**RPI-X, competition as a rivalrous discovery process, and customer engagement**

**Paper prepared for the Conference**

**The British Utility Regulation Model: Beyond Competition and Incentive Regulation?**

**LSE 31 March 2014**

**Revised version 22 April 2014**

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**Introduction**

1. I should like first to thank Jon Stern and Martin Lodge for proposing and organising another splendid conference on my 1983 Report. I also thank CARR, CCRP and the IEA for supporting it, and the LSE for hosting it. I enjoyed and learned much from the papers presented at the last conference, to commemorate the 20th anniversary, and expect the same experience for this one too. I am honoured that it has seemed worthwhile to gather together yet again. Though I don't know for how many more decades I can promise to keep coming, let alone presenting a paper.
2. At the last conference I explained in some detail how RPI-X came into existence, or more precisely came into my Report.[[2]](#footnote-2) Since then we have had publication of the impressive two volume *Official History of Privatisation* by David Parker.[[3]](#footnote-3) The first volume devotes three entire chapters to the decision to privatise BT, the regulation of it, and the flotation. I found absolutely fascinating the detail about the development of thinking by the Department of Industry, the Treasury and Ministers, not least on what to do about my Report. I can recommend this not only as authoritative but also as a rattling good read.
3. I want to draw on David's account in the first part of my paper today, in looking yet again at how the RPI-X proposal was developed and why it was adopted. Then I want to look at subsequent developments in regulation, and make a suggestion for the future. Jon Stern said last time

"Characteristically, Stephen Littlechild concludes his contribution with how he is exploring other means by which we may be able to do away with the need for price regulation by a regulatory agency of even the most natural monopoly-like element of utility services."[[4]](#footnote-4)

Well, characteristically, I also want to return to that today. And I want to do it by reflecting on the nature of competition as a rivalrous discovery process, and the role that customer engagement has played in that process and the even greater role it could play in future.

**Background: the nature of competition**

1. Let me begin by looking briefly at a paper that I published a couple of years before the 1983 Report, because that sets the scene for my thinking when I embarked on the Report.[[5]](#footnote-5) As far as I know, it was the first systematic and published attempt to examine the economic case for widespread privatisation and how it might be done. Inconceivable though it seems today, in the 1960s and 1970s it was professional suicide for an economist to write about privatisation. It was only when privatisation became government policy and some companies actually began to be sold off in 1980 that it became acceptable to write about it.[[6]](#footnote-6)
2. My paper begins by asserting that "There is widespread agreement that the nationalised industries should (a) attempt to discover the goods and services that consumers want and produce them in the most efficient way, subject to b) not exploiting the monopoly power that they frequently have and c) acting in the wider public interest (ie uncommercially) when called upon to do so."
3. Note that I did not simply write that the industries should produce the goods and services that consumers want in the most efficient way. There was an explicit acknowledgement that it was first necessary to discover what consumers want. The same concept underlies some of my earlier writings,[[7]](#footnote-7) and the paper on a similar theme that Michael Beesley and I wrote a few months after my Report was published.[[8]](#footnote-8)
4. This is of course the Austrian concept of competition as a rivalrous discovery process taking place over time, associated particularly with Schumpeter and Hayek, and more recently Kirzner.[[9]](#footnote-9) It stands in contrast to the more familiar neo-classical concept of competition as a static state of equilibrium with price equal to the lowest cost of production, where demand and cost curves are taken as given. In 2003 the Competition Commission provided a similar definition of competition as a rivalrous process (though one would have liked a more explicit acknowledgement of the discovery aspect).[[10]](#footnote-10) Successive chairman explicitly endorsed this approach.[[11]](#footnote-11) At the last conference I conjectured that my Report pushed regulatory economics in the direction of the Austrian approach, particularly with respect to the greater emphasis on information and incentive mechanisms, discovery and innovation.[[12]](#footnote-12)
5. In the course of the present paper I want to identify a number of respects in which the concept of competition as a rivalrous discovery process characterised the initial course that regulation took. I then want to show how this theme has surfaced in its subsequent development, and suggest a possibility for its further development in future.

**The 1983 Report revisited**

1. One other observation about my 1981 paper: it identified three aspects of the institutional framework where changes would improve the attainment of the stated aim. The three aspects were organizational structure (nowadays restructuring), market environment (removing obstacles to competition) and capital structure (the introduction of private ownership). Each industry was considered from these three aspects. It was suggested, inter alia, that three area electricity boards be majority privatised with notice of a reference to the Monopolies and Mergers Commission (MMC) after five years. The MMC could assess the effect of privatisation and if necessary suggest remedies for any observed problems. But regulation was not mentioned.
2. In the case of BT, the Government had decided on some form of regulation via a new body Oftel, and of course the main focus of my review was the nature of that regulation. But I had the other three aspects in mind in approaching the project. Restructuring of BT had been considered and ruled out. Private ownership had been considered and decided upon – provided sufficient regulatory protection could be provided against monopoly power. There was still scope (in my view) for further increasing competitive pressures, so my Report mentioned several possibilities here.
3. Subject to the objectives set out in my Terms of Reference, my aim was to design some form of regulatory protection which gave maximum scope for competition to continue to function as a discovery process. From this perspective, an attraction of the RPI-X price cap was that it did not apply to all BT's products: it was focused on the subset of products where it was commonly agreed there was most market power and least prospect of impending competition. For other products the competitive market process was left unrestricted. The cap did not specify particular prices: BT would have flexibility, within an overall tariff basket, to adjust individual prices in response to competitive market pressures. This stood in contrast to US practice, which actually fixed (and still does fix) the specific prices that the regulated company is allowed to charge. The cap did not specify what products should be produced, other than assuming continuation of the existing basic products within the basket. It was for BT to discover and respond to market demand and innovate with new products as appropriate. And finally, the price cap did not specify or seek to calculate particular costs or rates of efficiency improvement. What could be achieved in the way of cost reduction was for BT to discover and implement, though an assumption that there was indeed scope for efficiency improvement would underlie the level of X to be determined.
4. Why was RPI-X chosen as the preferred form of regulation? My own view as expressed at the time in my Report was that it scored better than the viable alternatives on all five of the identified criteria. (Protection against monopoly, Efficiency and innovation, Burden of regulation, Promotion of competition, and Proceeds and prospects)
5. Reading David Parker's account of how my Report was received in Government, it is tempting to argue that the explanation was much simpler. It could be summed up in two main factors. First, RPI-X was not Rate of Return Regulation, which the Prime Minister's advisor Alan Walters could not accept. Second, it was not an Output Related Profits Levy (OPRL), which almost everyone except Alan Walters could not accept.
6. This is of course an oversimplification. It was broadly accepted that some variant of the Department of Industry's maximum rate of return scheme could indeed "prevent excessive profits". But it was also widely felt, not only by Alan Walters and not least by BT and some ministers, that regulation of profits, via a variant of US rate of return regulation, was the wrong way to go and could or would be inconsistent with successful privatisation. And Alan Walters's proposed ORPL did have at least a few supporters. But it became clear that something different was needed than what was on the table when I was invited to opine.

**Designing regulation as a rivalrous discovery process**

1. Reading David's account today, in light of the theme of the present paper, it is apparent that we were all engaged in a rivalrous discovery process. The challenge was to ascertain the preferences and requirements of the various key parties (notably the Government and BT, who were in effect the "customers" in this process), and to devise a form of regulation that would best meet these needs. The various alternative regulatory schemes (and their proponents) were competing with each other for acceptance.
2. I am also struck by how one-sided at first was the discovery process. It took place entirely within Government: primarily the Department of Industry, the Treasury and the Central Policy Review Staff (CPRS) within the Cabinet Office, later other departments and the MMC and Office of Fair Trading (OFT), and also the Department of Industry's merchant bank adviser Kleinworts. Ministers, too, were occasionally allowed to chip in. But as far as I can see from David's account, BT was not asked for its view. The first reference to BT in the context of regulation is its objection that it was not consulted on the terms of reference of my study. And the first attempt to ascertain BT's views on the subject of its future regulation appears to have been my dinner meeting in the chairman's flat.
3. In order to make progress with a proposal, it is necessary to get buy-in from the parties involved. As explained last time, not only did I talk to BT people to understand where they were coming from, I found the Buzby Bond concept developed by its merchant bank advisers to be an interesting and potentially appealing concept. As I recall, Michael Valentine commented to the effect "We are concerned about the onerous nature of US rate of return regulation and what the Department is proposing. In the context of the Buzby Bond, which was for BT to borrow in the private capital market, we proposed this concept of limiting BT's price increases to RPI-2% as a means of disciplining the company. Can't we do something with this?" (He later explained that the idea was developed with – and primarily by - his colleague Andrew Smithers.[[13]](#footnote-13))
4. So I started thinking: is there some way of using that idea as a basis for a form of "regulation with a light rein" as the Secretary of State had requested? I sounded out officials at the Department, and I see that David reports them beginning to think about this themselves.[[14]](#footnote-14) I must say I had reservations: the last thing I wanted was to go down in history as a man who invented another price control. But as explained last time, I came to the view that a limited RPI-X price cap was better than the alternatives.
5. The point I want to make now is that, because my proposed form of regulation reflected a suggestion that BT's own advisers had made, which in a previous context had been accepted by the Treasury and the Department of Industry,[[15]](#footnote-15) this must have encouraged the company and these Departments to accept that form of control, at least in principle.
6. As David explains, BT had considerable reservations about the level at which X might be set. Indeed, all the parties involved had various reservations about the RPI-X proposal, not least how X would be calculated. Nonetheless, it seems to have been accepted relatively quickly. Attention soon moved to the question of what level of X to set. This in turn led to discussion of various associated parameters: the duration of the cap, the scope of the cap, the extent of tariff rebalancing to be allowed, possible additional steps to increase competition, the capital structure and level of gearing of the company, and so on.
7. In assessing RPI-X in my Report, I judged that it had a lower burden of regulation than other forms of regulation. It is perhaps difficult to reconcile this with the actual process of setting X that David now reveals. Negotiation was painful and protracted: it went on for over a year. Valentine (2006 ch 10) corroborates this from BT's perspective. And yet, there was apparently never any suggestion of abandoning the RPI-X concept. And all the other issues just mentioned would have to have been negotiated and ironed out anyway. Experience from subsequent privatisations suggests that they are never easy.
8. The conclusion that I want to draw from all this is not only that the process of setting the first price control for BT can be seen as a rivalrous discovery process. In addition, it was ultimately helpful to that discovery process to have representatives of all the main parties (or "customers") at the negotiating table. The process covered not only price (X) but a range of other considerations and dimensions of the price control. The negotiating process was a means by which the parties gradually discovered their own preferences as well as those of others. The parties made tradeoffs between the various different considerations and dimensions in order to reach agreement. And the outcome of the agreement, once reached, was better for all concerned than if one party (the Government) had simply asked for views then tried to dictate what would happen.

**Developments in regulation since 1983**

1. Let me now look briefly at the experience of regulation over the last thirty years since the Report. In the years immediately following 1983, an RPI-X type of regulation was adopted, in one form or another, for all the UK privatised and regulated industries. Not only in this country, but in many overseas countries too, including Australia and New Zealand, Latin America and the EU. Even some US regulation was modified in this direction, notably in telecoms.
2. What happened over subsequent years? In a relatively few respects, competition has been facilitated to the extent that RPI-X price controls have been withdrawn, notably at the retail level.[[16]](#footnote-16) But for the most part, the question has been what kind of price control to retain. At the last conference, Chris Bolt gave the following delightful summary.

"So although regulators regularly assess the merits of RPI-X against other forms of control at each price control review, equally regularly the merits of RPI-X are restated. But in reality, Littlechild's 1983 model of a simple control of a relatively narrow basket of prices has changed out of all recognition".[[17]](#footnote-17)

1. I suspect that Chris and others might reach the same conclusion today, but even more so. There have been many more changes in regulation, and more far-reaching changes, over the last decade. (Except in the baleful case of Australia, where the regulator is not allowed to make changes in the form of regulation.) I would nonetheless conjecture that, despite all these changes, most of this regulation retains a focus on the forward-looking incentive arrangements that lay behind RPI-X.
2. But I come to this conference neither to bury RPI-X nor to praise it. Although, having spent the last few years trying to bury Ofgem's post-1998 policy on retail regulation (in contrast to its commendable defence of retail competition before that date), I should at least like to praise Ofgem for various innovative and deftly implemented forms of network regulation. These include the concept of RIIO ("setting Revenue using Incentives to deliver Innovation and Outputs") that Ofgem says has now superceded RPI-X.
3. The point that I would like to make about developments in regulation since 1983 is that they, too, can be seen as reflections of a rivalrous discovery process. Regulators have been continually trying to discover new forms of regulation that better achieve their statutory objectives, while these objectives themselves have also been evolving. Often the regulatory changes are a matter of detail, like the scope of a tariff basket , but sometimes they are fairly fundamental, like "menu regulation" (offering companies a choice of packages of investment and rate of return) and RIIO. Regulators have repeatedly proposed new ideas, discarding some during the review process, implementing others, keeping on the successful ones during the next review and discarding or modifying the unsuccessful ones.
4. In this process the regulators have been discovering not only their own preferences but also something about the preferences of the firms that they regulate. The firms themselves have been learning in the light of their own experiences of these various controls. And the regulators have been learning from each other.
5. There have also been important elements of rivalry. At the beginning of each review the parties are frequently arguing for different regulatory models, whereas later they focus more on the parameters to be used to implement the chosen model. Over time, some forms of regulation supercede less successful ones: the ones best fitted to the circumstances survive. In this sense there is product improvement. There may even be rivalry between different regulatory bodies, some of whom would like to be seen as intellectual leaders, and none of whom want to be seen to be unsuccessful in the regulatory rat race.
6. However, until now, this rivalrous discovery process among alternative regulatory models has been almost entirely a single-buyer model of competition. That is, after a consultation process characterised by the rivalrous discovery process just described, each regulator decides the form of regulation it wants to buy on behalf of the entire industry that it regulates. The regulator may specify small variations tailoring the form of regulation to what it sees as the needs, or just deserts, of each regulated company. But the basic form of regulation is generally uniform, and determined by the regulator rather than by the firms or customers in the industry. The views of customers or their representatives exercise only limited influence, to the extent that the regulator listens to their submissions in the course of consultations. There is no market or regulatory process tending to discover and bring about regulatory models that better reflect the preferences of customers. Put rather provocatively, the regulator is a monopsonist exercising its market power.

**Negotiated settlements and customer engagement**

1. There are, however, some signs of competition being allowed to break through. Jon Stern's remark that I mentioned at the beginning refers to the following words at the end of my paper at the last conference.

But do we need to stay with this method of setting X for ever, or even with this kind of price control? There is great pressure for uniformity across companies in setting price controls, and this has disadvantages as well as advantages. For some time I have been suggesting that it might be possible for customer groups to negotiate directly with regulated utilities as to the levels of X. More generally, they could negotiate for whatever kind of control they prefer, whether on price or earnings or revenue, and with what basis of sharing and for whatever duration. Some of this is already happening in Florida, but that is another story. (Littlechild 2003, p 49)

1. Over the ten years since the last conference I have been telling this other story, documenting international experience with such regulatory approaches. Florida was where I started, where negotiated settlements were particularly extensive and successful.[[18]](#footnote-18) I looked, too, at the Federal Energy Regulation Commission in the US, where settlements first started, and at the National Energy Board in Canada, where they had recently flourished, and at an isolated experience involving the ACCC in Australia.[[19]](#footnote-19) There was also related and successful experience of users determining transmission investment in Argentina[[20]](#footnote-20), and of constructive engagement here in the UK, at the CAA.
2. These experiences had in common a somewhat different philosophy of regulation from what underlies conventional practice. It is not an approach that is in any sense incompatible with the statutory duties of regulators in general, but one that invites a different way of implementing those duties. The difference, quite simply, is that, instead of taking all the key decisions about prices, capacities, quality of service etc, the regulator seeks to facilitate a process whereby the market participants themselves – the regulated firms and their customers or customer representatives - are encouraged to try to agree these parameters between themselves, and recommend them to the regulator for consideration and approval.
3. In the cases where the parties were able to reach agreement, the process of setting the price control involved concentrated effort, but typically took less time and was less frustrating – indeed, it was sometimes positively fulfilling. Attention focused more on the issues most relevant to the parties, resulted in outcomes that were acceptable to and preferred by the parties, and led to better understanding of the concerns of the other parties and of the options available to the parties themselves. In many cases the processes were characterised by the development of aspects of the regulatory control that were either novel and/or could not have been imposed by the regulatory body itself.
4. It seemed to me worth encouraging further adoption of such an approach in the UK. Four UK regulators have effectively responded: the CAA, Ofgem, Ofwat and WICS. There is not time here to review their experience in any detail, but let me make just a few remarks.

**The CAA: from constructive engagement to ?**

1. The CAA pioneered customer engagement in the UK with its policy of constructive engagement. The three London airports and their airlines were invited to seek to agree on a traffic forecast, a future investment plan and standards of service, leaving the rest of the price control setting to the CAA. This worked remarkably well given initial scepticism. Its most recent price control review continued with constructive engagement but modified the process in two main respects. First, whereas the previous policy left the nature and extent of engagement rather to the discretion and inclination of the parties, this time the process of engagement and attendant responsibilities were more firmly defined, monitored and enforced. Second, this time the parties were allowed and indeed encouraged to seek to agree on a much more extensive and far-reaching set of parameters, including in principle the price control itself.
2. In the event, some items were agreed at each airport, but none of the three regulated airports attempted to agree an entire price control with all their airlines. The process was no doubt affected by the fact that a new Airports Act was in course of enactment. Whether each airport had market power, and hence would be subject to regulation at all, was also in course of determination. The CAA took the view that all three airports did have market power and would indeed be subject to regulation, and continued its process to determine their price controls.
3. For the first time, the CAA had to take account of a new duty to promote competition, which it had not previously had. Unfortunately, the CAA saw competition in the static sense of price equal to cost. [[21]](#footnote-21) Hence the CAA interpreted the duty to promote competition as a duty to choose the best way to ensure that price would be equal to cost. Its answer: by setting a price control with price equal to cost, as it always had done.
4. In fairness, the CAA did later accept that, by virtue of voluntary agreements signed between the airport and airlines, Stansted did not have market power and need not be regulated. The CAA also accepted Gatwick's proposed undertaking in lieu of a formal price control determined by itself. So the outcome has been some diversity of form of regulation, reflecting the different market conditions at each airport, and determined in part by the market participants themselves as well as by the CAA.

**Ofgem and Ofwat: fast-tracking in energy network and water regulation**

1. Ofgem and Ofwat, in slightly different ways, decided to incorporate an element of customer engagement in their most recent and still on-going price control reviews. This meant, for example, less regulatory prescription so that companies could better discover and respond to the preferences of their customers.[[22]](#footnote-22) Importantly, those companies that engaged fully with their customer representatives and got support for their business plan would be eligible for fast-tracking in the price control process, which would involve the regulator broadly accepting the company's business plan. But Ofgem and Ofwat made it clear that they remained in control, that agreement with customers was a necessary but not sufficient condition for fast-tracking, and that the regulator would set the final price control.
2. In the event, both regulators reported that the customer engagement parts of the price control process went very well. Companies were highly commended for their commitment to the process and responsiveness to customer preferences. From my own limited discussions with companies, customers and regulators, I can wholeheartedly endorse this. Even though I was familiar with successful overseas experience, I was pleasantly surprised and impressed by the enthusiasm and innovation that UK companies and customer representatives brought to these processes.
3. I was therefore a little disappointed that only one out of 6 electricity distribution companies (admittedly responsible for 4 out of 14 networks), one out of 10 water and sewerage companies, and one out of 8 water-only companies were given fast-track status. The remaining companies did not clear the hurdles in other respects - typically (but not only) because their efficiency projections were not deemed sufficiently challenging. In effect, in contrast to the approach adopted by WICS (see next section) Ofgem and Ofwat gave guidance on acceptable efficiency improvements after rather than before the company business plans were submitted. This means that the regulatory bodies will still need to determine the price controls of the great majority of the companies in these two industries.
4. I understand that there may be some scope for the companies to revise their plans in a fairly straightforward way, and thereby achieve something like fast-tracking. And they will engage again with their customer representatives. But will experience of these processes during the present reviews discourage companies, customers and regulators from committing to customer engagement in future?
5. The single-buyer characteristic of the usual price control process has been particularly marked in the present reviews. All companies have "bid" their business plans and it appears that each regulator has accepted only the lowest bid (particularly in terms of cost to supply) in each category. In fairness, competitive tendering works like that, and it might be argued that such a bidding process enables the regulator to obtain the advantages of competition *for* the market.[[23]](#footnote-23) At the same time, it seems to me that more potential benefits could be available by extending the multi-buyer characteristic to an even more competitive market process. I return to this shortly.

**WICS: water regulation in Scotland and the Customer Forum**

1. The fourth regulatory process involving customer engagement has been at the Water Industry Commission for Scotland (WICS). As in other sectors, the parties were interested in an alternative approach because they were conscious of the cost and confrontational nature of the traditional price control process, and the limited representation therein of the views of customers. WICS CEO Alan Sutherland has indicated that the interest of WICS was stimulated by accounts of negotiation processes elsewhere, including at a conference held on this topic in 2009.[[24]](#footnote-24) A Scottish Water attendee at the conference also commented: "It seemed to me that this was the next step for us in Scotland."
2. In September 2011 the main parties involved – WICS, Scottish Water and Consumer Focus Scotland (part of the National Consumer Council) – formally signed a Cooperation Agreement that created a Customer Forum. Briefly, its remit was to work with Scottish Water on a programme of research to ascertain the views of customers, to represent those views in the course of the price control process, and to seek to secure the most appropriate outcome for customers.
3. A year later, when the Scottish Government initiated the Strategic Review of Charges, the Customer Forum was asked to seek to agree a Business Plan for delivery by Scottish Water in 2015-2020 (subsequently extended to 2021). "Such a Business Plan should be fully consistent with Ministerial Objectives and with the views and ranges that the Commission will set out in notes and papers over the period to early 2014, unless there are demonstrable reasons for going outside those ranges to the benefit of customers."[[25]](#footnote-25)
4. As in England and Wales, the commitment and enthusiasm of all the parties was quite remarkable. The Customer Forum gelled and operated very effectively. Scottish Water responded. The parties did reach agreement on a Business Plan, and on 20 March 2014 the regulator WICS formally proposed a price control consistent with it.[[26]](#footnote-26)
5. The detail of this story remains to be told elsewhere. And final implementation is contingent upon the formal consultation process just announced. Nevertheless, certain observations may be helpful here, with respect to regulatory inputs into the process and what was achieved.
6. In order to facilitate and guide the customer engagement and negotiation process, and to assist in discharging its statutory responsibilities with respect to setting a price control, WICS issued a series of guidance notes indicating what it would be minded to find feasible and acceptable. This guidance did not determine the final outcome but it did provide a space within which negotiation could fruitfully take place. WICS provided preliminary views in autumn 2012 and further comments on Scottish Water's Business Plan in winter 2013/4. For example,

"Scottish Water completed its business plan and the Commission commented on this in detail. The Commission determined the ranges it expected the Customer Forum to keep within when reaching agreement on service improvements with Scottish Water. These decisions included: the appropriate levels of operating costs; inflation rates for costs; the financial parameters used in the tramlines; the size of the capital programme; the level of capital maintenance; assumptions on growth; and maintaining a benchmark with the OPA." (WICS Draft Determination p 11)

1. The "tramlines" referred to here were established by WICS with respect to Scottish Water's performance during the forthcoming price control period.[[27]](#footnote-27) If Scottish Water's performance runs outside these tramlines, the parties will discuss how it should be brought back on course. This means, for example, that if the company appears likely to make excessive profits, there will be a discussion as to how those profits might be used – to reduce borrowing, to increase investment or quality of supply, to reduce prices, etc. Amongst other things, it was hoped that this potential sharing arrangement would reduce concerns of the parties about possible downside risks of agreeing a Business Plan and setting a price control.
2. As to outcomes achieved, with the active cooperation of Scottish Water, the process has led to a more thorough investigation and understanding of customer preferences than in the past or than would otherwise have taken place as part of a conventional price control review.
3. The process has changed Scottish Water's approach in a number of significant respects. For example, the company has been forced to think through more thoroughly what investments and improvements it is proposing and why; this in turn has influenced the kinds of projects it has focused on – with greater focus on avoiding sewer flooding, for example; Scottish Water has become aware of the need to explain its thinking and its Business Plan in a simpler, less technical and clearer way so that customers can better understand the significance for them; it has become more sensitive to the needs of customers in the context of present difficult economic circumstances; and as a result has become more open to a price control settlement involving a lower rate of price increase than it would otherwise have considered appropriate.
4. Several participants have suggested that the negotiated outcome was better than could have been achieved via the conventional price control process: more open discussion could take place without the regulator, and the outcome was not limited to what the regulator could prove was reasonable in the face of company resistance. Importantly, too, Scottish Water believed that earlier and mutual agreement would allow the company to plan and operate more efficiently than would otherwise have been the case. In the view of the participants, such factors have enabled a better deal for customers in terms of both price and quality of service.
5. The negotiations led to – or at least facilitated - some innovative variants on the traditional price control. The Customer Forum argued that a price control related to CPI was more relevant to customers than one related to RPI. It also argued that customers needed some reassurance on actual prices for the first three years rather than a commitment relative to an inflation index. And following policy and experience south of the border the parties agreed that it would make more sense to fold into the agreement the final year of the present price control rather than have a price increase followed by a decrease.[[28]](#footnote-28)
6. The agreement negotiated between the Customer Forum and Scottish Water reflected these considerations.

"Taking into account Scottish Water’s decision to limit the increase in household prices in 2014-15 to 1.6%, the Customer Forum and Scottish Water agreed that Scottish Water’s revised business plan would assume nominal price increases for household customers of 1.6% per year for 2015-18; an overall cap on household charges of CPI-1.75% for the regulatory period 2015-21; and increases in wholesale charges of CPI-0.3% per year for 2015-21. "[[29]](#footnote-29)

The WICS draft determination accepted and implemented this, although it tightened the overall cap slightly to CPI-1.8%.

1. I am rather interested in this combination of inflation-related and fixed-price caps. When I proposed, defended and applied RPI-X controls in the 1980s and 1990s, it seemed to me to offer a necessary reassurance to both customers and investors. I still think this is true in substance but it doesn't always seem like that to customers. When I was regulating the electricity sector I became very aware of the uncertainties involved – what future inflation would be, what levels of underutilisation of entitlement the different companies would build up, how far each company would choose to take this in any year, how they would divide any aggregate allowed increase across different products, and so on. Despite the RPI-X control it was very difficult to predict what prices companies would set. I note that negotiated settlements in the US and Canada, which do involve customers, are typically in money terms, holding prices constant for a specified period, albeit typically shorter than a five or six year UK price control. Bringing the Customer Forum into the price control negotiation process thus seems to me to have had a very useful outcome for customers in terms of the form as well as the level of the control.
2. This is also reflected in the form of the agreement between Scottish Water and the Customer Forum. It is not expressed as a typical price control document. Rather, it reads like a typical commercial contract. It does not spend time explaining and defending why particular options have been chosen. Instead, it focuses on saying what has been agreed, and precisely what each party is to do and when. It is intended to be operational from day one, to deliver what the parties have agreed, and to be capable of monitoring and enforcement.

**A competitive process for setting price controls?**

1. I am therefore led finally to reflect on whether experience with this particular Scottish price control review could have implications for price control reviews in sectors with many participants, such as the water and energy sectors (and possibly other sectors) in England and Wales.
2. Admittedly the Scottish water sector has certain distinctive features. Scottish Water is the only wholesale water company in Scotland (though there is competition at the retail level for business users), it is government-owned, and Scotland is a relatively tight-knit community with a well-developed sense of community and shared values. These factors may well have been conducive to the success of the project, though I myself am minded to think they were not essential. Indeed, the parallel experience with customer engagement in the England and Wales electricity and water sectors suggests that the enthusiasm of companies and customers to negotiate on business plans transcends market structure, ownership and cultural homogeneity.
3. I mentioned earlier that the recent price control processes in E&W looks like a single buyer model. What would competition look like in these sectors and how might it be more nearly achieved? It would still be in a statutory context in which the regulatory body makes the final decisions. Furthermore, UK experience to date suggests that customer representatives do not at present have the experience, time and resources to make informed judgements on cost of capital and scope for future efficiency improvements. Nor do the regulatory bodies feel comfortable in delegating such judgements to customer representatives. For the present, then, the regulatory body will offer guidance on what it would deem acceptable in terms of cost of capital and efficiency improvements. But there are many more potential dimensions to a price control, not least with respect to quality and reliability of service, incentive and performance-sharing arrangements, duration and so on. I suggest, therefore, that competition would be characterised by each water or energy company and its customer group seeking to reach agreement on such dimensions of the price control, in the light of the evolving offers and agreements reported in the water and energy sectors as a whole.
4. Could this work and what would kickstart the process? I am reminded of a remark made to me as we were opening the retail electricity market during the late 1990s. The chief executive of one of the regional electricity companies told me that he would rather like to sell his retail business, but he didn't know what a reasonable market price would be. At the time, there was no "market" in retail supply businesses. He didn't want to sell if it would shortly be revealed that he had accepted an unreasonably low price.
5. But after one or two transactions took place, "a going market price" soon evolved. (As I recall, it was somewhere around £250 per residential customer.) It then became easier for companies to decide whether, at that sort of price, they were buyers or sellers of retail businesses. Numerous further transactions took place, at varying prices reflecting a variety of different factors such as the size and profitability of the business, the nature of the customer base, the balance of investor preferences to enter or leave the market, and so on.
6. Could such a process of developing a going market price be envisaged for network price controls? Consider the present case of the water and energy sectors in England and Wales. We have already had processes whereby regulators have indicated in broad terms what they are looking for. In the light of this, each company has indicated the cost of capital, investment, efficiency savings, quality of service improvements and so on that it deemed reasonable. Customer groups have participated in this process, setting out their own views on these issues, and discussed and negotiated with the companies. Business plans have thus been developed and revised in discussion between each company and its customer group, in the light of regulatory guidance. And the regulators have now identified one company in each sector as having proposed a business plan that the regulator finds acceptable, including on the basis of support from its customers. The regulators have also indicated, in effect, the kinds of modifications that the other companies need to make to their business plans in order to be accepted.
7. But how far does the next stage of this process need to depend upon company and regulatory decisions alone? An "initial market price" has been established, by agreement between the company and its customer group and endorsed by the regulator. Would it not be possible for regulators to invite the remaining companies and customer groups to see whether they could reach agreement in the light of the business plans already on the table and the published regulatory decisions and guidance issued so far? I accept that it might be too late to introduce this concept in the present reviews, and there is surely much to learn from the ongoing experience of these reviews, particularly about the appropriate nature and extent of "regulatory guidance". But could it be considered for future reviews?
8. As companies and customer groups reached agreement, a concept of "the going market price" for a price control would evolve. This would be interpreted in broad terms, to reflect parameters such as cost of capital, efficiency improvement, quality of service and supply, and could vary with the particular requirements of particular customers, as in other markets. This is not to say that every company and customer group would reach agreement quickly, or at all. But it would become increasingly feasible for a company or customer group to justify (to its investors, to the media and to the regulator) accepting a deal in line with the going market price – that is, a deal that embodied comparable assumptions on cost of capital, efficiency improvement, quality of service and supply improvement – to those accepted by the regulator and by previous companies and their customer groups. And it would become increasingly difficult for a company or customer group to justify asking for something that was some way away from the going market price.
9. Not only "price" would be relevant, even expanded to include the various factors just mentioned. Experience shows that negotiation with customers puts all aspects of the price control in play: fixed prices, prices linked to a variety of indexes, profit sharing, duration of control, and so on. The nature of the price control itself is up for discussion. And just as in other markets, one would expect that an innovative development by one company or customer group, that proved attractive, would encourage others to match and beat it.
10. I have already noted above that negotiations in the Scottish water sector picked up on the proposals of some companies south of the border to combine the last year of the present price control with the forthcoming price control. Another example in the present review is that some water companies and their Customer Challenge Groups (CCGs) have agreed sharing arrangements for financial outperformance, depending on the outturn level of RPI. Once it is apparent that some companies have accepted such agreements, it would be possible for other CCGs to propose such agreements to their own companies. I conjecture that such comparative competition will make it more difficult for companies to reject such proposals, or will put pressure on them to come up with alternative options that might be mutually beneficial.
11. As a result of this competitive process, some companies and customer groups might reach agreement by virtue of the companies modifying their business plan assumptions to comply with regulatory guidance. Others might not reach agreement at all, which would necessitate a regulatory decision. Yet others might find novel ways of modifying the parameters or the design of the price control in ways that the companies and customer groups deemed mutually beneficial and preferable to the template proposed by the regulator.
12. Whether, when and where agreements would be reached, and what they would look like, would no doubt reflect numerous factors. These might include the relative simplicity of some businesses compared to others, the advantages of early settlement, the desire by some to be seen as leaders, differential company policies with respect to cooperation, the personalities of the business executives and customer leaders, the stance taken by the regulatory body, perhaps the nature and extent of political pressures etc. But all agreements would need to reflect a recognition of "the going market price" – the best terms offered and accepted in the market. At the same time the path of such agreements would begin to indicate possible directions of change for the market price in future. As in a competitive market, these might be different directions to meet the various preferences of different customers and different companies, all considering the various options on offer by others, rather than a uniform approach determined by a single buyer.
13. For avoidance of doubt, in the present statutory context any agreements reached between company and customers would need to be ratified by the regulator, or if necessary modified. The regulators would need to satisfy themselves and others that the customer engagement processes and outcomes, including their own forms of guidance, were consistent with their statutory duties. But this is equally true of negotiated settlement processes elsewhere. Most recently, the Draft Determination just issued by WICS is an example of how this consistency can be demonstrated and how WICS exercised its proper judgement throughout the process.

**Conclusion**

1. Finally, it might be asked: "What is the point of all this?" If RPI-X provided a workable form of price control thirty years ago that proved attractive in many different contexts and has since been developed in many different ways, why not just leave price controls to be determined by the regulators?
2. One reason, as almost universally accepted and as explained earlier, is that the conventional approach is a painful and costly process that does not necessarily lead to the best outcomes for customers or companies – or for regulators. There is a growing feeling that there must be another and better way.
3. I agree with this, but I have sought to argue an additional reason in this paper. The present price control process is limited by virtue of being a monopsony process: a single buyer model of regulatory design. A limited degree of customer engagement is already bringing some welcome customer focus, diversity and innovation to UK price control reviews. A further step in this direction would not only bring to the monopoly networks the benefits of negotiation and agreement. It could also bring many of the benefits of competition, such as innovation and improvement in the nature of price controls and regulation itself.
4. My own guess is that this would lead to some significant changes compared to usual regulatory practice. For example, I doubt that any customer group would say to its company: "We don't really mind what you do as long as the price reflects the cost – you choose". So menu regulation would soon disappear. Agreements reached in the UK and settlements elsewhere suggest that price controls would be shorter – maybe about 3 years initially but with the subsequent development of longer "framework agreements". There would be more sharing of financial out-performance, particularly due to factors outside the company's control. There would be more ongoing monitoring and discussion between company and customer representatives.
5. But all these are just my guesses: the point of the proposed process is not to substitute my guesses for the decisions of present regulators. Rather, it is to discover what companies and customer groups find mutually beneficial, and to learn from a greater variety of ideas than is possible under present approaches.
6. In summary, my suggestion is that we can have competition in designing and setting price controls. Competition is here understood as a rivalrous discovery process in which companies seek to gain the approval of customers for the price controls they offer. And the regulator's task, as always and as in 1983, is to promote such competition.

1. \* Fellow, Judge Business School, University of Cambridge, and Emeritus Professor, University of Birmingham. [↑](#footnote-ref-1)
2. Stephen Littlechild, "The birth of RPI-X and other observations", in Ian Bartle (ed), *The UK Model of Utility Regulation*, CRI Proceedings 31, University of Bath, July 2003. [↑](#footnote-ref-2)
3. David Parker, *The Official History of Privatisation, Vol I The Formative Years 1970-1987*, Routledge, Abingdon, 2009; *Vol II Popular Capitalism 1987-97*, Routledge, Abingdon, 2012. [↑](#footnote-ref-3)
4. Jon Stern, "What the Littlechild Report actually said", in Ian Bartle (ed), *The UK Model of Utility Regulation*, CRI Proceedings 31, University of Bath, July 2003, p 23. [↑](#footnote-ref-4)
5. Stephen Littlechild, "Ten Steps to Denationalisation", *Journal of Economic Affairs*, Vol 2 No 1 October 1981. [↑](#footnote-ref-5)
6. Parker (2009 pp 77-82) documents the development of thinking about privatisation within government and particularly praises the Central Policy Review Staff (CPRS) Report of October 1982. Unfortunately that CPRS Report (which was subsequent to my own paper) was not published. [↑](#footnote-ref-6)
7. E.g. my monograph *The Fallacy of the Mixed Economy*, Hobart Paper 80, Institute of Economic Affairs, London, June 1978, and in the final chapter of my textbook *Elements of Telecommunications Economics*, Peter Peregrinus Ltd on behalf of the Institution of Electrical Engineers, 1979. [↑](#footnote-ref-7)
8. "Companies which succeed in discovering and meeting consumer needs make profits and grow; the less successful wither and die." Michael Beesley and Stephen Littlechild, "Privatization: Principles, Problems and Priorities", *Lloyds Bank Review*, No 149, July 1983, pp 1-20, at p 4. [↑](#footnote-ref-8)
9. Key contributions to the concept of competition as a rivalrous process over time include JA Schumpeter, *Capitalism, Socialism and Democracy*, Harper & Row, 3rd edn, 1950 especially chapter VII “The process of creative destruction”; FA Hayek, “The Use of Knowledge in Society” *American Economic Review,* XXXV (4), 1945, 519-30, reprinted in Hayek, *Individualism and Economic Order*, Routledge and Kegan Paul, 1948; FA Hayek, “Competition as a Discovery Procedure” in FA Hayek, *New Studies in Philosophy, Politics, Economics and the History of Ideas*, University of Chicago Press, 1978; IM Kirzner, *Competition and Entrepreneurship*, Chicago University Press, 1973; IM Kirzner, “The Perils of Regulation: A Market Process Approach” in IM Kirzner, *Discovery and the Capitalist Process,* Chicago University Press, 1985; IM Kirzner, “Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach”, *Journal of Economic Literature,* 35(1), 1997, 60-85. Another recent and accessible succinct exposition is in IM Kirzner, *How Markets Work: Disequilibrium, Entrepreneurship and Discovery*, Institute of Economic Affairs, Hobart Paper No 133, June 1997, available at [www.iea.org.uk](http://www.iea.org.uk) [↑](#footnote-ref-9)
10. "... the Commission sees competition as a process of rivalry between firms or other suppliers ... seeking to win customers’ business over time". CC3, *Market Investigation References: Competition Commission Guidelines*, June 2003, para 1.16. "Competition is a process of rivalry as firms seek to win customers’ business." CC3 Revised, *Guidelines for Market Investigations: Their role, procedures, assessment and remedies,* April 2013, para 10. [↑](#footnote-ref-10)
11. Sir Derek Morris referred to “competition as quintessentially a process of rivalry through time” in “Dominant firm behaviour under UK competition law”, paper presented to the Fordham Corporate Law Institute, Thirtieth Annual Conference on International Antitrust Law and Policy, New York City, 23-24 October 2003. Peter Freeman remarked that “The process of competition is the means by which good ideas succeed while bad ones fail, well-run firms thrive while bad ones reform or perish, and a constant pressure for innovation is maintained” in “Investigating markets and promoting competition: the Competition Commission’s role in UK competition enforcement”, Beesley Lecture Series, 18 October 2007. [↑](#footnote-ref-11)
12. Littlechild (2003 pp 40-1) [↑](#footnote-ref-12)
13. Michael Valentine, *Free Range Ego*, Antony Rowe Limited, 2006, p 131. [↑](#footnote-ref-13)
14. "At a meeting with BT on 22 December 1982, Department officials suggested a compromise between the Department's two-tier rate of return regulation and Littlechild's proposals, namely 'an overall rate of return ... to be ended as soon as effective competition was established in the market – ie. probably by 1992 – and some formula on domestic tariffs such as the RPI-2% agreed for the Buzby Bond'. In other words, even before Littlechild's final report was submitted recommending the use of some form of price cap, the Department of Industry had already begun to consider the idea of a formula for domestic tariffs along the same lines." (Parker Vol I p 277) My notes say that on 23 December I discussed with the Department the possible application of RPI-2% especially to rural phones. (Littlechild 2003 fn 3 p 33) I doubt this was the first time I had raised the Buzby Bond formula with Department officials. It seems more likely that on 22 December they were responding to my previous interest (and Warburg's) than that the Department had initiated this option itself. [↑](#footnote-ref-14)
15. A point made by Valentine (2006), p. 131. [↑](#footnote-ref-15)
16. It took 22 years before Ofcom finally removed BT's original RPI-X retail price control in 2006. For an exposition of how retail competition was enabled in the electricity sector from day one, see Littlechild, "The creation of a market for retail electricity supply", in Eric Brousseau and Jean-Michel Glachant (eds), *Manufacturing Markets: legal, political and economic dynamics*, Cambridge University Press, 2014 (forthcoming). Previously issued as EUI Working Paper RSCAS 2010/57, European University Institute, Florence, July 2010). [↑](#footnote-ref-16)
17. Chris Bolt, "The future of RPI-X and the implications for utility investment in the UK", in Ian Bartle (ed), *The UK Model of Utility Regulation*, CRI Proceedings 31, 2003, pp 67-8. [↑](#footnote-ref-17)
18. I first talked about this new approach at a conference held a couple of months after the 20th anniversary conference. Consumer Participation in Regulation: stipulated settlements, the consumer advocate and utility regulation in Florida, Market Design 2003 Conference, Stockholm, 17 June 2003, *Proceedings* at www.elforsk-marketdesign.net. Subsequent publications on Florida included "Negotiated settlements: the development of legal and economic thinking", (with Joseph Doucet), *Utilities Policy* 14, December 2006, 266-277. "Stipulated settlements, the consumer advocate and utility regulation in Florida", *Journal of Regulatory Economics* 35(1), February 2009, 96-109. "The bird in hand: stipulated settlements in Florida electricity regulation", *Utilities Policy,*17 (3-4),September – December 2009, 276-287. [↑](#footnote-ref-18)
19. "Negotiated settlements and the National Energy Board in Canada", (with Joseph Doucet) *Energy Policy*, 37, November 2009, 4633-4644. "The process of negotiating settlements at FERC", *Energy Policy*, 50, November 2012: 174-191. "The Hunter Valley Access Undertaking: elements of a negotiated settlement" (with Stephen Bordignon), *Transport Policy* 24, 2012, 179-187. [↑](#footnote-ref-19)
20. "Transmission Expansion in Argentina 1-6", *Energy Economics*, 30(4), July 2008, 1367-1535. [↑](#footnote-ref-20)
21. Stephen Littlechild, Regulation of an increasingly competitive airport sector, paper submitted to CAA consultation by Gatwick Airport Ltd, 26 May 2013, available on EPRG website and on Gatwick Airport website. [↑](#footnote-ref-21)
22. "Like with a Lego kit, a prescriptive set of instructions for companies to build their business plans in line with may have been the easier option and would have resulted in a generic set of plans that look the same. We didn’t do this and we didn’t do this very deliberately because it has meant that companies have the opportunity, for the first time ever, to build a business plan that is right for their customers – we think that the benefits are worth it." Sonia Brown, Chief Regulatory Office, Owat, Keynote Opening Address, Water 2013, 13 November 2013. [↑](#footnote-ref-22)
23. Harold Demsetz, "Why regulate utilities?" Journal of Law and Economics, 11, April 1968, 55-66. [↑](#footnote-ref-23)
24. This was the SGBI conference held in London on 5 March 2009 on the theme *After RPI-X: What Next?* Speakers on customer engagement included Nick Fincham (CAA) on "Negotiation in UK airports price regulation", Kenneth Bateman (NEB) on "Negotiated settlements in Canada", Scott Thomson (Terasen Gas, Canada) on "Negotiated settlements from the perspective of a local distribution company", Jack Shreve (former Public Counsel [Consumer Advocate] in Florida) on "Regulation without regulators: delivering equity for all", and Tony Ballance (Severn Trent) on "Could constructive engagement work for the water sector?" These speakers and several senior attendees also participated in an informative discussion, which I chaired, at the conference dinner. [↑](#footnote-ref-24)
25. Letter from Alan Sutherland, Chief Executive of WICS, to Peter Peacock, Chair of Customer Forum 15 October 2012, reproduced in *Draft Determination*, Appendix 3. [↑](#footnote-ref-25)
26. *The Strategic Review of Charges 2015-21, Draft Determination*, WICS, 20 March 2014. [↑](#footnote-ref-26)
27. "An innovative approach that allows all stakeholders to have confidence that Scottish Water’s financial performance is consistent with its price determination and that the industry is in a financially sustainable position for the longer term." *Draft Determination* fn 4, p 10. [↑](#footnote-ref-27)
28. On 31 October 2013 the Ofwat chairman wrote to water companies noting the social and political concerns about water prices, urging that business plans embody price reductions over 2015-19, and pointing out that it was for companies to choose whether to implement price increase entitlements in January 2014 for the final year of the present price control. Two water companies proposed to bring forward reductions in bills to smooth changes in bills over six years rather than five, and others indicated that they were not taking up their allowed increases in 2014/15. "Ofwat is aware that other companies are considering whether to take their full allowed increase in prices in 2014/15." Water companies submit business plans to Ofwat, PN 11/13, 2 December 2013. [↑](#footnote-ref-28)
29. *Draft Determination* p 17. [↑](#footnote-ref-29)