Competition Policy versus Regulation in Electricity Systems – Determining the Boundary

Victoria University of Wellington
20 November 2008

Richard Meade

Research Principal, ISCR

Principal, Cognitus Advisory Services Limited

Teaching Fellow, Victoria University of Wellington

richard.meade@cognitus.co.nz

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 <u>consequence</u> of liberalisation

- But sometimes created to preclude competition or do so unintentionally (<u>triggers</u> 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:

Pre-Liberalisation	Regulatory Era	Post-Regulatory Era
Welfare state model, with old school regulation and government taking lead role in economy	Post-liberalisation, replacing old school regulation with economic regulation	Shift away from imposed rules to hybrid of hard/soft law and mix of self-/state-governance

Time →

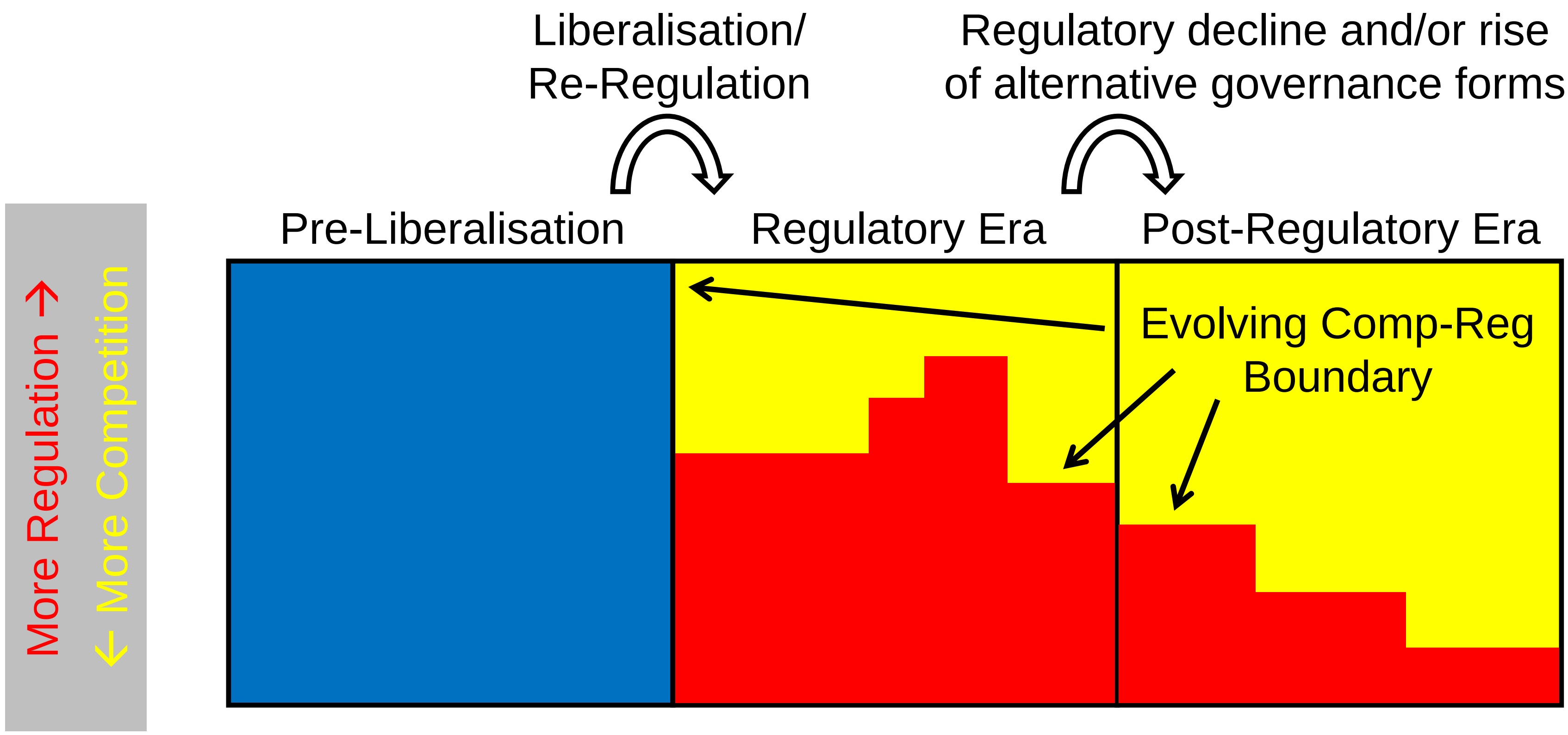
Demarcation Factors – cont'd

- 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



Old School Regulation

Competition Policy

Economic Regulation

ISCR NEW ZEALAND INSTITUTE FOR THE STUDY OF COMPETITION AND REGULATION INC.

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

ISCR NEW ZEALAND INSTITUTE FOR THE STUDY OF COMPETITION AND REGULATION INC.

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 → 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 <u>three key mechanisms</u>:
  - 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:
  - Littlechild (2008) – “negotiated settlements” between suppliers and consumer representatives for US and Canadian electricity grids and gas pipelines
  - 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)

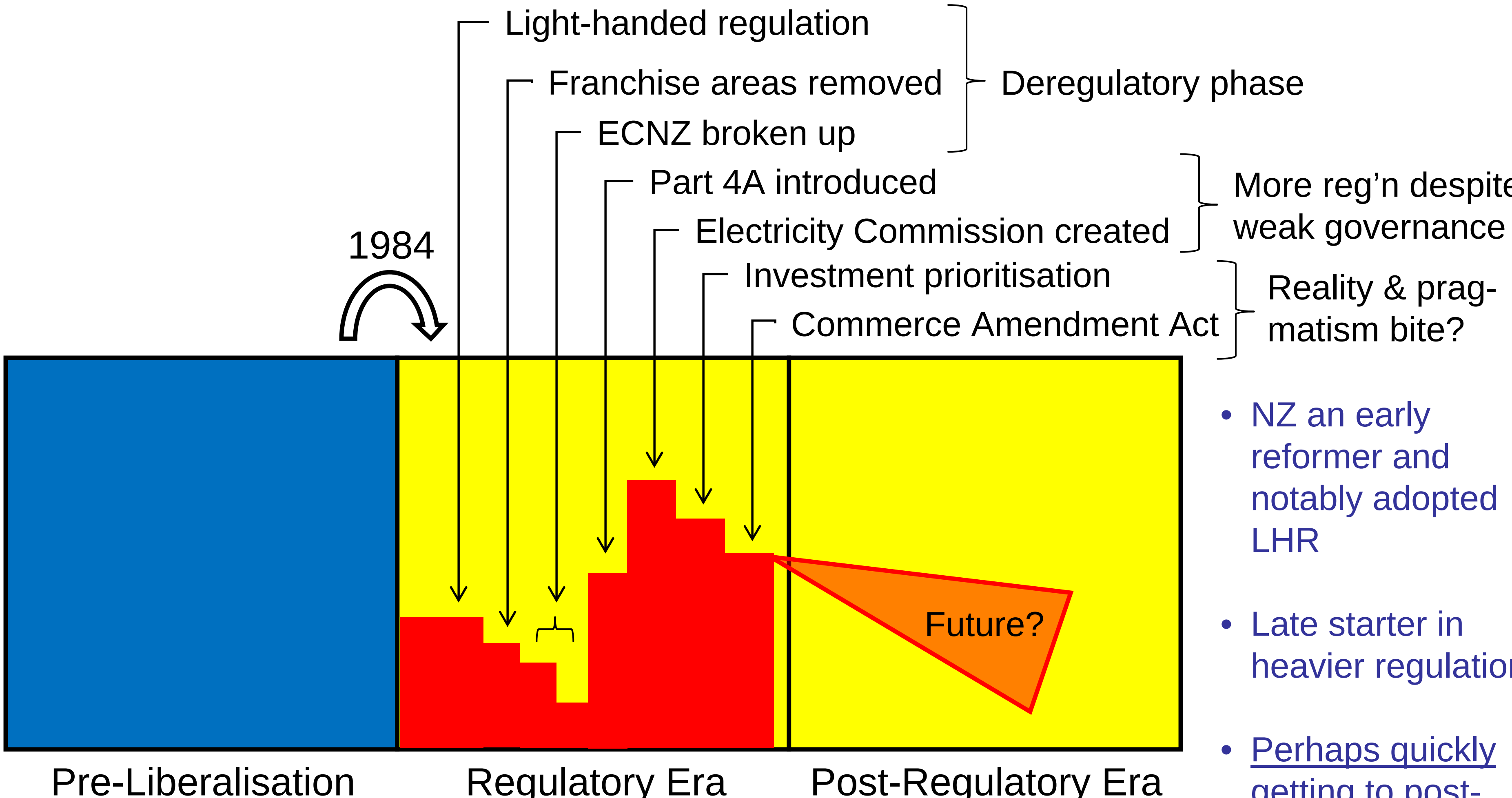
- Regulatory chilling of lines investment (in face of replacement cliff) and 2006 D-shackle grid failure at Otahuhu:
  - Government asks Commerce Commission to place greater weight on investment incentives in price control decisions
  - Extension of Commerce Act review to include Part 4A

    → 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



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

Old School Regulation
Competition Policy
Economic Regulation

NEW ZEALAND INSTITUTE FOR THE STUDY OF COMPETITION AND REGULATION INC.

Thank You – Any Questions?