. The formal separation out of the regional companies meant that as new investment requirements varied, so too would the bills. Thus in the South West, with some 30% of England and Wales' bathing beaches, the effects were dramatic, so that bills rose fastest for some of the poorest customers in Britain.

These four major failings in the privatised structures are the starting point for any reform. The key questions for the Draft Water Bill are therefore:

- Does it address the abstraction rights problem, so that in the face of greater water scarcity and the potential for droughts, water can be efficiently priced and allocated?
- Does it integrate environmental and economic regulation?
- Does it integrate flood defences and river basin and catchment management?
- Does it provide a basis for moving away from a taxation basis for bills, whilst recognizing the consequences for water poverty and the unwinding of cross subsidies on a regional and national basis?

The answer to all four questions is “no”.

To these failures carried over from privatisation, there are the “new” problems that now confront the industry. The first and foremost is the development of new water resources, and the better management of existing ones. In the South East, in particular, the coincidence of climate change and rising population means that some combination of demand management (through, for example, metering and incentives to store water at the household and company level, and trickle flow), new reservoirs and desalination will be required. In some cases, the most efficient solution may be to pipe water from the midlands (Severn Trent) to

Thames, Anglian and the smaller south east companies, through greater network integration. It is surprising that so little attention has been paid to analyzing these options and their relative costs.

The second “new” problem is storm overflows and sewerage and its associated pollution. At privatisation, quite a lot of raw sewerage was still dumped at sea—including the sewerage barges operating out of London into the North Sea, as well as direct disposal at the coast. European legislation put a brake on this, and indeed it was partly the level of investment required to meet the new European legislation that prompted the Treasury’s interest in privatisation and private sector balance sheets.

These problems have not been fully resolved some twenty years later. For London, it is proposed that there should be a new interceptor sewer pipeline collecting along the Thames and transporting to the Beckton Sewerage Works—the Thames Tideway. Elsewhere there remain major problems with bathing beaches and if climate change brings more variance in rainfall (and more floods) then additional major investment will be required.

The floods issue raises a further investment requirement—analogueous to the sewerage one at privatisation. Large scale investment in flood defences will be required, both to cope with the consequences in river catchments and also to deal with rising sea levels and more storms with greater weather variance that climate change is predicted to bring.

The third “new” problem is more long term and in fact an opportunity. Information technology has transformed communications, but as yet has had limited impacts on the energy, transport and water networks. The scope for an active demand side of the market is now emerging, and this will be facilitated over time by smart metering technologies. These new opportunities are being applied to the energy sector, but whilst smart electricity meters are being rolled out across the housing stock, amazingly there is virtually no coordination between energy and water, and hence duplication rather than coordination will

both raise costs and slow down the application of an active demand side to water. There is perhaps less urgency with water, but given one utility is carrying out a nationwide programme it makes sense to use the opportunity for water to piggy back on this enormous roll out. It also provides for value-based charging and a move away from the tax-based approach. As with the other “new” problems, what is required is large scale investment.

Taken together, these “new” problems provide a further test for the Draft Bill: does it sufficiently facilitate another large scale investment programme in the next couple of decades, and whether it does this at the minimum cost of capital. The answer again is “no”. Rather the Draft Bill focusses on a particular form of competition, and in some areas, the Draft Bill will probably have a negative impact on investment and the core agenda for water industry reform outlined above.

### **3. To what extent is “competition” the answer to these questions?**

It has become conventional wisdom to assert that competition is always and everywhere a “good thing”. More competition is better than less competition, and monopoly is a “bad thing”—rather like the mantra in George Orwell’s *Animal Farm*: “four legs good, two legs bad”. It is indeed remarkable how crude the competition argument has become, and how there is virtually no attempt to either sort out the *different kinds of competition* or to spell out the transmission mechanisms from “more competition” to “a better outcome”. To question “more competition” in almost any context is to put oneself beyond the pale of conventional dogma.

The White Paper and the Draft Water Bill preamble repeat this dogma, without any serious engagement at a particularly ironic moment—when much of the competition approach upon which OFWAT relies is currently being slowly abandoned in the electricity industry with Energy Market Reform. Whereas electricity is a valuable commodity, as we shall see, water is rather different,

considered from a commodity perspective. In electricity, the motive for the new central buyer model is the need for investment to ensure security of supply, the need to encourage low carbon technologies and the cost of capital. The parallel with water is fairly obvious—and the irony deepens when OFWAT refers to the electricity industry as a template for water.

Applied to the water industry, these sorts of crude claims about competition have become a barrier to rational argument and debate—and a barrier to the role that markets and competition can usefully play, not least in competitive tendering. Competition is seen too often as an *end*, not one possible *means* to a series of ends. Unfortunately the Draft Bill merely reinforces this trend—yet as we shall see, whilst some forms of competition can reduce costs, others can inadvertently raise the cost of capital (and hence have detriments as well as benefits). The form and sequencing of competition matters greatly. In the Cave Report, the effects are aggregated into a crude estimate of the claimed gains from the full set of competition proposals—but without separating out the various parts, and in particular neglecting to engage in any serious analysis of the impacts on the cost of capital. Such crude estimates—over several decades—are highly questionable and at best naïve. Yet it is also remarkable that the claimed gains (around £2 billion) represent about 1% of the total projected expenditure over the period. A small change in the cost of capital would, as we shall discuss below, swamp these gains, even if they were to materialize.

There are many ways to increase competition in the water industry, but the Draft Bill considers only two main ones—bulk water supplies and business choice of supplier—so-called “retail competition”. Left out is any serious consideration of increasing competition *for* monopoly, and in particular increasing the role of competitive tendering for all and any services provided through the water companies. (Paragraph 20 in the Introduction to the Draft Bill lists out the competition proposals). These latter options may have much more potential to bear down on costs, without the offsetting detriments discussed below.



In order for these various forms of competition promoted in the Draft Bill to develop, very considerable discretion is provided to OFWAT to develop a “flexible upstream pricing regime”, “establish market codes” and “reform connection charges”. In other words, the Draft Bill is *enabling* legislation, giving OFWAT the *discretion* to develop its *preferred* model. This discretion matters—it is in this detail that the impact on the current water companies will be felt. Amazingly, it is claimed that these new regulatory initiatives will reduce the regulatory burden. A cursory glance at the electricity and gas industries will reveal that regulation *of* monopoly is trivial in comparison with regulation *for* competition.

Once it is accepted that competition is a means, not an end, the first question to consider is which bits of the water industry are amenable to competitive bidding. This turns very much on the *system* nature of water and sewerage, and the extent to which there is natural monopoly, supported by a natural monopoly asset base.

At first glance, the water and sewerage businesses indeed look very much like natural monopolies. They are *systems*, which require *system coordination*. Put another way, disaggregating systems looks like a very bad—and expensive—idea. River basins are exactly that—they are catchments where changes in one bit of the system impacts on other bits.

The next point is related: as with all natural monopolies *the marginal costs tend to be below the average costs, and the average cost curve falls through the range of demand*. In the water case the marginal cost of water is mostly close to zero, reflecting variable costs like power. Contrary to a number of statements from OFWAT and in the preamble to the Draft Bill, water is not like electricity and gas, where the marginal costs are not remotely close to zero, and indeed jump around a lot. The implication is very obvious: *water does not lend itself to commodity competition*. Of all the core utilities, it is the least amenable to commodity competition, and it is therefore not surprising that competition has made little headway, and that there would have to be artificial regulatory handicaps placed

upon incumbents to make it work—which is where OFWAT’s discretion would come in.

It is true that the marginal cost is not *always* close to zero. There are points of stress and scarcity—droughts—and there are points where the costs are strongly negative—floods. But it is extremely important to bear in mind that the introduction of commodity-based competition into this sort of context is basically a *peaking commodity model*. Yet everything that has been learned from recent droughts and floods suggests that it is at precisely these points that command-and-control is best deployed. Floods and droughts are not best coped with through peaking prices—on the contrary, the full powers of the state and the authorities tend to be needed. Peak pricing may have a significant role to play—but commodity competition is not a necessary condition to make it happen.

Avoiding droughts and floods (or at least managing the consequences) requires a focus on the supply of water and its rapid disposal through drains and rivers. Let’s look at supply. This is largely about abstraction and abstraction rights. There can be little doubt that the current ownership and control of the property rights is detrimental to the efficient management of the water supply. The Cave Report and the White Paper recognize this. Furthermore, to the extent that anyone thinks water commodity competition is desirable, access to abstraction rights would seem like not just a good idea, but also actually a *necessary* condition. Does the Draft Water Bill address this question? The answer is an emphatic “no”. Why? Because it would probably require buying out the abstraction rights as embedded and protected in the 1963 Act. And it is a further—distinct—step to make such rights tradable. This is fraught with problems since water abstraction is location specific, and it is not surprising that governments’ attempts since the late 1980s to develop a viable abstraction rights trading regime have so far failed to come up with a solution.

This leaves commodity competition at the bulk supply level largely in the hands of the owners of rights. There is no competitive access. So wholesale competition

comes down to the ability of the *in situ* rights owners to sell any surpluses to other water companies, and to build the pipelines to do so. This may or may not be a good idea—but the important point here is that *they can do this now anyway*, and it is not clear why they need any further legal powers to do so. Indeed, it could be argued that the regulator should ensure at periodic reviews that water companies have exhausted all the possible options for bulk supplies, including provision by neighbours. Why haven't these opportunities been exploited so far by profit-seeking water companies, subject to regulatory oversight? What are the barriers? Why has there been regulatory failure? Or perhaps these opportunities are not what they seem, and perhaps regional catchment supply and local reservoirs might be better? It does not take legislation to solve this obvious problem—one which is recognized in the White Paper.

The Draft Bill comes in is by facilitating business customers to turn to other suppliers—to get someone other than the incumbent monopoly to supply them—using the incumbents pipes—or to develop their own pipes and supplies. Given the marginal cost is mostly close to zero, this is really all about the costs of access to the incumbents' pipes. It is what the access codes and charging principles are all about. What should the cost of using a specific pipe be? One argument is that it is only the cost of *that* pipe, and it should be the *marginal* cost. This is exactly what business customers will argue for. But is it right? Water pipes fit into a system, and disaggregating a system is likely to raise costs—to the rest of the customers. Water resources go into a system, and if one (business) customer claims only to have to pay the cost of large pipes, other customers (households) will suffer the additional costs passed onto them downstream. The water pipe access charges are really a giant cross subsidy regime—reducing one customer's prices does not change the system total costs that someone else now has to bear.

The Draft Bill does not prescribe how this allocation of costs is to be effected—it enables OFWAT to do this, and hence the outcome depends upon OFWAT's underlying "agenda". The removal of the cost principle, whilst delegating what it is to be replaced by to OFWAT adds to these concerns. Ultimately the allocation

of costs is a matter for public policy not regulatory discretion. When this is coupled with the ambiguity as to whether OFWAT might “move on” from a RAB-based regulatory framework after 2015, it is to be expected that this discretion at the heart of the Draft Bill will have potentially serious detriments.

Worse still is the idea that bits of the system can “defect” from the networks, running their own supplies. To date, there have always been parts of the water and sewerage networks that are remote and have found it cheaper to organize their own supplies rather than contribute to the network costs. However a major achievement over the twentieth century has been to extend mains water and sewerage services to most of the population. What “inset agreements” and related “competition measures” try to do is to turn back the clock, breaking off bits of the networks. As with the costly mistakes being made in the North Sea with separate offshore grid companies, the results are detrimental to the rest of the system. The preamble to the Draft Bill notes that there have been very few successful “inset agreements” under the existing arrangements. But instead of questioning whether this might reflect underlying costs, it is assumed that more insets must be necessarily a “good thing”—that competition is an end rather than a means. Rather than learn from the mistakes in electricity, the Draft Bill proposes to perpetuate them.

These considerations suggest that competition is likely to be of less importance—in the sense of less economically efficient—in water than in other network utilities, where there is a valuable commodity to compete over and where there are multiple sources of bulk supply—like power stations and gas fields—and that competition for the provision of services might best be initially focused on competition *within* the existing framework, rather than trying to disaggregate the network.

What business supply competition is really all about is enabling business to make a smaller contribution to the system network costs. This will yield one of two consequences: either domestic customers will pay correspondingly more; or the water companies’ revenues will fall. It is not unreasonable to assume both

effects: and hence for investors to question whether the revenues underlying their investments may be called into question by the exercise of the discretion based upon the enabling powers provided in the Draft Bill to OFWAT. This in turn will probably raise domestic customers' bills too. OFWAT has made little secret of the desire to eventually in the medium term "go all the way" with competition, and whilst OFWAT (and indeed Cave) might set out timetables far into the future, and the government may have leant on OFWAT to moderate its language (notably in the 2011 OFWAT discussion paper on "Financiability and financing the asset base"), investors will note that in other cases governments and regulators then stepped in to speed up the process.

#### **4. Competition, the RAB, and the cost of capital**

So far the argument has been about whether and to what extent competition can be expected to improve the efficiency of the water industry—how much of a "good thing" it might be. The analysis above suggests that its scope is likely to be limited, and to focus largely on the pricing of access to the networks. If commodity competition is what the Draft Bill is trying to promote, then it should start with the abstraction rights, and turn water sources into a competitive market analogous to power stations and gas fields. It does not do this. But even this would have limited effect since the marginal costs of the commodity are so often close to zero. There is just not much of a valuable commodity to supply most of the time.

Supply competition requires a further step beyond reform of abstraction rights. It requires the industry to be unbundled and again the electricity and gas industries are (mistakenly) used—notably by OFWAT—as an example. In water and sewerage, it is not clear what is to be unbundled. In theory, it should only be the commodity—everything else is part of the system—and the "use of system charge" applied in electricity should apply to any users of the water system. It is immediately apparent—given the enormous gulf between marginal and average costs—that the use of system charges should be almost *all* the total cost of supply and network provision, most of the time.

In theory then, unbundling has little to unbundle. However this is not how OFWAT sees the situation: its version of unbundling has several parts—and it is a continuing agenda. First, it wants to unbundle retail from wholesale, and OFWAT produces neat diagrams to show the separate parts with separate price caps. Yet again, retail is comparatively trivial—it has few, if any, assets and its total costs relative to those of the system are trivial too. So it is not really serious unbundling.

Here is where the competition agenda becomes anything but costless. OFWAT has also opened up another agenda that is intimately related to unbundling and network cost allocation. It has questioned whether the Regulated Asset Base (RAB) is an appropriate way to build up the network costs *in the future* and is careful to avoid concrete commitments to the treatment of all assets after 2015 as wholly within the RAB framework. Under political and other pressures it has since backtracked and made somewhat reassuring statements about its post-2015 treatment of the RAB. Were it to follow its earlier inclinations, this would be a much more dangerous path. It is notable that the White Paper goes out of its way to distance itself from this path, and it is worth quoting in full:

“We do not want to take risks with a successful model given the challenges we face in building the resilience of the sector. The water and sewerage sector has proved attractive to investors looking for reliable, low risk returns, with its stable regulatory system a key factor in building confidence...We want to preserve the features of the current regime which have proved so attractive to investors... Ensuring the sector remains an attractive prospect for investors will enable water companies to deliver continued investment at costs that customers will find acceptable”. (para 5.25).

Why does the White Paper need to state this? Why does it spend more words on this cautionary note than on the arguments for “reforming the market for business customers”? The answer is well known: because at the time, OFWAT’s

statements caused sufficient concern amongst investors that the RAB might be under threat and this is where the enabling powers and discretion come in. As we have seen earlier in the paper, the “new” agenda items for the industry are all about investment—and, as we shall see, the cost of capital is a key variable. So just at the point where investor expectations matter most, and where stability matters, and in a context in which the existing framework is considered to be stable, along comes the Draft Bill to start a process of significant change. Why?

Whilst there remain problems inherited from privatisations as identified above, there have been notable successes. It has kept the cost of capital low, and a core reason for this is the RAB and its application at successive periodic reviews. Investors understand how it works, and have come to regard it as the cornerstone to the financing of the industry. The RAB is the mechanism to solve a fundamental economic problem that arises from the enormous gap between marginal and average costs—*time inconsistency*. The problem confronting an investor in a water or sewerage asset is that the capital costs might not be recovered—for once the asset is built, it will be economic to operate as long as the marginal costs are covered and some contribution is made to the fixed costs. In other words, the investors might be promised that they can recover their capital costs *ex ante*, but then be driven towards marginal costs *ex post*. This problem is so pervasive in networks that it led to the nationalization of most of the networks in the twentieth century across the utilities. In water, it is especially important, since the marginal costs are so low most of the time, as noted above.

The RAB is a mechanism to solve this problem. Once a new asset has been built, provided the costs were efficient; it is “bought” by the RAB and then provided with a return through the duty on the regulator to ensure that the functions are financed. Investors know they will not be expropriated, and have an independent regulator with statutory duties to protect them.

So successful has this mechanism been that the cost of capital in the water industry has been very low, it has little difficulty in raising new finance, and a

host of international investors have bought into the model. That is what the White Paper recognizes in the quotation above. Once account is taken of the internalization of equity risk in the public sector, the cost of capital to the water industry rivals that of governments. No wonder there was such concern in government about the approach OFWAT appeared to be taking.

This stability and low cost of capital is a remarkable achievement, and provides an immense opportunity to address the “new” items on the water industry agenda identified above. Indeed so successful is the RAB-based model in water that it is considered a model of choice for other sectors. (The Prime Minister referred to it explicitly in considering how to take roads forward in a speech on infrastructure in February 2012). It is also internationally regarded as “best in class”. No other country offers such stability and so credible a solution to time inconsistency outside public ownership.

Does “the competition” as proposed in the Draft Water Bill undermine the RAB? The explanatory notes attached to the Draft Bill provide some reassurance, but close inspection suggests that investors should worry about the implementation. OFWAT has made little secret of its preferred regulatory reform path, and the powers to change licences enable it to move along this chosen path. It will have the discretion to set “codes” and “access pricing” regimes. This is where the economic revenues matter—where the average costs get recovered. It is impossible to conclude other than that the RAB is rendered less certain as a result. Although OFWAT goes out of its way to commit to the pre-2015 RAB (and has, under pressure, given some reassurance after 2015), in practice creating a two-tier approach after 2015 in turn creates added risks to *both* the pre- and post-2015 assets. A neat separation, even if desirable (which it is not) would, in practice, probably break down.

It would be a mistake to rely solely on the courts to protect investors via the duty to finance functions, important though this is. Regulators have already reinterpreted “function” and “finance” as “efficient functions” and “efficient finance” and these are open to all sorts of further interpretations, including the



argument that they are the outcomes that the Draft Bill's and OFWAT's competition models might produce.

The priority is the guarantee to the revenue stream that underpins the RAB. If, for example, customers do not—or are not required to—contribute sufficient monies, then the return on the RAB is not available. This has occurred for example in the case of BAA, and this is where the pre-and post-2015 separation may break down.

In the water case, it might be argued that there will always be a network set of costs—related to the unbundled network companies OFWAT has in mind—that can be recovered through system user charges. However this only holds if those network costs are enforced on all users and there is no element of discounting or less than average cost charging—or indeed provided the networks are maintained intact. In other words, it depends upon what OFWAT does with its enabling powers—how the regulatory discretion is used.

But why should investors believe that there would be such a guarantee? Why would they not anticipate a gradual peeling back of the RAB revenues? Looking across to electricity distribution—where the unbundling is perhaps the clearest—the meters have been *deliberately* stranded. In the case of water, might not some of the very large pipes at one end, and the local networks at the other, get gradually split off? Might not other assets get stranded? Would they then no longer be regarded as functions to be financed, since once stranded they could be regarded as “inefficient”? Is this not the model that OFWAT might pursue? This is where access prices and access codes come in. Chipping away at the network charges is an obvious way in which artificial “competition” might be advanced, as business users seek to move towards marginal rather than average costs for a disaggregated set of pipes. It will be in their interests to lobby hard, and their regulatory strategy may become a critical part of their corporate strategy.

The actions and statements by OFWAT and the Draft Bill provide little comfort. This matters because it is the *expected* risk—not the actual risk—that shapes the

behavior of capital markets and hence determines the cost of capital. Looking at the new issues identified above, all require lots of investment, and all are on the margins of the system. They are therefore typically “exposed” investments and for these the cost of capital is likely to be particularly sensitive to perceived regulatory risk. New reservoirs, the interceptor sewer, new flood defences and new meters are all in this “risky” category. It is indeed ironic that just as electricity generators are seeking the protection of guaranteed fixed price contracts, OFWAT may be moving in the opposite direction.

All of this impacts on the cost of capital, and for a capital-intensive industry, the cost of capital is *the* key variable. It is here that the Draft Bill’s cost-benefit assessment is extremely weak. It does not calculate in any convincing way the cost of capital effects of its proposals (though OFWAT concedes that it will go up). Yet a moment’s reflection would identify that a 1% cost of capital premium would dwarf any of the claimed (but not substantiated) benefits of the particular competition mechanisms that it seeks to promote. If the value of the existing RABs is say £40 billion, then 1% on the cost of capital is equivalent to £400 million *additional* efficiency gains over and above those created by enforcing competitive tendering on the incumbents *every year*. Compared with the Cave Report’s claimed £2 billion over decades, a small change in the cost of capital is *vastly* more important.

Thus not only are the kinds of competition envisaged and promoted by the Draft Bill unlikely to be efficiency enhancing in themselves, but they are also likely to impact negatively on the cost of capital and in the process take the industry away from dealing with the main challenges it now confronts.

## **5. A better way forward**

The White Paper convincingly identifies a series of new challenges facing the water industry in the next decades. These are all about coping with climate change, increased population and developing an industry capable of meeting the

challenges of greater demands, greater variances of supply (both droughts and floods), and facing major ecosystem challenges.

The most urgent priority is to reform the abstraction regime. This should be the first item in the Draft Bill—instead of being postponed. Although there is a cost of acquiring the abstraction rights, there is then an asset to set against the cost, and therefore the net effect on the government's balance sheet should be negligible. It is just a pity the government does not have a balance sheet to reflect these assets and liabilities.

The second priority should be floods and flood defences. Whilst it might have been better to have sorted this out at privatisation, there is a strong case for getting flood defences out of the pay-as-you-go cash-based public expenditure regime, just as there was at privatisation for water and sewerage. Flood defence companies could be created, with RABs. These could remain public, or be private, and they could be acquired by water and sewerage companies, creating greater river basin and catchment area integration. Flood defence investment is a clear national priority on which the Draft Bill is largely silent.

The third priority should be the basis of customer charges. The Council Tax banding is a very inefficient basis for charging, and if resources are to become scarcer an element of volume related peak charging may be appropriate—and indeed more sustainable and fairer. It is here that the metering issue comes in.

The fourth priority should be to integrate environmental and economic regulation. Environmental externalities are just as important in economic efficiency terms as monopoly problems, and the provision of water and sewerage services is greatly distorted by the absence of such pricing. This should encompass agricultural pollution (fertilizers, pesticide and herbicides) that imposes costs on the water industry (and induces more hard capital investment to deal with the consequences of excess pollution at source), as well as the development of pollution charges for sewerage discharges and other effluents. In setting pricing and incentives for the water industry, these different forms of

market failure should be jointly accessed, and this probably needs institutional reform. Integrating OFWAT into the Environment Agency as a technical regulator would not only force consistency (as for example with the economic regulatory function inside the CAA) but also reduce costs and create great regulatory clarity to the investors.

Comparing the issues which confront the water industry with the answers provided in the Draft Water Bill illustrates just how removed the obsession with a particular model of competition is from the overwhelmingly important investment requirements. The bit that gets lost in the middle is the cost of capital. The RAB-based water model works remarkably well, and is a sound basis for tackling the new issues confronting the industry. Just when the model has proved itself and delivered a very low cost of capital, it is ironic that the government chooses this moment to start a process that may well undermine it. A better way forward would be to build upon its successes and reinforce it so that the cost of capital remains low for the next two decades.

### **Paper and reports referred to in text**

The Cave Report. (2009), "Independent Review of Competition and Innovation in Water Markets—Final Report", Defra, London, Stationery Office

Defra (2012), "Draft Water Bill", London, Stationery Office

Defra (2011), "Water for life", London, Stationery Office

The Walker Report. (2009), "The Independent Review of Charging for Household Water and Sewerage Services, Final Report", London, Stationery Office

OFWAT (2011), "Financeability and financing the asset base—a discussion paper"