Competition Policy versus Regulation in Electricity Systems – Determining the Boundary

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Overview

• Presentation drawn from an evolving paper, Meade (2008):

   Demarcating Electricity Sector Regulation and Competition Policy over Time: The Efficiency of Institutional Change

• Begin with stylised characterisations of:
  – Competition Authorities (CAs)
  – Regulatory Authorities (RAs)

• Briefly set out factors affecting demarcation between CAs and RAs → the Competition-Regulation (Comp-Reg) Boundary

• Apply the ideas to New Zealand’s electricity sector reforms

• Not offering a simple prescription re the appropriate boundary – focus is on how institutions can affect it settling in a good place
Competition Authorities

- Created to protect competition for benefit of consumers (often as a key component of liberalisation)

- General sector coverage, limited brief, and mainly economic/legal skills

- Often have history/precedent to call on, and independence

- Discrete, *ex post* intervention – enforcing existing laws against firms’ past actions (except merger clearances)

- Prefer structural remedies over behavioural (e.g. breakup)

- Permanent (no sunsets)
Regulatory Authorities

• Often set up for distributional/social objectives, or as substitute for competition when competition is not workable – e.g. arising as consequence of liberalisation

• But sometimes created to preclude competition or do so unintentionally (triggers for liberalisation/RA reform) → pro consumer focus not necessarily a given

• Sector specific, wide brief, ex ante rule-making, and ongoing monitoring/control (though perhaps with sunsets/reviews) → can give rise to inflexibilities/uncertainties

• Can have sector skills/information, lack of history/precedent/ independence, and can create new obligations (applying to firms’ subsequent actions)

• Prefer behavioural remedies over structural (e.g. CPI-X)
Factors Affecting Demarcation

• Easy, it seems:
  – CAs are good at things that are more generalist, sporadic, ex post, less information-intensive, efficiency-oriented, … (i.e. competition policy)
  – RAs are good at things that are more specialist, ongoing, ex ante, multi-objective, information-intensive, distributional, … (i.e. regulation)

• Though sometimes it may be better for CAs to do RAs’ jobs if “time consistency” (i.e. regulatory opportunism) is a problem – as it will be for industries with large, long-lived and sunk investments

• More interestingly, how do we explain changes in the Comp-Reg boundary over time …
Demarcation Factors – cont’d

• Is a question about institutional change:

  Aoki (2004): Institution = self-sustaining shared belief

• Some causes of institutional change:
  – Exogenous – e.g. “shocks”, or “focusing events”, such as:
    • Technology – e.g. advent of mobile telecommunications, or a D-shackle failure at a major substation
    • Weather – e.g. winter power crisis
  – Endogenous – e.g. political and economic entrepreneurs, balancing interests of “veto players”, learning (e.g. L&E, regulatory models), …

• So in thinking about how the Comp-Reg boundary evolves, we must consider the factors either enhancing or reducing the purview of both competition policy and regulation
Demarcation Factors – cont’d

- To keep things manageable, have adapted the Scott (2004) scheme to define three stylised regulatory epochs:

<table>
<thead>
<tr>
<th>Time</th>
<th>Pre-Liberalisation</th>
<th>Regulatory Era</th>
<th>Post-Regulatory Era</th>
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<tbody>
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<td></td>
<td>Welfare state model, with old school regulation and government taking lead role in economy</td>
<td>Post-liberalisation, replacing old school regulation with economic regulation</td>
<td>Shift away from imposed rules to hybrid of hard/soft law and mix of self-/state-governance</td>
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Demarcation Factors – cont’d

• **Assert** that Pre-liberalisation:
  – Old school regulation was the natural state of affairs
  – Competition policy and economic regulation were superfluous

• **Further assert** that after this era:
  – Competition policy became the natural state of affairs, being required to support a move towards competition and market-based economic organisation (and trade reform, etc)
  – Economic regulation of some sort replaced old school regulation

• **Implies that tracking the Comp-Reg boundary, post-liberalisation, requires particular regard to the rise and fall of economic regulation, taking competition policy as given**
Adding the Comp-Reg Boundary

Pre-Liberalisation → More Regulation → More Competition → Regulatory decline and/or rise of alternative governance forms → Post-Regulatory Era

- Pre-Liberalisation
- Regulatory Era
- Post-Regulatory Era

Old School Regulation

Economic Regulation

Competition Policy

Liberalisation/ Re-Regulation

Evolving Comp-Reg Boundary
The Rise and Fall of Regulation

• Aside from the allocation of tasks to CAs and RAs based on static comparative advantage, think about the institutions that support or undermine effective regulation

• Assume that regulation should only be around until workable competition develops

• If regulation “works”, then it will result in the advent of workable competition, and can therefore decline in favour of competition policy alone → will generally require private investment to occur

• If not, then, absent other innovations affecting competition (e.g. technology change), regulation must either:
  – Persist – i.e. adapt or grow until it does work (stay in the regulatory era), OR
  – Be displaced or even replaced by some other approach (transition to the post-regulatory era, or even reversion to pre-liberalisation arrangements)

• Aside - even if regulation does work, does this mean regulators will “let go” (questions of inertia and creep)? → argues in favour of multi-sector regulators, or CAs as regulators, all other things being equal
Rise and Fall of Regulation – cont’d

- Literature focuses on the “time consistency” of regulation, which either supports or undermines efficient investment in regulated sectors \(\rightarrow\) a.k.a. credible regulatory commitments

- Turns out the problems are more acute for regulation than they are for monetary policy, and more so where assets are long-lived and demand is growing slowly (more so for electricity than telecomms)

- Levy and Spiller (1994) highlight the role of institutions (“regulatory governance”) in providing the right balance between regulatory “discretion” and “commitment” – with three key mechanisms:
  - Restraints on regulatory discretion
  - Restraints on changing the regulatory system itself
  - Institutions for enforcing these restraints

- “Institutional endowments” and “veto players” play a key role in determining whether effective regulatory governance can arise, or whether regulation fails (e.g. in favour of state ownership, or …)
Rise and Fall of Regulation – cont’d

• Thus countries like the UK – which suffer from a strong executive but have a tradition of respecting property rights, a strong judiciary and an independent civil service – can implement mechanisms such as regulatory contracts ("licenses") to provide the required balance.

• Others – like the US and Germany – have strong checks and balances (e.g. federalism, separation of powers): these can provide Levy and Spiller’s three mechanisms, but also impede reform.

• France – has some institutions favouring effective regulation, but strong public service orientation impedes liberalisation.

• One size does not fit all, and having a certain mix of institutions does not dictate any given approach (e.g. path dependence matters too).
Getting to the Post-Regulatory Era

• A number of models exist demonstrating that the right governance mix can mean regulation may not be necessary even for natural monopolies:
  – Glachant et al. (2008) – German electricity sector “Association Agreements” between producers, and major users plus the German business association
  – Meade (2005) – NZ and US customer ownership of unregulated lines companies (and ownership of G+T co-ops by US lines co-ops)

• Importantly, such models side-step regulatory time inconsistency by internalising the costs of opportunism to customers

• So the real question in tweaking regulatory setups may be whether such alternatives beat regulation in addressing market power? (recognising that regulators and regulated firms may have become “veto players”)

The New Zealand Case Study

• Apply these ideas to the New Zealand electricity sector reforms, highlighting key:
  – Institutional endowments
  – “Focusing events” giving rise to institutional change, affecting:
    ▪ Quality of regulatory governance
    ▪ The Comp-Reg boundary itself

• Track key phases (with emphasis on lines/grid):
  – Muldoon-era pre-liberalisation
  – Change to light-handed regulatory approach
  – Introduction of heavier economic regulation
  – Tweaks to economic regulation, including kernel of post-regulatory approaches
Key NZ Institutional Endowments

- Single chamber of parliament → strong executive able to act opportunistically (more so under FPP; less so under MMP even if incentive to do so is greater)

- Healthy tradition of protecting private property rights, though inflation and taxes historically expropriated wealth, and other notable interventions arise (e.g. EIRA, Foreshore and Seabed, Telecom unbundling)

- Strong judiciary with history of finding against government (e.g. Treaty cases in 1980s, Equiticorp), though loss of Privy Council appeals …

- Professional and fairly independent civil service, bolstered by 1980s reforms, though repoliticised to some degree over past decade

- Vetoes in electricity – Comalco contracts, privately-owned lines/retailing, private generators (especially Contact)

- Mixed bag for good regulatory governance, meaning:
  - More regulation may arise than is efficient
  - Regulation may not succeed, and thus perpetuate itself
Pre-Liberalisation Environment

• Textbook old school regulation, with no pro-competitive regulatory or competition law infrastructure → crowded out by strong industry policies

• Private ownership of lines/retail → veto players against radical reform (ESANZ as bulwark against government)

• Excess capacity yet blackouts → used to justify ongoing centralised control rather than to spur reform

• Muldoon as locus of power → independence and status of bureaucracy undermined, major veto player

• Self-sustaining institutional environment → big crisis needed to induce change …
Key Focusing Events

• 1984 election and currency crisis:
  – Political and policy entrepreneurs took opportunity to liberalise
  – Commerce Act 1986 and light-handed regulation (with threat of more) were two critical planks → blue turns yellow, red lowish

• Corporatisation and later, privatisation:
  – Were intended to create strong veto players to constrain governmental discretion (i.e. the SOEs, and then their new owners) → got stuck half way
  – Means reform remains easier to achieve, but good regulatory governance less so

• 1992 failed Transpower “club” model → left grid business unfinished, hence open to later price controls

• Electricity Act 1992 removal of franchise areas → important part of deregulation (red falls)
Key Focusing Events – cont’d

• 1993 MMP referendum → some research suggests PR associated with lower quality regulation (Bertelli and Whitford (2005)), also all-but killed privatisation as a commitment device, both negatives for regulatory governance

• 1996 Contact formation and privatisation, and 1999 final break-up of ECNZ → “de-regulation” of generation with degree of entrenchment

• 1998 EIRA, and 1999 failed introduction of price controls → government signaled it is expropriatory, raising time inconsistency spectre and weakening regulatory governance (lines companies proved to be weak veto players, paving way for future regulation)

• 1999 election → political entrepreneurs took opportunity to make electricity governance an issue, leading in 2001 to Part 4A of the Commerce Act, and centralisation of industry control ultimately under a non-independent Electricity Commission (red jumps up)
Key Focusing Events – cont’d

• 2001 and 2003 power crises, combined with 2003 failure of industry to agree Electricity Governance Rules (key veto players prevail) → critical drivers of move to centralised industry governance, including EC approval of grid pricing policy and investment, plus reserve generation scheme (red jumps up)

• Regulatory chilling of lines investment (in face of replacement cliff) and 2006 D-shackle grid failure at Otahuhu:
  – Government asks Commerce Commission to place greater weight on investment incentives in price control decisions
  – Extension of Commerce Act review to include Part 4A
    → red falls back?

• Commerce Amendment Act 2008 → raises jurisdictional uncertainty for lines and grid, but contains kernel of post-regulatory solutions:
  – Exempts consumer-owned lines from price controls
  – Introduces negotiate/arbitrate option
    → red falls more? (for lines companies)
Summarising the New Zealand Story

Pre-Liberalisation

1984

Regulatory Era

Post-Regulatory Era

Light-handed regulation
- Franchise areas removed
- ECNZ broken up
- Part 4A introduced
- Electricity Commission created
- Investment prioritisation
- Commerce Amendment Act

Deregulatory phase

More reg’n despite weak governance
Reality & pragmatism bite?

Future?

- NZ an early reformer and notably adopted LHR
- Late starter in heavier regulation
- Perhaps quickly getting to post-regulatory model?

Old School Regulation

Competitive Policy

Economic Regulation
Thank You – Any Questions?