

Promoting competition in challenging policy environments

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Central planning vs regulation

1. In the 1980s and 1990s I spent nearly 10 years working on the transition from central planning in the countries of Central Europe and the Former Soviet Union. Today, when I think about the way in which regulation has developed in the UK, I get all too frequent reminders of the manner in which central planning used to operate with, of course, the regulator as central planner.
2. For those who may be sceptical about the analogy, I would remind them that central planning was considerably more flexible than over-simple descriptions would imply. The problem of capture due to asymmetry of information and the almost universal obsession with investment – pouring concrete – are only two of a much longer list of parallels. Electricity generation in the UK is a clear example of the strengths or weaknesses (depending on your criteria) of central planning with a focus on politically-driven investment and regulatory arrangements created to serve a variety of non-economic objectives.
3. To extend the analogy it was always wrong to represent central planning as a competition-free zone. There was ferocious, though hidden competition, for the resources that could be handed out by planners. The planners in turn were trying to satisfy the demands of their political masters. This led to a strong bias to allocate investment to shiny new projects which were, of course, never operated or maintained properly. Innovation was not about the implementation of small, steady steps towards better performance but instead focused on giant leaps which were more likely than not to turn into a stumble

or falling flat on your face. But, “things will be different this time” was as seductive a tune for central planners as for politicians and regulators in market economies.

4. There was another crucial feature of central planning. It relied heavily on the under-pricing of natural resources and environmental costs – energy, minerals, water, air pollution, etc – and of capital. When the implicit subsidies for material inputs and capital were removed, many of the industries created by central planning could not survive. The transition was traumatic and is blamed by many on the “too rapid” adoption of market arrangements. That is simply wrong – the formerly socialist economies collapsed because they could not sustain the extravagantly wasteful use of resources and investment required to keep going as before.
5. I do not want to suggest that the state of regulated businesses in the UK is as bad as that in centrally planned economies in the late 1980s, but how many of the common features of central planning can be seen to a greater or lesser extent in the UK.
 - A focus on what the central planner or regulator wants, and thus on managing the expectations of planners & regulators.
 - A focus on investment and new projects rather than maintenance of existing capital and infrastructure.
 - A lack of knowledge about who or where your customers are and what they expect to receive from you – reinforced by large barriers to entry.
 - Reliance upon under-priced and/or privileged access to natural resources and capital.
 - Political pressure to make investments or sign up to targets whose costs are not known but which will be borne by customers, who, of course, have no say in the matter.
 - Etc, etc.

Private vs public

6. For many people there is an automatic association between competition and private ownership. This is an understandable perception given the origins and history of public sector ownership in the UK but there are much stronger traditions of competition involving public and private businesses in other countries. My Scandinavian friends at the World Bank used to defend vigorously the performance and competitive record of publicly owned companies. On the other hand, it is important to recognise that it is very easy for a situation to develop in which publicly owned companies have privileged access to capital and other resources.
7. In the academic studies that have been able to separate the influence of ownership and market structure, there is a fairly consistent finding that market structure is a more important determinant of efficiency and related measures of performance than ownership. The problem, of course, is that market structure is not truly an independent variable. Countries are rarely willing to expose publicly owned companies to competition unless either (a) their performance is pretty good anyway, or (b) their owners reach the point of despair about prospects of reforming public companies and choose competitive entry as a sink or swim method of forcing change.
8. Nonetheless, it is important to make the point that competition does not have to involve private ownership. I want to emphasise this point because the resistance to competition in the provision of health services or education relies heavily on this elision. A whole variety of ownership models such as mutual companies, non-profit organisations as well as public ownership and for profit private ownership can be reconciled with an open competitive market.
9. There is one consequence that I will come back to. One of disciplines of competition and private ownership is that some companies will go out of business. There is no point in glossing over this fact. A part of the point of competition is the penalty for failure. Yet in the case of network utilities or

key health and education providers the idea that businesses would just disappear is viewed as inconceivable. The error, of course, lies in a failure to distinguish between the ownership of the infrastructure or capital and the responsibility for operating and managing the assets. A key aspect of competition is a bankruptcy or resolution regime that can ensure the continued operation of assets while arranging a transfer of ownership.

The role of competition

10. Competition has always been seen by economists as the antidote to the tendency for regulation to revert to central planning, at least outside the limited scope of natural monopolies in network and related services. In practice, introducing and sustaining competitive markets has proved more difficult and the outcomes more nuanced than most of us expected two decades ago. Indeed, I suspect that a poll of general public opinion would roundly reject the idea that competition has benefitted the majority of customers for many infrastructure services – particularly energy and transport, though views about telecoms might be different.
11. To understand why the outcome of competition has been so equivocal we need to think about the factors that drive public perceptions and political responses. There are, I think, three main factors that underpin public scepticism about competition:
 - (a) Regulatory intervention has often been the vehicle for implementing public policies whose impacts on customers are neither transparent nor adequately explained. How many electricity customers know what the magnitude of the Renewables Obligation is in relation to their annual electricity bill? It is easy to blame the failures of competition for outcomes that are outside the control of individual companies.
 - (b) The belief, whether accurate or not, that resource markets are dominated by oligopolistic behaviour. This is not unique to regulated

industries: refiners and oil retailers have frequently been accused of being quick to raise prices and slow to reduce them when market conditions change.

- (c) A failure by regulated companies to understand and respond to the situation of their customers. This is reinforced by relatively high transaction costs for customers who wish to move to a supplier, partly as a result of this failure but reinforced by contractual arrangements. The grocery market is dominated by a small number of large operators, but no one doubts that Tesco cares about what its customers think and operates on the principle that “we know you have a choice of suppliers”.
12. These considerations are important when it comes to examining whether and how competition should be extended into areas that are currently regulated. In particular, it is very dangerous to view the introduction of competition as a (partial) mitigation of externally driven changes in policy that will increase core prices for a resource. As an illustration, there is little doubt that sooner or later it will be necessary to recognise the different scarcity values of water when charging for water abstraction in different parts of the UK. Experience tells us that it could be a mistake to combine this with a move to introduce competition either for resources or in downstream markets. A ‘big bang’ approach may be attractive when viewed in simple economic terms, but the costs of disruption caused by a combination of structural changes in markets are easily under-estimated by advocates of change.
 13. A separate point that I would emphasise is that, following Hayek, competition is both a process and a frame of mind. Anyone who has read an introductory economics text can easily gain the impression that competition is all about static efficiency. A more sophisticated version of the same model in comparative economics is that it is the key to the efficient flow of information, leading to analyses of the role of quasi-price signals in planning models.

14. None of these really capture the dynamics of competitive markets. The key feature is continuous, often incremental, innovation. No one really knows what products and services customers will value and what are the best ways of meeting their needs, so a process of experimentation is required to learn what works and what does not. That is why the range of goods and services on offer today are substantially different from those offered in 1961 or 1911. Further, few of the companies that were large 50 or 100 years ago remain so today and many have not survived at all. The pressures of innovation and competition mean that the benefits of innovation (often more than 90%) accrue to customers rather than companies or their shareholders.
15. This is where the idea of competition as a frame of mind comes in. Adam Smith and many others have pointed out that ensuring competitive markets function and are maintained involves a delicate balance. Public discussion today focuses on the role of regulation in minimising economic risks, but it is important not to get the balance wrong. It is easy to point out the risks of removing and changing regulatory interventions, but economic history and experience show us that the benefits of competitive innovation may greatly outweigh the costs and risks of change. The nature of competition means that we cannot predict how these benefits will arise, but we can be reasonably certain that they will be realised.
16. “Always keep ahold of nurse, for fear of finding something worse”. Hilaire Belloc’s aphorism expresses the precautionary principle much better than bureaucratic language. It is this reliance upon the familiar that a commitment to competition in its broadest sense must counter.

Access to natural resources

17. As I have mentioned, the reported performance of public companies has often been overstated because they have benefited from privileged and under-priced access to natural resources. Far too often the resource rents from oil and gas are dissipated by downstream operations which could not survive on

their own in a competitive market. The consequence is that governments are reluctant to expose such operations to competition under which they have to pay the market price for the resources that they use.

18. This is not always the case. Hydro-electric or geothermal power in Iceland or Siberia is genuinely low cost because the only way of transporting it economically is embodied in electricity-intensive products such as aluminium ingots.
19. In the UK, a clear case of under-pricing natural resources is raw water. No one can believe that the value or opportunity cost of raw water is the same in Central Wales or Argyll as in Cambridgeshire or East Lothian. The consequence is that we have a string of regulatory and bureaucratic measures designed to fill in the gap left by an unwillingness to deal with the consequences of this basic fact. It goes further because differences in the values of return flows are not recognised. When dealing with wastewater everything is driven by environmental standards, but these are no more than another element of central planning designed to address a small part of the larger picture. That larger question is: how should we manage both abstraction and discharges to meet our goals for maintaining the quality and quantity of river flows?
20. It is my view that a failure to attach some price to the use of water resources will compromise the effects of competition in the water sector – immediately but as it develops over the longer term. However, there is also a danger that the best may be the enemy of the good in this area. There has been a rather inconclusive debate about opportunities for trading abstraction licences in the UK with reference to various trading regimes in Australia, Chile and other countries. The reality is that none of this is going to go very far without basic legal changes in the property rights associated with such licences. Such changes are controversial and seem not to be close to any list of priorities for legislation.

21. While the Environmental Agency may be restricted in what it can charge for abstraction, it is not obvious that regulatory agencies are unable to act on the basis of proxy incentives. In this context, it is important to recognise that measures to put a value on water abstractions are not really about using the price mechanism to encourage better water use by the majority of final consumers – unlike the energy industry. Under any regime water bills will be dominated by the cost of treatment and network infrastructure. Given what we know about price elasticities and the structure of water service costs it is a fallacy to believe that abstraction charges will have a significant impact on water consumption.
22. However, recognising the value of water as a resource can have a significant impact on the design and operation of water and wastewater systems – from water treatment to network leakage to return flows from wastewater treatment. There are a whole variety of trade-offs – both within and between water & wastewater companies - that could and should be managed differently. This would extend to large users if a separate resource charge were made for net water use.
23. As a general principle I am very hesitant about suggesting that regulatory action is required to substitute for market failure or the absence of market signals. Like any other area of government intervention, regulatory impositions have significant costs that are rarely transparent or even acknowledged by those who believe that they are acting in the public interest. Nonetheless, the failure to price water resources properly is a huge market failure that inhibits any proper balancing of economic and environmental concerns.
24. It would, I am sure, be feasible to introduce a mechanism designed to share the benefits of better management of water resources between operators and environmental improvements. In the longer term this would benefit customers because there is a substantial risk that pressures to improve water quality in key rivers will lead to large investments in water or wastewater

projects which are not cost effective methods of improving environmental quality but appear to be the only way of achieving specific goals.

The cost of capital

25. One of the most characteristic features of central planning was the view that investment resources are scarce. Control over the allocation of investment resources was central to the exercise of power by planners. At the same time, capital was used with the most profligate way by favoured enterprises and projects. The reason was that once projects had been approved there was little interest in ensuring that they were implemented in a cost-effective manner or in monitoring the return on capital more generally. A routine discussion that many dealing with utilities and other businesses in centrally planned economies will have experienced ran along the following lines.

Adviser - Why don't you maintain or renovate your existing plant and equipment?

Manager - Well, what we really need is a major investment in xxx.

Adviser - But any equivalent operator in Europe/the US/etc has much older equipment and gets much more out of it.

Manager - No, that will not work here; it is essential that we should invest in the latest technology.

Adviser - But you can't operate and maintain it properly....

26. There is something of the same problem in regulated utilities. In many circumstances the effective cost of capital is simply too low. This is really what people mean when they refer to a "capital bias" in the choice of technologies and the management of network operations. To the extent that it exists, the reasons for any bias towards capital-intensive solutions lie in the structure of incentives operated by regulators together with an increasing marginal cost of capital.

27. Dieter Helm has argued that under current regulatory arrangements which protect the RCV of companies the cost of financing network infrastructure which is in place should be little more than the government bond rate. That is only part of the story, because there may be significant risks involved in constructing and operating new infrastructure and this has to be compensated. We can see this in arguments over the re-financing of PFI contracts.
28. The crucial point is that our regulatory arrangements (largely) reward utilities for having large amounts of capital invested in network infrastructure. This is perverse. If the average cost of capital is genuinely low, then we should find a way of rewarding companies for the manner in which they deploy and operate network assets, which would include the quality and nature of service to customers. On the other hand, if the marginal cost of capital is considerably higher than the average cost, then we should find ways of ensuring that this is reflected in the trade-offs between operational expenditures and investment.
29. In this respect, the Anglo-Saxon model of private utilities is far from optimal. In countries where concessions, franchises or management contracts are the norm it is possible to devise better ways of rewarding the performance of utility operators. Of course, there are disadvantages – in particular the perennial fear that concession operators will neglect regular maintenance or favour the management of new investment projects in order to boost their returns. However, having dealt with many different systems in practice I am not convinced that regulatory incentives in the UK are any better at avoiding these concerns. On the other side, regular competition to retain concession contracts can do wonders to change management attitudes and operational performance.

Economies of scope and scale

30. Another feature of central planning which is reproduced in regulated businesses is an overriding concern with taking maximum advantage of economies of scale and scope. This is reinforced by the focus on investment, so that decisions are driven by a preference for large, capital-intensive, projects that are assumed to be the best way of achieving economies of scale. It is often argued that competitive arrangements will lead to sub-optimal scale or scope and under-utilisation of capacity.
31. This logic can be seen most clearly in health services where it is used to justify concentration on large hospitals that are supposed to be operated at something close to 100% capacity all of the time. The fact that this imposes heavy costs on both customers (patients) and staff is simply ignored, because capital is assumed to be scarce and everything must be done to extract the maximum return from investment in facilities and equipment. The other side of the story is that there are huge diseconomies of scale in operating large institutions because of their inflexibility, so that any benefits of more efficient use of capital are vastly outweighed by problems of coordination and the inefficient use of labour inputs.
32. The same behaviour is apparent in many regulated utilities. In water, for example, it is correct to note that there are economies of scale in building and operating water & wastewater treatment plants, but most of the evidence suggests that these are minor above a scale required to serve a population of 50,000 people (or equivalents) and exhausted above 250,000. Yet, the water company serving Rio de Janeiro has a water treatment plant capable of serving 8 million people (in effect a fairly large river – about 45 m³ per sec) because they thought that this was the most efficient use of capital. And they wanted to increase its capacity by 50%! The same company was barely able to manage its billing, network operations, etc and was completely unwilling to acknowledge the risks of relying upon a single tunnel and transmission system from its treatment plant to the city.

33. This is an extreme example but it serves to make a simple point. We all know that centrally planned economies put the interests of producer way before the interests of customers. Despite the rhetoric there is a strong tendency for the same to apply in regulated businesses if there are no opportunities for entry and competition to correct the balance. The history of monopoly nationalised industries casts a long shadow, not only in the businesses themselves but in the attitudes of the public and politicians.

Know your customer

34. As some of you may be aware, the WICS introduced retail competition for water and wastewater services in Scotland 3 years ago. The retail arm of Scottish Water – Business Stream – was separated from Scottish Water and operates at arms-length from its parent company. Indeed, it could be transformed into an entirely independent company if the Scottish Government, as the shareholder, chose that option. Scottish Water operates as a wholesale supplier of water to retail businesses and all of the RCV is located of the water & wastewater business is allocated to Scottish Water.
35. The process of retail competition in Scotland is still a work in progress. It has recently been extended to cover various aspects of the management and monitoring of trade effluent. The number of new entrants to the retail market is relatively small, but there is no doubt that Business Stream is considerably more efficient than the former retail operations of Scottish Water and the level of customer satisfaction is generally high. Overall, there are a variety of detailed lessons that can be learnt from this experience, which Alan Sutherland – Chief Executive of WICS – has discussed in various papers available from the Commission’s website. I will focus on two important messages for regulated businesses more generally.
36. One of the worst features of both central planning and regulated businesses is the failure to understand and respond to the concerns or needs of customers. In part, this is because all too often regulation blurs the issue of who is the

customer. When, unfortunately all too often, I travel through a BAA airport I consider that I am a BAA customer and the apparent inability of the company to operate in a manner that take account of the interests of airline passengers is infuriating. On the other hand, looking at it from BAA's perspective I am not the customer – the airline is and airlines are often not very interested in my experience on the ground provided that I don't decide to travel by another route. This is a failure of regulation as much as of BAA.

37. One big lesson from the Scottish retail experiment is that price is not everything. Of course, we all know that from our personal behaviour but how often is that really embedded in regulatory actions? Business customers in Scotland have not just been interested in obtaining the lowest price for water services. Many of them have opted to pay somewhat higher prices for a bundle of water and additional services which offer convenience, reductions in general operating costs, etc. This is what I mean in referring to the need to know your customer.
38. When I look at the problems that have arisen in the energy sector in the UK and compare them with what has happened in other countries, I conclude that a huge mistake was made during the early period of privatisation and regulation. In most countries that I worked with we insisted that any privatised company, concession, etc had to carry out a detailed census of both its connections and its assets within, usually, 5 years of the structural change. This had to be accompanied by updated and much more accurate billing systems. That was not done in the UK, either because it was thought to be unnecessary or too expensive. Yet the level of public ill will that has been engendered as a consequence of repeated failures to get records of connections/meters and billing correct has been enormous and represents a continuing sore more than 20 years after privatisation.
39. There is a cultural issue here. Often, it seems that regulated industries view customers as a nuisance. From this perspective the serious business lies in asset management, investment and upstream operations. No one in Tesco

would take that view and there is no excuse for it in energy or water. The customers pay the bills and just because an industry is regulated is no reason to give less weight to their concerns. Of course, it may be difficult for regulators to monitor levels of service and customer satisfaction rather than bills or the completion of investment projects, but we have to try harder to devise ways of measuring quality of service.

40. This is why retail competition is so important. The portion of the costs of providing water services that is linked to the retail end of the business is quite small, so the direct benefits of competitive pressures on the cost of providing retail services are necessarily modest. What is much more important are the potential benefits of finding out what customers want, what they are willing to pay for, and how their needs or wishes can be met most effectively.
41. Learning about how to make competition work in the non-residential sector does not mean that retail competition for residential customers must follow. That is a political decision and the sentiment in Scotland against it is very strong. Even if that sentiment were to change after the impact of non-residential competition has been assessed, there are other elements of water services where the balance of risks and rewards of competition might be more favourable.

Failure & resolution regimes

42. Competition will inevitably mean that there are failures as well as successes. The argument that is used against competition in health, education and sometimes utilities is that we cannot contemplate the possibility that community or region would be left without vital services because their operator has failed. We know that this argument is spurious. Railway services did not cease when Railtrack was put into bankruptcy or East Coast Trains gave up its franchise, because a regime of special administration was quite effective in ensuring that key operations continued.

43. There are some lessons about company failures that might be learned from concession regimes around the world, where failures are far from unknown. Many concession contracts require that operators post bonds that are intended to cover the costs of special administration in the event that the operator gets into difficult. There is a further element to such bonds. Banks may refuse to renew bonds if they believe that there is a significant risk that a company will fail. This can be seen as a warning mechanism for both operator and conceding authority.
44. It is rarely the case that company failures are totally unexpected. More usually, the difficulty is that failure is resisted for too long with measures that undermine either investment or quality of service. Instead it would be better if prompt action is taken either to transfer the licences/concessions of regulated companies that run into difficulties or to bring in new capital and management. If bonds can facilitate this process, then they should be considered. Indeed, in 2004 the then Department of Trade and Industry produced a paper on the risks of gearing which discusses special administration but mainly from the perspective of costs to the taxpayer.
45. There is another area where there is a major problem, which concerns the liabilities of pension funds. I gave a talk on this issue at an RPI workshop in 2009 based on accounts up to 2008. An updated version of my paper is due to be published later this year. It shows that the situation has deteriorated markedly since 2008. In March 2010 there were several regulated companies whose net pension liabilities, properly calculated, exceed 100% of their shareholder equity.
46. Regulators have taken different views of how, if at all, they should take account of pension deficits in setting regulated charges, but any clear strategy is hindered by an almost complete lack of transparency about the scale of the deficits and their potential implications. For example, Ofcom undertook a review of BT's pension deficit and took a distinctly unsympathetic position. Unfortunately, most of their analysis was based upon misleading financial

information because of a difference between accounting and regulatory/legal standards.

47. In practical terms, there are a significant number of regulated utilities whose pension schemes effectively control the companies. However the deficits are addressed, there is a strong chance that this will constrain the capacity of companies to finance investment. Equally important in the present context, it may strengthen their resistance to opening up activities to competition, since maintaining monopoly control is a convenient way of taxing consumers to cover liabilities associated with past pension promises.
48. There is no simple solution to the problems of utility pension deficits. Still a strategy of ignoring the problem and hoping that it will go away will not work, since the situation is getting steadily worse. Most utility pension schemes are mature and will not be rescued by an upturn in equity markets. It would be better if regulators were to require companies to face up to their problems and propose how they intend to address them.

Conclusions

49. I have touched upon a wide variety of themes. To conclude I would like to emphasise two central points:
 - (a) For regulators: Competition is not about static efficiency. Improvements in efficiency are nice but they will be swamped by any benefits from opening up services to innovation. Attempts to constrain the scope of competition may significantly reduce the dynamism that should characterise competitive markets and should be resisted.
 - (b) For companies: Know your customer. The companies that are most likely to benefit from competition are those which make a serious effort to invest in customer relationships. The most effective marketing tool is to understand and respond to the needs and priorities of customers.

This should be obvious, but how many companies in the energy market have really learnt the lesson?

50. Introducing retail competition for water services has been hard work and it involves a significant initial investment. In particular the quality of IT systems is critical. But it has generated significant benefits for customers and, I believe, even for Scottish Water. We have every reason to expect that these benefits will increase in future and I would hope that more companies will come into the market.
51. My final lesson from central planning concerns the orphan child of network utilities in the UK – metering. You cannot know your customer unless you know who and where they are. Yet, attitudes in the UK to installing and reading meters or in using meter information in energy or water have more in common with Poland or the Soviet Union of the 1980s than with practically any market economy that I know. Even today the old nationalised monopoly spirit prevails. Reading meters and sending out bills is a costly nuisance, not an integral part of the business. This attitude infects billing practices and a whole range of other dealings with customers.
52. The story of smart electricity meters provides an illustration. UK electricity are being pushed reluctantly into installing them and will take 8 or more years to do so. Enel installed them for its own reasons and at its own cost over a much shorter period and it is hardly a leading edge network operator.
53. My point is simple. Meter reading and billing are central elements of any customer relationship and lie at the heart of a competitive market. Companies that can't – or won't – get this right should be penalised heavily by regulators, because they cause so much damage to the public reputation of competitive arrangements. There is a precept that the tax authority of another country tries to teach its staff - get it right first time. That is equally applicable to all matters of billing for UK network utilities.