The scope/limits of incentive regulation

George Yarrow

Chairman, Regulatory Policy Institute

www.rpieurope.org

What are we talking about?

- All regulation affects incentives.
- Examples:
  - Averch Johnson effect in rate of return regulation.
  - More generally, cost padding incentives in pure cost of service (CoS) regulation.
  - Incentives to degrade quality of product or service under pure price-cap regulation.
- So what are we getting at when asking whether incentive regulation *"is more a complement than a substitute for traditional approaches to regulating legal monopolies"*.
- Roughly: can we do much better (in promoting the relevant, high level policy objectives) than cost of service approaches?

Economic points relevant to the discussion

- Regulatory credibility and uncertainty
  - Regulatory credibility: companies fear the (*ex* post) appropriation of quasi-rents associated with sunk investments. Since incentive arrangements affect company returns*, such arrangements are a potential means of opportunistic rent appropriation*. How can regulators commit to <u>not</u> using incentive schemes for this purpose?
  - Regulatory uncertainty: regulatory uncertainty occurs when decisions are not "contingently predictable". Future circumstances are inherently uncertain, but, *<u>given</u> a particular set of circumstances*, regulatory certainty implies that observers will be able to predict, with reasonable accuracy, how the regulator will decide matters in those given circumstances. Ever changing (unstable) incentive schemes are a potential source of regulatory uncertainty.

Economic points relevant to the discussion (cont.)

- Information and incentives:
  - Monopolised markets tend to suffer from informationally poverty. This implies that the information that informs the setting of incentives for regulated firms is also poor. (The effects of limited information on on incentives are not confined to monopolies, however: see banking bonuses.) 'Incentive setting' is an economic activity in is own right.
  - Regulatory agencies can lack both the incentives and skills required for the effective conduct of this activity (setting of incentives for others).
- Justiciability (required for effective supervision):
  - How easy is it to decide whether a regulator is acting reasonably when determining a particular incentive structure?
  - Analogies with contractibility issues in contract theory and practice, and with competition law attitudes to 'excess prices'.

Why cost of service regulation?

- Useful first to look at the positives of CoS regulation.
- These are chiefly associated with the value of 'objective' measures and procedures in a context where matters are being decided by the exercise of state (monopoly) power.
- Important to recognise that there are two monopolies involved.
- We (the people) want to constrain/limit potential abuses of power by both; and limiting the power of government and its agencies has typically been the much higher priority task in countries such as Australia, NZ, the UK, and the US.
- Juvenal's(?) question is ever relevant: *Quis custodiet ipsos custodes?*
- CoS regulation, based on backward (not forward) looking cost data, possibly indexed, makes for easier monitoring of the 'guardians'.

The regulatory remit

"The dilemma faced by Congress in establishing regulatory agencies is that a dual purpose is envisioned. Regulatory agencies must be accountable to the Congress or the Executive and represent an exercise of congressional or executive power. However, it is desired that the regulatory issues proceed fairly, that they accord individuals the due process of law, and that their decisions are consistent with judicial review. Unfortunately, achieving these two purposes within a single agency may be inconsistent or problematic at best."

Daniel Spulber, *Regulation and Markets*, MIT Press, 1989.

What regulators do, and the supervision of it

- *"The multiple goals that Congress attaches to the regulatory process has resulted in a broad range of powers for regulatory agencies and diverse instruments for carrying out the agency's mandate. ... Thus, the powers and procedures of regulatory agencies resemble those of the legislative, executive and judicial branches of government. It has frequently been pointed out that this combination of functions violates, at least in principle, the constitutional objective of separation and delegation of powers."*

  Daniel Spulber, *Regulation and Markets*, MIT Press, 1989.
- In other words, there is a very difficult agency problem here, which is a source of constraints on what regulators can do in terms of setting incentives for regulated companies.

Regulatory cultures: evolution in the UK

- Lesson of regulatory history: people matter, cultures matter.
- UK post-privatisation regulatory cultures were influenced by context: transition from public monopoly to regulated private monopoly plus (crucially) market opening where feasible.
- Dynamic and relatively un-bureaucratic.
- Waverman on Ofgem: on North American experience, expected to find another public bureaucracy, but found something closer to a university: hard headed intellectualism.
- BUT ... times change. More markets and freer markets imply more rules (a shift from fiat to rules-based systems is inherent to the transition), and the cultures of the regulatory agencies were bound to change.

The impact of legal constraints

- The ‘more rules’ evolution applies to networks, even when they remain monopolies, because network users are no longer monopolists, and network decisions have effects on competition downstream.
- Network rule-books are necessarily complex, and are another source of constraint on the setting of incentives, which tends to be ‘(anticipated) outcome driven’.
- There is a general tension between management of processes – rule-making, enforcement, adjudication, etc. – and purposive regulation focused on outcomes and targets.
- Major problem in UK has been resistance to the trend:
  - from regulators who tend to lose some of their discretion, and
  - from politicians, who tend to be outcome/target-driven creatures.

Adverse developments ... at just the wrong time

- Regulatory resistance to legal advance has not led to economic Camelots, where enlightened economists set incentives to maximise economic welfare.
- Rather, what we see in the UK is re-politicisation and executive/managerial/bureaucratic – rather than legislative or judicial – cultures in the ascendancy.
- Ironically, what we get is much more incentivisation, but *unstable* incentivisation, driven by today's political agendas.
- The developments have led to increased regulatory uncertainty, which is bad for investment, at a time when new investment embodying new technologies in networks is a policy priority (see Newbery).

How might a Martian visiting London see things

- On the basis of observed behaviours, the likely conclusion of a visiting social science could well be that *"the principal objective of regulators is to convey a good impression of themselves."*
- Making good decisions and running decent processes are sometimes (and sometimes not) means to this end.
- So are spin and news management.
- Example, RIIO:

  Regulation = Incentives + Innovation + Outputs

  "Regulation is equal to ....." No it (quite manifestly) isn't!
- Will look at RIIO, but first examine the previous regulatory philosophy of Ofgem.

The regulatory balance: looking backwards, looking forwards

- What's done is done, and shouldn't be undone: keeping commitments is a cornerstone of good incentives.
- Marshall's law: don't mess with the RAV.
- Has made UK energy regulation relatively litigation-lite, and asset valuation issues relatively simple (stress *relatively)*.
- Compare with telecoms: forward looking, subjective asset valuations influential in price determination.
- The approach limits/constrains development of incentives with substantial downside risk for companies. Major upside potential is less immediately constrained, but restricted in practice by perceptions of implications of regulatory duties towards consumers.
- Incentive arrangements are complementary to the basic 'compact' in relation to past capital expenditures.
- In practical terms, expected rate of return = cost of capital + a little, and it is the '+ a little' that provides room for added incentives.

Still leaves considerable potential for incentives

- In relation to past investment, there is a typically high degree of asymmetry in the respective power of the parties (regulator and regulated firm). Hence conservatism in approach.
- The asymmetry is typically less in relation to forward looking investment: the bargaining positions are less unequal.
- Therefore more scope for stronger incentives and a regulatory focus on incentives for *incremental , forward looking* decisions, *where they do not have the effect of undermining past commitments.*
- Roughly: the past is a done deal, the future is open to negotiation. Arguably the clarity of the commitment to the past -- don't mess with the RAV – actually facilitates incentive regulation.
- *Crucially, the '+ a little' is calculated on the basis of the RAV as a whole, implying significant potential funding available for incremental incentives, without threatening past commitments.*

RIIO: what's new, and what's not new?

- RIIO is the rebranding of a two-year project, originally labelled as *RPI-X@20*, which was originally intended as a (sensible) stocktaking exercise as the adoption of RPI-X regulation, following the original Beesley/Littlechild advice, approached its 20th anniversary.
- Part of the rebranding has been to seek to draw sharp distinctions between the old regulatory ways and new, proposed ways, but a lot of nonsense is involved in this marketing exercise.
- Useful discussions from 'insiders' not prone to excessive spin are: Steve Smith's 2010 Beesley lecture (Smith was the managing director of Ofgem who ran the project) and Cloda Jenkins's Florence discussion paper (Jenkins was head of the RPI-X review team), both available on the Regulatory Policy Institute's website (www.rpieurope.org).

Things not changing

Smith: *Two bedrocks of RPI-X remain:*

Revenue is ... where Ofgem have kept much of what was good in RPI-X – there will be an ex ante revenue allowance that is designed to reward timely and efficient delivery, ensure network companies are financeable and balance the costs appropriately between present and future consumers. This will continue to be based on the current building blocks including the use of the Regulatory Asset Value of RAV. The major difference here will be the length of the control where Ofgem want to move from the current 5 years to 8 years with a tightly specified mid-period review to look at whether the required outputs have changed.

And incentives are similarly simple but no less important. Ofgem want to maintain the incentives that RPI-X has created and provide appropriate reward and penalties for owners of the business for outperformance and underperformance respectively. But Ofgem want to make sure these incentives represent good value for customers.

Comment: looks rather like RPI-X!

Changes: the length of the price control period and other incremental adjustments

- Shift from five-year price control period to an eight year period, *but with provision for a review after four years.*
- Forbearance is promised in relation to the four-year review, but how credible is this? Eg. Ofgem interventions into retail energy markets have grown in scope and are now more or less continuous – compare with earlier promises of simplification and a shift to reliance on general competition law. It will depend on the politics, which are not reliable.
- Other incremental adjustments to RPI-X:
  - Move toward economic depreciation, to replace past 'fudges'.
  - Fast/slow money: a fixed proportion of expenditure will be expensed.
  - Greater use of rate of return on regulatory equity.

Contractualisation: new or old?

Smith: *I will start with outputs – the regulatory settlement will be built around a clear and transparent "contract" – and before I get picked up by any lawyers in the audience this is not a legal contract and might be better describes as a "compact" - and I use it of what the networks are required to deliver in return for the right to collect allowed revenue from customers. These outputs will be informed by enhanced engagement with customers who use the network.*

Again, those of you with long memories may say – so what's new? – the quest for outputs stretches all the way back to the second MMC report on British Gas which proposed this as the solution to the then emerging problems of dealing with capex under RPI-X.

Contractualisation: mixed results

- Sequence of regulatory decisions, starting in the 1990s,encouraging contractualisation of relationships *between network services providers and network users,* usually involving the creating of new rights for users and associated incentives for the network providers (providing upside potential for companies, as well as penalties for failure to deliver).
- Note that this is not equivalent to the old notion of a regulatory bargain *between regulator and regulated*: the focus is more on users' rights.
- Examples: gas storage capacity, gas entry capacity.

  See Yarrow, *Capacity auctions in the UK energy sector*, Utilities Policy, 2003.
- Mixed results: range from very positive gas storage capacity developments to escalating systems operation costs in electricity, associated with the strengthening of transmission access rights for Scottish generators at the time of the integration of the Scottish system with that of England and Wales.
- A general problem: *"it is very difficult in practice to determine a set of outputs"* (Smith).

RIIO: less incremental changes

- Fast tracking of price reviews (eg. 6 months instead of 18 months) for companies with good performance in the past, well evidenced business plans, good customer engagement, etc.
  - But issues of due process still to be resolved – eg. challenges to regulatory decisions on fast-tracking.
- Greater role for third parties in the provision of new infrastructure, particularly where projects are large and separable.
  - although this too is a development of existing policy (eg. in relation to offshore wind transmission capacity) it represents a substantial broadening in the scope of the policy.
- Innovation funding arrangements, which will again allow third parties, as well as network providers, to compete for funds.
  - Seeks partly to addresses a major defect of the price control system – its failure explicitly to provide incentives for investment in intangible assets – although the funding arrangements will be outside of the price control process.

Concluding thoughts

- It is best that the limits on what can be done, arising from the various factors discussed be fully and explicitly recognised. However smart they may appear, economic policies based on delusions usually turn out badly (see the credit crunch).
- In regulation, it should be recognised that we cannot replicate the incentive properties of a competitive market. That is because (a) information conditions in a competitive market will be different (and generally much richer), as a result of (b) its central dynamic, which is rivalry to discover better ways of serving customers, and (c) public regulation is a monopolistic activity, subject to constraints aimed at preventing the abuse of power exercised by regulators.

Concluding thoughts (cont.)

- On a slightly more positive note:
  - *"Although regulation that stands as a substitute or surrogate for competition can never replicate the properties of a competitive process – for the simple reason that the central dynamic, rivalry, is missing – it is at least possible to ask whether regulatory processes are creating incentives that encourage companies toward the positive outcomes that are implied by the notion of workable/effective competition."* Yarrow, Cave, Pollitt and Small, Report on Asset Valuation in Workably Competitive Markets for the NZ Commerce Commission, May 2010.
- Keep the focus on doing *necessary* things, do them well, and don't expect too much (consistent with there being good reasons for thinking that competition, where feasible, is usually strongly preferable).