Water Competition: the UK Experience

Martin Cave

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Transcript

Over the past decade, water restrictions have been imposed in many Australian cities. There have also been significant investments to increase supplies of water. With the immediate risks to water security abating, there is now an opportunity to explore how we could improve delivery of water services in the future.

Professor Martin Cave, the author of a UK Government report on urban water reform discussed the importance of a staged approach to gradually increasing competition in urban water supply that should reduce costs.

Speaker: Martin Cave (Martin)

Moderator: John Daley (John)

(Music being played)

JOHN: My name's John Daley, I'm the Chief Executive Officer of Grattan Institute and it's my very great pleasure to welcome all of you here tonight. The first thing I'd like to do is show our respect and acknowledge the traditional custodians and owners of the land on which this meeting is taking place. Second thing I'd like to do is to thank our hosts, Middletons. Thank you very much for the chance to be here and for these quite splendid facilities and we would ask all members of the audience to try and focus on the front rather than the very, very pretty view out there. And thirdly, of course to welcome this evening's guest, Professor Martin Cave. Martin, if I may, comes to us from the United Kingdom where amongst many other things he's the Professor and Director of the Centre for Management under Regulation at the Warwick Business School, holds bachelors, masters and doctoral degrees from Oxford University and until 2001 he was the Professor of Economics at Brunel University. He has a wide variety of interests as we will doubtless discover this evening in regulatory fields particularly in telecommunications and we could doubtless spend most of the evening talking about broadband and telecommunications and all of those kind of things, but for tonight we won't, although I'm sure if you get a chance to talk to Martin afterwards he'd be very happy to talk about those at length. What we do want to talk about tonight is another economic regulatory field that Martin has been involved in around water and in particular has been involved in a major review of the water regime in the United Kingdom.

In terms of the format for this evening I'll begin by asking Martin a number of questions which hopefully will provide some of that background as to some of the things he's been up to and hopefully some of the lessons that might come out of it for regulation of water in Australia and then we will very much throw things open to the floor and hopefully there will be a flock of questions from those around us, perhaps a flood would be more appropriate. The one thing I would stress is that as always there's far more questions towards the end so if you have a burning question I strongly recommend that you get in early. So Martin, a long and distinguished career looking at the regulation of telecommunications and you wound up looking at water. How did this happen?

MARTIN: Well it's simple too. I wasn't, and still aren't, an expert on water and particularly not an expert on sewerage 'cause when you say the water sector and then you say well ... and it's the same in reverse for sewerage but I know that's not entirely true so I do feel a bit uneasy about that but I've done three or four government reviews and this is the technique that the government has when they've got something they want discussed publicly without making a commitment to any particular point of view on it, so they hire somebody like me at extremely low wages and they give the person a team of ... small team of three or four people and I've always manage to insist upon having a young public servant in the Treasury because they're very quick-witted and brutal in dealing with interlocutors as you know and then six months later they have produced the report and you know from the government's point of view it's quite good in a way because if they don't like it they could say well this is very interesting whoever did this bit. In fact reading this morning's paper [laughter] I can see there might be certain parallels in having an independent report to do this so I was asked to do ... I was asked to report about the water structure. It's a review of competition and innovation. The innovation bit was sort of added and I think it's in fact very important in ... arguably it's the most important aspect of it, but of course the two things are inextricably linked as well as we'll see no doubt as this discussion goes on. So I started doing this and we finished about a year ago and not much has happened since as will become apparent. That's largely due to the sort of dead time created by the election.

JOHN: So what was the kind of environment that led to this review and where is Britain ... where was it and what was the concern, what motivated the shift?

MARTIN: Well to be honest that's not entirely obvious. I think it was a mixture of things. One was that the Treasury thought that something ... it should be looked at because an attempt had been made to introduce competition in 2003 which was completely botched and it was botched because the responsible ministry didn't want a competition to develop because they weren't behind it and so they permitted the legislation to go through in a way which effectively prevented competition emerging in any form so I think the Treasury sort of held a bit of a grudge about this. I think the other reason was that it was really kind of a climate change-related reason. I should explain, nothing that's been brought in very quickly is that the attitude towards climate change in the UK is very different from what it is in Australia. I mean you have actually experienced climate change. If you asked a soul in 100 in the UK probably 60% would say it's all something brought up by the media and by climate scientists and so on and it doesn't exist.

But just, regardless, the governments, the past government is very committed to quite significant action on climate change. As you know being committed to action doesn't necessarily mean you take it for the ... you are committed to it and so I think they realise that the way things were going, particularly in the south-east, environment agency has calculated or estimated that the summer water flow in southern rivers is going to be cut by 50% by 2050 and so the over-abstraction was taking place in those rivers at the moment could become very serious. And in order to deal with that problem you had to do something different to what you'd done before 'cause we've had a privatised water sector in the UK for 20 years. It's undertaken massive investments but they've all been pretty much of the same kind. We probably need to do quite different things in the future and deal in particular in a different way with regional imbalances in water supply and therefore I think the far-seeing public servants thought that it was time to do something like this.

JOHN: And when you say it's being privatised what was the basic structure of the industry?

MARTIN: Right well it was privatised essentially as about 20 regional monopolies fully vertically integrated so if you live as I do just outside London you have a water company which basically does everything. It owns all the abstraction rights in the area and treats the water it delivers in through its pipes. It's in effect the sole retailer because of the botching of the attempt to introduce retail competition in 2003 and then ... bit of a long way from here, with the wastewater it's actually the same thing, happens in reverse, that is to say the company is responsible for getting rid of it all. So you've got in essence 20 sort of regional vertically integrated sort of silo-type companies that do everything and they're monopolies. They're very chummy with one another. I've been to meetings of the Association and it's a bit like an old school reunion you know if you meet people in the telecoms industry they're very wary of each other you know they don't want to say anything, they consciously almost don't want to be seen talking with anybody but these guys you know they tell the same old jokes, it's like an old boys' gathering or an Oxbridge College or something of that kind. I mean that's the thing so it's been successful in many ways in the sense that the investment programs have gone through. It is a big investment program which they amount to something like £4b a year for a 20 year period and similar investments will have to be done largely to meet environmental goals but also replacing Victorian infrastructures for the next 20 years as well so it's not been a disaster, but there's certainly scope for argument that the structure they've got, this sort of vertically integrated silo-type monopolies, is not meant to be conducive to sort of carrying things forward.

JOHN: So what kinds of things had they been focusing on doing? And what is it certainly in your perception they hadn't done that there was a need to do?

MARTIN: Well one thing which I think's worth mentioning is that the only academic paper written on the water industry suggests that they've achieved over the last 20 years an enormous substitution of capital for labour, the labour force has gone down, but if you look at total factor productivity it's basically remained static. So they've overcome the capital shortages that were present say in 1989 when it started but the thing which they are criticised for, and the criticism applies not only to the water companies but also to the regulatory system, is that when they're faced with a problem which typically is going to be the problem of requiring an environmental solution, the environmental requirement also invariably emanating from Brussels as part of a European directive, they sort of reach into the bottom drawer for the solution and the solution always tends to be very capital-intensive. So the expression that's used for this is always pouring concrete, they're always pouring concrete.

If they've got a problem the natural solution is a very energy-intensive, costly, capital-intensive solution, and those of you who are familiar with regulatory theory will recognise that if you're basically regulating to a cost plus standard, and if the regulator gives you a return on capital employed, which is in excess of your cost of capital ... 'course these guys are actually borrowing money, very highly geared companies, they were borrowing money for something like 2.1% real you know I mean staggering amounts. The regulator was saying that the allowed rate of return is 5% you know the more money you manage to sort of shove into the ground you know for every 100 million of extra investment you do you're getting 3% a year just as a kind of windfall as a result of that so the regulatory system tended to promote the use of capital-intensive solutions, there was relatively little evidence of productivity increases on top of that and you know it worked, that people's bills went up initially and then they sort of levelled out so there wasn't so to speak massive concern on the part of household customers that they were being ripped off, but just the same it didn't look as it if it was a particularly good regime in static terms. It didn't look as if it was capable of actually carrying on into the future and dealing with any challenges.

JOHN: Mmm and this is one of those kind of terrifying Prime Minister's questions, I'm not sure whether I should ask, but I mean what's the kind of water bill being paid by the average consumer? I mean was it big enough that anyone noticed or ..?

MARTIN: It's not very high so a household would typically pay something like £300 a year. That's about ... heaven knows, I can't know what the exchange rate is, it's an awful lot less in dollar terms, but I suppose that would be about $550 a year, then you compare that with an energy bill, household energy bill which instead of £300 a year would be £1,000 a year, and probably rising, so you could see why in a way water's sort of pushed back into second place compared with energy in terms of reform but just the same once you've sort of, so to speak, sorted out energy then it becomes natural to think about water. But just one other aspect of it which I think is worth mentioning, if you don't pay your water bills you get an awful lot of reminders but you aren't cut off. And so a lot of people don't pay their water bills and then you can see how the story's being read.

Other people pay their water bills, they get fed up with this, so they don't pay their own water bills, and so the default rate sort of goes through the roof, and in fact it could be very bad so there are other problems associated with charging and really quite serious problems. You know I've mentioned one of them which is defaulting on bills, but another huge problem in this whole thing which I didn't have to address in my review because somebody else was doing it, is the fact that only 30% of UK households have meters so everybody else pays an amount based upon what's considered to be the value of their house which means that the marginal price of water is then zero. So trying to achieve the kind of demand reduction that's been achieved in this country, you haven't got a kind of social consensus that it's bad to water your garden, and you haven't got any kind of economic consensus to prevent you having a 20 minute shower or anything like that and so those things are completely absent in the situation. As I say that wasn't my focus, but it's quite an important factor, particularly related to the climate change issue in the future, but because it's not imminent in people's minds we don't get much purchase on it at the moment.

JOHN: So if that was the scene if you like in terms of a series of vertically integrated monopolies, and certainly the in-going hypothesis sounds as though it could have been more efficient, and certainly more effective in their use of capital than they had been. What did you come up with and how would you suggest that the market change?

MARTIN: Well I've got a slide ... it's a bit complex so I won't spend all my time doing it. This is what I call my digestive read slide. It follows a column in The Guardian which a literary reviewer takes ... produces a kind of ... a page of really taking the mickey out of the novel and at the end there's a thing called the digestive read digest it. He just has an extraordinary capacity to skewer the writer so I think I've probably, as you've seen from the complexity, managed to skewer myself to some extent you know in producing the digestive read digest it, but essentially we were operating under a number of constraints. You always are. As I said I've done this before, and you don't want to come up with stuff that everybody's going to rubbish and cause the government to chuck into the bin. That's partly vanity, I suppose, but partly if you're going to spend a year of your life doing this you don't want to have to be involved in felling trees for no particular good reason. So a particular constraint that I felt we were under, and everybody else thought we were under too, arises from the facts that all these firms were being messed around, and they have basically to achieve the massive influx of capital that they're getting every year, £4b a year, that they ... there's a great concern about what the cost of capital to them is. Now as I said, I think generally the regulator has overestimated the cost of capital and given a lot of stuff on top and this has had adverse effects. It's a judgement which is not something that's capable of proving, but it does mean that there's a big lobby in favour of maintaining the safety of the investments, the certainty of return for the investors and in particular preventing stranding.

So you know just as soon as we started the companies say well of course you know we'd love to have a lot of competition, we're up for it you know we're companies ... but by the way we don't think it would be in the consumers' interests because the fear of stranding would push the cost of capital so high, and therefore, we've come rather reluctantly to the conclusion that we should remain as monopolists you see. So we've got quite a lot of this kind of stuff, so my response to this was okay well we'll propose a system in which it's all done progressively. I mean the phrase we used was trust and verify which is a rather wonderful phrase for 20th century politics so you trusted your competition but you checked that it worked. The phrase incidentally was used secondly by Ronald Reagan talking about Soviet arms control, but first of all it was used rather more sinisterly by the first head of KGB, Felix Dzerzhinsky. I'm not quite sure what we conclude from that. I don't think there'd be a great deal of trusting as it turned out, but we had this idea that we should approach it in this incremental fashion and that basically explains the rather peculiar structure of this figure, which if my memory services me right you've got on the top the four stages of the value chain because we're looking at the insertion of competition [unclear 18:13] at this stage.

The four stages in the value chain, different degrees of natural monopoly you know abstraction, you know getting water out of rivers and such ... that's not a monopoly, treating sewerage or water ... that's not a monopoly although quite difficult to insert competition because of the very lumpy nature of the activity of ... and then also the very long duration of the assets. The pipes ... not much scope there, they're all duplicated pipes. We did have duplicated pipes [unclear 18:44] 18th century. And then finally retail which is very easy to insert competition into so we've got these ... so to speak these four activities and from the standpoint of introducing competition we looked at them separately. And then of course at the end you've got to decide, does this have any implications for the vertical structure? Should we be proposing accounting separation, legal separation, structural separation, energy separation or things of that kind.

Now what we've got on the vertical axis is basically different degrees of competition inserted more or less vigorously. So at the bottom we've got the status quo which is the use of dominant firm regulation. There's one dominant, vertically integrated monopoly. How did we do it? We deal with that just by establishing a price control which covers the whole value chain from [unclear 19:41] construction up to retail. So that's what we have at the moment and then taking that as the start and I apologise that some of you I see are straining to see the ... just to see the figure. We're moving to the top half of it now which will be something of a relief. The next thing you can do is what I call use of market type instruments and I'll give you an example of that in a moment. It's not markets but the government introduces pricings which actually get used currently and then moving up again into the chain of insertion of competition we have the use of competition for market and that might involve, for example, a situation in which in a certain part of the UK it was necessary to introduce a new treatment plant, okay? The regulator then carries out a tendering process in which it asks various people to step forward with their plans to produce a treatment plant, the criterion being basically how cheaply can you do it, okay?

So the point about that just parenthetically is that it doesn't threaten competition for market increments, doesn't threaten the existing capital stock, and therefore, I could say okay forget about stranding, you're going to be fine, it's just that because you're such a bad producer you aren't going to get the next plant that comes along and then the next thing we have is you know the best form of competition [unclear 21:05] competition which is head to head competition for the marketplace so you're you know you act as a ... someone who owns a treatment plant, you might be contracting for the whole of the output with a particular retailer or with a common carriage type process for the transport okay. So our basic idea was that in the various elements where competition seemed capable of insertion ... that's everything essentially except pipes, what we do is move up the stages and then as I've said if you wanted to stop at any time so as this would require legislation we could. So the idea was you'd have one bout of legislation, do quite a big chunk, and I'll just describe one aspect of it in a moment which I'm particularly attached to, and then this might only culminate in full competition across the market for everything in, you know say 2025, and that's a long time ahead but the water sector is a long game giving you to ... it's not like constructing a combined cycle gas/turbine plant which you do it in two or three years and it lasts for 10 years then you throw it away. These are very durable, very expensive, very lumpy assets and so you do require quite a long period actually to get things going.

Now I just want to focus upon one aspect of this which is in the abstraction column because I know that you're lucky enough to have a kind of trading regime for water which in some respects works pretty well and it's possible in Australia because ... in Victoria which I've learnt about this morning ... this is to the best of my knowledge anyway ... because the government basically owns all the assets it can actually require things to be put in place, notably a set of pipes or a desalination plant in a particular location. Now obviously in a UK context, with investor-earned income, because you don't have that opportunity because you can't direct investor-owned companies to do these things. If you want to achieve it you've got to do it so you build ... get grid build in rather more indirect ways so the proposal in the report which you may think is a bit whacky for doing this and I think it does rest upon being subject to this constraint, that the proposal in the report is ... that basically the government uses its knowledge of the scarcity of water in different parts of the country to construct abstraction prices which its ... the government's or their consultants, and who knows our consultants ... you never know who. I've got some form in doing this in another sector which I might mention in a moment ... they construct a sort of a proxy competitive price and if the cost of abstracting water at different parts of the country differs then obviously there becomes kind of an exporting opportunity you know if it's incredibly high in the south-east which it would be, if it's very low in the Midlands or in the north then it may make sense to build a pipe to transport it. But this will be a decision that's made by a company which wants to go into business on that footing.

Now how do you establish what the opportunity cost or price of abstraction is in any particular area? Well I think you do it by looking at various ways in which you could alleviate a shortage in that area. If you wanted to reduce abstraction by so much how did you do it? You can do it by reducing leakage. That will give you your price. You could do it by demand management measures which I've said we haven't really confronted it in the UK yet. That will give you another price. Or you can do it by importing and that will give you the price depending on how much it'll cost to transport the water so you'd have three alternative candidate prices for the abstraction and you take the lowest of those and that will be the basis upon which you'd establish a particular period, say five years, an abstraction price. Now in five years' time when you did it again the water situation will have changed, the climate might have worsened. Well when you do the calculation again you'd end up with different prices and so these government prices would so to speak flex the construction of the grid.

Now that's you know it's a method which might work. I mean that's all I can say but there's absolutely no appetite on the part of the government to require firms to do this and then again it might ... by imposing the decision upon firms who've made the investment you might end up with a better decision-making process than a bunch of people sitting in a government office in

Whitehall saying I think we should invest two million quid in this but ... so it goes either way. So that's an example of the way in which it might be possible to use market type instruments.

JOHN: I mean is that essentially a form of use of the framework you've got here, competition for the market? You're essentially saying well the existing abstraction techniques, whatever they might be in Sussex, are whatever they are, but we know that there will be increasing demand in Sussex, or at least the same demand that … inadequate supply will create a market for that additional supply.

MARTIN: Exactly. Exactly so it's a way of gradually getting people to think in a commercial framework which embraces not only their own locality, but creates an opportunity for in a sense trying to steal somebody else's business. So I mean a classic example is that one large water company, the largest, proposes to build a huge reservoir in the south of England. I don't if you ... well by our standards a huge reservoir, after hearing what the capacity of yours is, it'd probably be quite a small one by Australian standards. Now it's probably cheaper for the neighbouring water company to basically sell bulk water, and so a combination of these prices which give the right signals for the construction of projects, and also another market type instrument which is called here economic purchasing, which is a strict regulatory obligation upon the company to purchase water at the cheapest price, or alternatively to save ... be remunerated at the cheapest price, and if it chooses to do it more expensively then its shareholders will have take the cost. The combination of this abstraction process and an economic purchasing obligation could in principle without ... in the transition towards genuine competition, could achieve some of the same effects.

Now I am specifying only some of the same effects. Be much better in the case of abstraction rights to create a market but the problem is we can't create a market because the abstraction rights in any location are owned almost exclusively by two parties, either the incumbent water authority or alternatively businesses that have set up with very strong water needs, like power stations which require water for their own survival, so if you look ... the self-supplier of power stations, you can take that out of the market. All that's left is stuff that's held exclusively by an existing water company. I heard today that in Victoria, 70%, 77% of licences ... have I got this right? Bruce will correct me if I haven't ... were used for agricultural purposes. In the UK it's like 3%, and 20% in East Anglia, but nowhere else, so you wouldn't get an honest market in water trading just simply because it would be dominated by one side which held a monopoly. That's why in my opinion we're going to get this show on the road. We have to be forced to use this rather gruesome sort of Soviet-type principle of the state establishing prices and just hope that the consultants are smart enough to do it.

Now that may not be very difficult because at the moment bizarrely abstraction prices are lower in the south of England than in the north of England, not much lower but lower, so even if we just drew a line across the country and said above this line it's going to be X, below this line it's going to be 10X, or more realistically to introduce these things gradually without producing a shock in water prices it's going to go up over the 10 year period from X to 10X. I think that would be bound to have a good effect. But as you can see it's a pretty extenuated form of competition, it's not like sort of just removing the tent pegs and letting the thing go up in the air and go where it wishes, and it's difficult in the water sector to achieve that.

JOHN: So this is the cunning Cave plan. Where's it got to and what do you think is the likely prognosis for the United Kingdom?

MARTIN: Well oddly enough the government ... the Commission is not very keen on it but they're going to be toast, I imagine by.. I don't say that entirely with satisfaction but if we're going to have a ... if the Conservatives come in they have expressed enthusiasm for it. Slightly half-hearted enthusiasm and if we get a hung parliament and as we say in the United Kingdom that's great, whom do we hang first? If we get a hung parliament in the place you don't know what will happen, they'll just have to ... as you know they have to have a sort of German-style confabulation and produce a playbook in which they do all these things so it would all be sorted out. But my hunch is that there is a fair degree of momentum. There are some companies which benefit from it, that's fairly important. The majority of them would prefer not to be subject to competition but there are ... business customers want it. When they're polled over 60% of them say they would ... they were certain or quite certain to change their retail supplier, and therefore by extension, they probably want quite a lot of competition to be upstream as well. So if you have a government which is keener on the use of markets even in this slightly attenuated form and has some legislative time which is unfortunately not entirely straightforward then I hope that by the next water price review which takes place in 2014 you get an indication of how slow these things move in the water sector, you might be embarking on a process that might take 10 or 15 years but it wouldn't be a kind of overnight thing, it's not like introducing ... removing barriers, regulatory barriers for instance from the telecom sector where somebody can just come in and you know they will put up a few towers and operate a wireless broadband system in 60 days. It's slow-going, it's slow-going.

JOHN: Well thank you for that, there's been a tremendous introduction on where and how the water sector is and where it might go in the United Kingdom. Obviously in closing or getting any kind of competition into an urban water market in particular is inherently a very tough thing to do and this is a fascinating way that one could kind of put ... be in that journey so thank you for that and I wonder if we could throw it open the floor. We have a number of people here heavily involved in the water sector one way or another and if I could just ask that you introduce yourself briefly with your name and where you're from and if you can wait for the microphone so that we have a fighting chance of capturing your wisdom for posterity on the recording, thank you. So who'd like to be first? Please, thank you.

AUDIENCE: Ron Ben-David (Ron), I'm the Economic Regulator in Victoria. This is on a point of clarification. It's not clear to me why is it that the privatised water authorities own the abstraction rights? They're not maximising the return on those rights and looking to sell to their neighbours as an example you gave rather than waiting for government interventions?

MARTIN: So the question is why haven't they done all this?

RON: Yeah well if they already own the rights and presumably they want to maximise the return on those rights.

MARTIN: There is the legal possibility of trading our water but that's all. I mean you can only pass over bulk water at the boundary of two ... of another company, you can't insert it into that company's pipes and pay an access price and deliver it to customers. Now my plan envisages in due course having that kind of common carriage model coming in, but I think the answer to your question is they could do it at the moment. They probably have slightly weak incentives to do so and perhaps more importantly the practice in the industry has always been to say I don't want to rely upon anybody else's water because if times get tough they will stop shipping to me and my customers will suffer from any reductions in supply.

So that's another possible explanation. I can't quite remember how many of these rather inconclusive suggestions I've made already, but I think my fourth point would be that they don't think that way, they interested in operation, they're interested in competition and so the tenor of activity within the sector has been not to impose themselves upon their neighbours in any way. And that's why I think it's necessary to have some kind of regulatory impetus to try and get them to be in a position where they could, so to speak, tender for business with their neighbour, not get the proposal just simply knocked back without any consideration, but subject to a proper comparison which can be shown to the regulator which will actually give them a chance of success in getting the business. So it's a perfectly reasonable question given ... I'm sorry, that sounds awfully patronising, I didn't mean to say that, but I don't think there's a very clear answer, I think a lot of it's to do with the way in which the industry's developed and the way in which the firms interact.

JOHN: Martin, is there also a weak incentive because for the purchasing water authority they would ... yes, they would get water cheaper in the short term but on the other hand they'd miss the opportunity to invest that nice big lump of capital and get a return on.

MARTIN: Exactly. I mean that explains why the demand side is weak or it's an explanation of why the demand side is weak because they'd be foregoing a sort of 3% premium between the cost of capital and the allowed rate of return if they built a reservoir instead of just buying a constant [unclear 36:50] of the stuff.

JOHN: Next question, please.

AUDIENCE: Warwick Bray from Telstra. The popular press in the UK would often assert that [unclear 37:07] leaks in the distribution network than is possibly economic. I'm just wondering whether you would agree with that and [unclear 37:18] interest to fix?

MARTIN: Well there's obviously an optimal level of leaks you know as you acknowledge, it's not zero and it probably isn't 100% if it is. It's somewhere within there which depends upon a whole range of factors including, for example, the price that you're paying explicitly or implicitly for abstracting the water, the cost of transporting it, the amount you'd have to spend actually to the marginal cost to reduce leakage. Now the regulator ... I think I'm right in saying this ... has calculated economic leakage rates for a large number of companies and set them targets, and at various times some companies have fallen short of the targets and have been required to make substantial additional expenditure which they haven't been able to recover from their customers so there is a cost associated with that. It took the regulator I think quite a long time to get to the point of saying well actually you have to do this and so you know it's arguable that there's always been a tendency to underperform.

So I think there is a mechanism in place now that is capable of achieving economic levels of leakage but the proposition is as you'll quickly recognise that the economic level of leakage is not constant and it's likely to decline quite substantially particularly according to some climate change scenarios, and therefore, you should be able as I've said ... I've indicated, to sort of factor in the cost of reducing leakage as one of the elements which is used to determine the opportunity cost of water [unclear 39:14] so there is a solution. It's very hard to persuade people that the solution is to plug every leak. And it might get better if the program of replacement of ancient pipes is progressively accomplished. I think there are a huge number of pipes still in use in England and Wales dating back to the reign of the old Queen, to whom I refer of course is Victoria, not our current Queen to whom I certainly wouldn't be disrespectful.

JOHN: Thank you.

AUDIENCE: Peter Forsyth from Monash University. I'm just trying to sort of get your view on the way in which water has been regulated and as I understand it there has been ... there have been price caps for the last 20 years or so. You seem to be saying that a lot of the problems are the sorts of things that you would expect from old style regulation such as you know … you know the capital intensity problem. What do you think in terms of … the way in which water has been regulated in those terms? Is it really not a success in terms of you know in that way or would you think there was something to do ... that private practice did work to some extent or whatever?

MARTIN: Well I mean we know that a system of three or four or five year price caps as a kind of hybrid between just establishing a trajectory of prices and leaving it in place for a long time and having a very high-powered incentive mechanism so you can keep everything that the reason you keep the price cap is you keep it all and a system in which you've got essentially a cost plus mechanism but it's working with five year lags and I think in the water sector the system in price caps has contained a much stronger element of a cost plus thing for a number of reasons. One of the reasons is that the capital investment projects in the water sector are approved individually by the regulator so the regulator isn't using some kind of exogenous estimation of what the capital expenditure ought to be, it's so to speak assessing bids that are owned by the water companies normally to achieve environmental standards to which they're subject.

And if all the water companies are putting in bids which are pretty generous then the comparative method isn't going to help you with this and so you're really forced to rely upon the ... essentially upon the acuity of the regulatory officials in spotting cost padding, gold-plating and things of that kind. And that's extraordinarily difficult to do. And one index of the proposition that the plans contain allowance for too much capital investment is that in order for price caps that have gone through, the firm's underinvested by about 10%. In other words they've been allowed to invest by you know £10m and they've only invested by £9m and they have an incentive to do that because the five year period, they receive prices which are based on the hypothesis they have invested the 10 million but they don't do it, they save the money so they bank that. At the end of the five year period they can only add to the regulatory asset base the nine million they actually invested so you've got a combination of big asks which are accepted by the regulator and some underperformance and in a sense the whole problem is arguably that there's too much reliance upon information that's provided about companies. And since it's all inflated you can't spot it by comparative purposes.

JOHN: Question just here. Thank you.

AUDIENCE: My name's Suzy Goldsmith, University of Melbourne. It's reassuring that they're smart but I was just wondering, you've talked about this in terms of trading and moving water around in a great big grid and so I've got two questions. One is, have you calculated that basically there's enough water into the long-term future as long as you move it around a bit? And the second is, have you explained how the system you're talking about actually provokes innovation?

MARTIN: Right. The first question, do we know if it's enough? Well there is at the moment in terms of projections a huge surplus of water in the north of England. Much of this is captured in a kind of white elephant dam that was built in Northumbria in about the 1980s in response to some kind of panic [unclear 44:22] which has got a huge amount of water in it so I think that if one could so to speak magically transport the water around at zero cost there'd be no question even on the you know the more pessimistic climate change versions of there being a long-term problem. And so in other words it just hinges upon the cheapness of the transport and if the transport can't be made cheap then you have to do other things such as you have to improve leakage or you have to use demand management measures which I've indicated have never really taken root in the UK. So I think that's the issue, it's one of these sort of marginal balancing issues of different ways of solving the same problem.

Now the second question about innovation is the one which we thought was really important in terms of where the review I think is really not entirely satisfactory. I mean obviously competition has the potential to unleash innovation on quite a large scale and we think that even retail competition, that's to say just allowing competing retailers to buy the same wholesale water but pass it over to business customers from different sources, could actually have some beneficial effects on innovation because within the vertically integrated company the retail function is partly to make sure people buy of lot of water whereas if you've got a separated retailer whose interests are much more highly focussed on the customer then it might be possible to encourage innovations in the use of water or in the self-supply of certain services such as electricity and with wastewater, which would introduce some form of innovation into the upstream as well. That's one sort of semi-non answer you know competition where you can I think is going to do an awful lot of good. I mean it certainly works in the telecom sector.

But there's also a slightly worrying issue about capability because the water companies in the UK have between 1998 and 2008 reduced their R&D budgets from a very low level to half of that very low level and most of them closed down their R&D departments, and there is a question in my mind about whether they have the capability to make the assessments of new technologies in a coherent way. And so one of the things that we proposed in the review, and I was seeing some reluctance, was to set up some kind of central R&D fund which would do pre-competitive R&D, running trial projects in order to demonstrate what might work and what might not work. To be honest it sounds awfully like burning 500 Euro notes or something like that, I do acknowledge that, but there is I think a serious capability problem and this might be done either through a fund set up for the water industry or it might be done through an initiative that the government set up to raise innovation more generally, but if anybody's got the silver bullet that would make a sector which in the UK has been performing adequately but not very well, a sector which finds it very hard to attract the best engineers because all the best engineers want to work for Google or something like that, you know tell me afterwards. I think it's the great sort of ... the great unanswered question.

Though there is one other point which I think is worth making, again which has been pretty controversial is that we proposed as one means of promoting innovation, that we should relax the takeover regime because the companies in the UK are largely immune from takeover. They change hands very frequently but they're immune from mergers and I think that increasing capital by the competition might also permit the spread of best practice from more innovative companies to less innovative ones and it might also put a spring in the step of the less innovative ones too but all this is pretty neutral.

JOHN: Martin, we've spoken mainly so far about the United Kingdom. I know you haven't been in Australia for that long this time, this visit, but I wondered if you thought that there are any particular consequences of your work that might be relevant so thinking about the Australian situation.

MARTIN: Well I mean the huge difference is that, unlike the UK, the government actually owns the businesses and so it has much greater capacity to shape and reshape them and more particularly to require the construction of certain facilities which I understand in Victoria's already been done both in respect to a large desalination plant, but also more generally in terms of the creation of a kind of proto grid that would enable theoretically a much quicker advance up the ladder, so to speak, of different forms of competition than we've contemplated in the UK, at least we contemplated in the independent review. So I think in a way you've got quite a good framework for bringing forward ideas about restructuring and because of the lack of reliance upon capital markets and ratings agencies and things of that kind you're much better placed to sort of re-slice the industry in ways that you think would actually provoke the greater efficiencies and innovation that competition could bring.

I mean for example in terms of the basic model we've got up here which is you know the crucial decision about who buys the water which is then passed to the retailers for transmission to the customers, I've got two models here. One is the so-called single buyer model where you create an independent production entity. I think in one of the states such a thing actually exists and given the existence of a grid it can then make purchases from various competing sources and by that means it can achieve kind of upstream competition that we would give our eye teeth to achieve in the UK 'cause it's going to take a very long time to do so. So you know that potential might be present much sooner in parts of Australia where grids have been constructed, crossing boundaries, and then of course the next step is to create a kind of common carriage regime, the kind that I understand exists in south-east Queensland where you have a grid manager who runs the pipes and then it's possible for customers and retailers on one hand to contract with suppliers of treated water on the other through competitive contractual process thus producing that kind which is much more similar in general terms to energy competition.

So I think in, a perhaps an unintended and curious kind of way, maintaining government ownership of these things, although my view is that it probably has adverse effects on efficiency in other respects which might actually have placed some parts of Australia at least in a position where things can go forward rather more quickly than the sort of slightly snail-like pace which is being proposed over here. However, as you say I've only been in this country for 23 hours. I'm certainly reluctant to pontificate about it.

JOHN: Thank you.

AUDIENCE: Simon Corden from Victorian Department of Premier and Cabinet. My understanding, in the UK most of your economic regulators are industry-specific, and here for a long period most of our economic regulators have been generalists to cover the wide range of sectors so that's changed recently in a separate energy regulator. Are there any lessons from the UK experience about the cost and benefits from an industry-specific regulator in terms of water review?

MARTIN: Well there's been a tendency in the UK for regulators to come together so what the communications regulators come together [unclear 53:41] to form a single regulator whereas in the dim distant past we had a gas regulator and an energy regulator we now have just one [unclear 53:53] approach, one regulator so there's been a kind of ... there's been some degree of mergers that have taken place. I think that those mergers that have taken place you can make a very strong case for because you would have a coherent approach setting energy prices, and also the broadcasting and telecommunications have basically come together through convergence and so they're the same things. Whether you want to go ahead and go further and create a single agency which covers the whole regulated sector, it's not entirely clear to me what the benefits of that would be. I mean you might get more expertise, you might get learning from one sector to another taking place, you might get better use of specialist resources like lawyers and economists across there, but it's not obvious to me you can get an immediate big win through having a more coherent approach.

What I think is an important aspect though of regulatory change that's likely to take place in the UK is that the boundary between regulation and policy making has shifted over the past 10 years largely because the government has, I can almost nearly say this, it has abdicated its responsibility to making policy decisions on things like energy, security and I feel things like high speed broadband, and so there's been a tendency for the regulators to sort of step into areas which are quite clearly policy. Now one thing that you can see very strongly from the Conservative manifesto in the election is that they want to stop that, they want to repatriate policy decisions with the government and turn the regulators into basically people who are doing technical calculations to support in an unbiased and disinterested way policies which the government has itself chosen. So I think that's a big change that's going to take place on the horizon, and there's a commitment by David Curran to decimate the telecommunications regulator for reasons which unkind people attribute to his close friendship with Rupert Murdoch, who's at odds with the telecommunications regulator at the moment, and there's a commitment in the manifesto also to turn off the energy regulator into a kind of technical body like the phrase that comes to mind, although I don't mean it pejoratively, is bean counter, you know they want to turn into bean counters not policy makers.

However, as far as water is concerned nothing's become clear. The last government initiated one of its last acts of review of the water regulator whether it's doing its job properly, whether it's properly constituted, things of that kind, but nobody really knows quite what the impetus for that was, apart allegedly from rather harsh exchanges of words between the Minister and the regulator which is perhaps a rather puerile explanation of ... although not entirely implausible about what might actually happen to do this. So it's like I don't think that kind of aggregation's going to take place, but I think there could very well easily be changes taking place and it'll be based upon shoving stuff back into government.

JOHN: Thank you very much. The time has probably come when we should let everyone go into Melbourne evening so if I can thank you, Martin, for your incredibly learned exposition of where the UK market is and some of the things that might be done in terms of reviews and regulation and clearly there's a number of lessons for us. We can only hope that your hit rate is ultimately a little bit better than the Henry Review's so far, and that indeed the government trusts you and then ultimately verifies [unclear 58:16] but if I can ask Joanne from Middletons to just close very briefly.

JOANNE DANIELS: Thank you very much, John. Martin, on behalf of Grattan Institute, everyone in the audience and the partners at Middletons, we'd like to thank you for what was a very insightful speech. As you know here in Australia we have a lot of structural reform happening, particularly in Queensland, and we're grappling with how you price urban and rural water so really your speech is perfectly timed for the Australian market so I'd like to thank Martin in the usual way.

APPLAUSE

End of recording