

Light-handed regulation of the energy sectors

Geoff Bertram Fabians lecture

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Light-handed regulation: Allows the firm discretion in how it meets regulatory targets.

Regulation that is not intrusive, in contrast to command and control or ... cost of service regulation. This process is designed to reduce information requirements and high compliance costs, while introducing clear incentives for good performance.

<http://www.regulationbodyofknowledge.org/glossary/define/Light-handed%20regulation/>

1. Introduction.

“Government failure” was a recurrent theme in policy discourse in New Zealand back in the 1980s. Driven by an ideologically-evangelistic Treasury, and given wings by the anecdotal disasters of policy in the Think Big programme, the idea took root that government could do virtually nothing right whereas the private sector was better at (almost) everything. The outcome was a “self-hating state”¹ in which officials and ministers loudly proclaimed their own institution’s ineffectiveness and proneness to rent-seeking and capture, then used this as their excuse to abdicate from serious engagement with the core regulatory functions of government in a mixed capitalist economy. In the process they converted the New Zealand Government into the inept, rent-seeking bungler of neoliberal propaganda (and of their own imaginations). Nowhere was this process more apparent than in the application of the doctrine of deregulation - mis-labelled for PR purposes “light handed regulation” - to services formerly provided universally and cheaply by the government as part of the welfare-state social contract hammered out in the mid-twentieth century. In telecommunications and rail, electricity and gas, ports and airports, radio and television, the neoliberal agenda swept through: more market, less state intervention, privatisation wherever and whenever possible, enthusiasm for financial engineering and novel accounting techniques, wholesale abandonment or suppression of regulatory and legal arrangements that had evolved to provide basic protection against monopoly for workers and the mass of small consumers and citizens. The outcomes of this epidemic of social irresponsibility at the heart of government provide the subject matter of this series of lectures.

In this paper I focus on two energy sectors – electricity and gas – and especially the first of these, since the electricity sector provides an especially clear-cut demonstration of the downside of the neoliberal project from the standpoint of the ordinary citizen and consumer. My focus is on transfers of wealth, because the unifying theme of energy-sector policy since 1986 has been to facilitate the gouging of wealth, from the poor and the powerless, for the benefit of the rich, the strong, and the Treasury. The wealth transfers in energy, taken on their own, account for only a part of the enormous growth of income and wealth inequality across the New Zealand economy over the past two decades – only a few percentage points of GDP, a few billion dollars here and a few billion dollars there, have been shifted from poor to rich via electricity and gas pricing – but the sector’s history provides a microcosm of the general orientation of government policy towards greater

¹ See http://www.fpif.org/articles/the_self-hating_state on application of this term to the George W. Bush administration in the USA.

inequality across society and worsening poverty at the bottom, under both Labour and National administrations.

2. A note on wealth transfers

Wealth transfers come in many forms: donations and gifts, Lotto wins and welfare benefits; taxes; monopoly profits, financial scams, outright robbery. Society is not indifferent amongst these, because some involve voluntary or legislatively-approved transfers of wealth to deserving recipients, whereas others such as robbery involve coercion of unwilling parties from whom wealth is transferred. (It is one of the ironies of neoliberal thought that taxes – subject to democratic decisions by the legislature – are stigmatised, whereas monopoly profits, which lack democratic mandate, are not.)

Between 1986 and 1993 there was vigorous debate in policy circles over the question of whether monopoly profit-taking involved any detriment to the public. Unsurprisingly, Treasury and the Business Round Table led the charge for those who said not, and in 1992 they won a key debate within officialdom over the “public benefit test”². The outcome was that, with no referral to Parliament, the official position was adopted that wealth transfers have no effect on public welfare³, which in turn means that the taking of monopoly rents by price-gouging customers is of no concern to the Commerce Commission or the courts – unless for some political reason the government of the day decides that a particular example requires intervention, in which case Part IV of the Commerce Act gives the relevant Minister the power to trigger a long, cumbersome process of inquiry which might eventually lead to regulation.

Thus when the Commerce Commission uncovered evidence of excess profit-taking estimated as some \$4 billion by electricity generators in the wholesale market during the early 2000s, it took no action, noting that

“The exercise of market power to earn market power rents is not by itself a contravention of the Commerce Act, but is a lawful, rational exploitation of the ability and incentives available to the generators.”⁴

Similarly, in its 2003 Gas Inquiry the Commission noted that

“a net public benefit analysis considers net total welfare effects. Under this analysis, any deadweight efficiency loss due to allocatively inefficient prices would count as a net public detriment, but any transfer of wealth from consumers to suppliers (or vice versa) would not... [E]xcess returns being reduced, with a transfer of wealth from suppliers to consumers ... [would constitute] a net benefit to acquirers. [However] [t]he increase in

² I reviewed this debate in Geoff Bertram, “What’s wrong with New Zealand’s public benefit test?”, *New Zealand Economic Papers* 38(2): 265 — 277.

³ “Public benefits must be net gains in economic and/or social terms (“efficiency gains”) Transfers of wealth *per se* are not net gains.” Commerce Commission, *Guidelines to the analysis of Public Benefits and Detriments - revised [1997]* NZComComm 29 (1 December 1997) , <http://www.nzlii.org/nz/cases/NZComComm/1997/29.html>

⁴ Commerce Commission *Investigation report: Commerce Act 1986 s.27, s.30 and s.36 electricity investigation*, 2009, <http://www.comcom.govt.nz/investigation-reports/>, p.6 paragraph v.

consumers' wealth is matched by a reduction in suppliers' wealth (resulting in zero net public benefit).⁵

This official stance was correctly read by private-sector investors, as well as by Treasury officials, as a licence to exercise any market power they could acquire, for the purpose of extracting wealth from those consumer groups that lacked the power to resist. Large industry obviously could look after itself through its sector organizations MEUG and MGUG; but the only channel through which aggrieved small consumers could seek redress was political⁶, and the political/regulatory machinery moves slowly. In the two New Zealand energy sectors covered in this paper, there have been three examples:

- Gas pipelines were freed from price control in 1993. By the time a political decision to investigate the resulting excess profit-taking was taken in 2003 they had nailed down something in the order of half a billion dollars of bare wealth transfers, crystallised in asset revaluations with associated price rises to fund the associated so-called "capital costs". The subsequent Commerce Commission investigation took a further eighteen months, after which provisional non-binding "authorisations" were made to check further monopoly behavior, but leaving the companies in full and undisturbed possession of their gains from a decade of predation, which meant consumers were left paying the higher prices⁷. In 2008 Powerco and Vector were given "customized price-

⁵ Commerce Commission, *Gas Control Inquiry: Draft Framework Paper*, 16 July 2003 pp.14-15.

⁶ As noted later, the old common-law rights of consumers have been suppressed by the Commerce Act 1986 as interpreted by the courts, so no legal channel for redress applies.

⁷ Geoff Bertram, Ian Dempster and Simon Terry, *Pipeline Profits: Gas Pipeline Rates of Return*, Simon Terry Associates, July 2001, http://www.geoffbertram.com/fileadmin/publications/Pipeline_Profits.pdf ; Geoff Bertram, "Deregulation and Monopoly Profits in New Zealand's Gas and Electricity Industries", *Energy Studies Review* 12, 2 (Spring 2004) pp.208-227, <http://www.geoffbertram.com/fileadmin/Energy%20Studies%20Review%20Spring%202004.pdf> .

From Commerce Commission, *Gas Control Inquiry Final Report*, 29 November 2004, <http://www.comcom.govt.nz/assets/Imported-from-old-site/RegulatoryControl/GasPipelines/ContentFiles/Documents/comcom-gascontrolinquiryfinalreport-nov2004.pdf>: "During 2001-2002 the Government commissioned advice from consultants as part of a review of gas pipelines. In November 2001 it issued a set of draft decisions which acknowledged that "there has been significant debate over the extent of any rent-seeking behaviour by gas pipeline owners. Some commentators suggest that pipeline owners have earned significant excess profits over a number of years. However, the measure of profits is dependent on how the assets are valued, and the extent of any excess profits is unclear. To resolve these uncertainties, the Minister of Energy will request the Commerce Commission to report under section 56 of the Commerce Act, on whether 'control' should be introduced for gas pipelines and the inquiry is expected to take 18 to 24 months to complete."

From Cambridge Economic Policy Associates td, *New Zealand Gas Industry Regulation: Lessons to learn for the British energy sector*, report for Ofgem, March 2009, <http://www.ofgem.gov.uk/Networks/rpix20/ConsultReports/Documents1/NZ%20gas%20regulation.pdf> : "The Minister's request for an inquiry was made in April 2003. The Commission reported in November 2004, confirming excess returns were being secured by gas pipelines and recommending that price control be introduced for Powerco and Vector. On 25 July 2005 the Minister announced that control under Part 5 of the Commerce Act would be introduced for the two companies, and the Order in Council took effect from 25 August 2005. The Provisional Authorisation in August 2005 imposed average price reductions of 9% for Powerco and 9.5% for Vector. Prices were held constant in nominal terms from that time; therefore, since 2005, prices have been reduced by approximately 19%. Further average price reductions of 11.1% for Powerco and 3.7% for Vector were required under the final

quality paths" under their new Authorisations⁸. Meantime the Commerce Amendment Act 2008 introduced changes to the regulatory procedures under Part 4 (which now covers gas and electricity and specified airport services). Commission was required to produce "input methodologies" for CPI price caps on regulated sectors by 30 June 2010. The first draft gas "default price-quantity paths" were released in October 2012 for consultation⁹, and are to come into effect in July 2013. Thus there was an unregulated ten-year free-for-all, followed by a full, dreary, ten year process to get regulation in place. At the end of the process the monopolists' books are fatter, and consumers are worse off, than would have been the case had there been any actual regulation in the 1990s – or if a political decision had been possible to claw back the monopolists' gains, as the "bring out the club" rhetoric" of the early 1990s had suggested might happen.

- Electricity distribution networks were corporatised and deregulated in 1994 and given official encouragement to double their asset valuations and pass the resulting increased charges on to customers. By 2000 they had booked \$2 billion of wealth transfers crystallised in the form of ODV asset valuations, sustained by steeply increased profits. Those profits came from increasing margins as operating costs were driven down while prices rose.¹⁰ In 2000 a ministerial inquiry suggested regulation be considered and a 2001 amendment to the Commerce Act required the New Zealand Commerce Commission to "set thresholds for the declaration of control in relation to large electricity lines businesses"¹¹, but after lengthy hearings, the Commission decided that it was not its role to engage in retrospective analysis of lines company profitability or asset revaluations since 1993. The main reasons given by the Commission were, ironically, mainly to do with the alleged lack of relevant information

Authorisation and took effect from 1 January 2009... The RAB was set for June 2005 at the 2003 ODV valuations, and then rolled forward using a "financial capital maintenance (FCM) approach... The Commission established the initial valuation by taking the Optimised Deprival Valuation relating to system fixed assets (SFA) for 2002/03 and rolling those values forward to 30 June 2005. The value of non-system fixed assets (NSFA) as at 30th June 2005 was then established according to accounting principles and this is added in to provide the total amount... Under FCM accounting the company should ex ante expect to be able to recover the cost of the investment over the life of the asset. This approach to accounting requires that any asset revaluation is incorporated into the profit and loss of the company, so ensuring that total returns are measurably comparable to the allowed cost of capital."⁷

⁸ <http://www.comcom.govt.nz/assets/Imported-from-old-site/industryregulation/Gas/CommissionReportsandDocuments/ContentFiles/Documents/comcom-decision656powercoauthorisation-oct2008.pdf> and <http://www.comcom.govt.nz/assets/Imported-from-old-site/industryregulation/Gas/CommissionReportsandDocuments/ContentFiles/Documents/comcom-decision657vectorauthorisation-oct2008.pdf> respectively.

⁹ <http://www.comcom.govt.nz/assets/Gas/DPP/2011/Initial-DPP-for-GPB/Revised-Draft-Decision-on-the-Initial-Default-Price-Quality-Paths-for-Gas-Pipeline-Services-24-October-2012.pdf>

¹⁰ Geoff Bertram and Dan Twaddle "Price-cost margins and profit rates in New Zealand electricity distribution networks since 1994: the cost of light handed regulation", *Journal of Regulatory Economics*, 27, 3 (2005), pp. 281-307 <http://www.geoffbertram.com/fileadmin/publications/Price-Cost%20Margins%20and%20Profit%20Rates%20in%20New%20Zealand%20Electricity%20Distribution%20Networks%20Since%201994.pdf>; Paul H.L. Nillesen and Michael Pollitt, "Ownership unbundling in electricity distribution: empirical evidence from New Zealand", *Review of Industrial Organization* 38: 61-93, 2011.

¹¹ Commerce Act 1986 s57G(b), inserted by the Commerce Amendment Act (No 2) 2001.

after nearly a decade of mandatory information disclosure¹². Asset revaluations were allowed to stand, and reclassified as “historic cost”. The Commission in 2001 introduced an investigatory “thresholds regime” against which lines companies performance could be assessed – with no penalty specified for breaches. “If one or more of the (price or quality) thresholds were breached by a lines business, the Commission could further examine the business through a post-breach inquiry and, if required, control their prices, revenue or quality.”¹³ For the five-year period 2004-2009 the threshold regime continued with a vaguely-defined freeze on asset revaluations. In 2008 new legislation empowered the Commission to set “input methodologies” for a CPI-X regulatory regime; price caps were finally set in 2010 and the regime is now in force. The Input Methodology for the 2010 price setting exercise finally brought in “financial capital maintenance” to prevent revaluations causing wealth transfers, and refused attempts by companies to revalue up from the 2004 ODVs which had been rolled forward with some indexation.¹⁴ The deregulated free-for-all lasted effectively for a decade, 1994-2004, and the imposition of CPI-X regulation took a further half-decade. The 2010 price reset process was highly contentious and became enmeshed in two years of litigation between the Commission and Vector, which has only just been resolved in the Commission’s favour by the Supreme Court.¹⁵ The \$2.3 billion of wealth transfers from consumers, and associated higher lines charges than would have prevailed under regulation, were left untouched – retrospectively clawing-back consumers’ losses was not something the Commission felt able to tackle.

- Electricity generation and retail activities were corporatised and part-privatised between 1986 and 1999, and subjected to no price or profit regulation whatever, nor even to requirements to disclose information beyond what was required by normal company annual reporting practices. Between 1999 and 2011 they booked \$9 billion of wealth transfers crystallised in asset revaluations, much of which was extracted in cash dividends and sale proceeds to various private and public owners – but mostly to the Government, which was the leading predator in this market, cheered on by both major parties in Parliament. As of the end of 2012 there is no sign of any political interest in price regulation of the five firms that make up an effective cartel; official policy remains that everything can be fixed by market competition, and the Electricity Authority devotes its attention to supposedly-pro-competitive interventions that have had little if any visible effect on prices, let alone on asset values. The Government is now poised to part-privatise its three SOE gentailers, a process which will make it virtually impossible to wind back bloated asset valuations or provide pricing relief to small consumers as a matter of political decision; it remains to be seen whether market forces will eventually turn the tide (in which case the sharemarket floats could echo the Facebook experience).

¹² Commerce Commission, *Regulation of Electricity Lines Businesses Targeted Control Regime Draft Decisions* 23 December 2002 p.25 para 109.

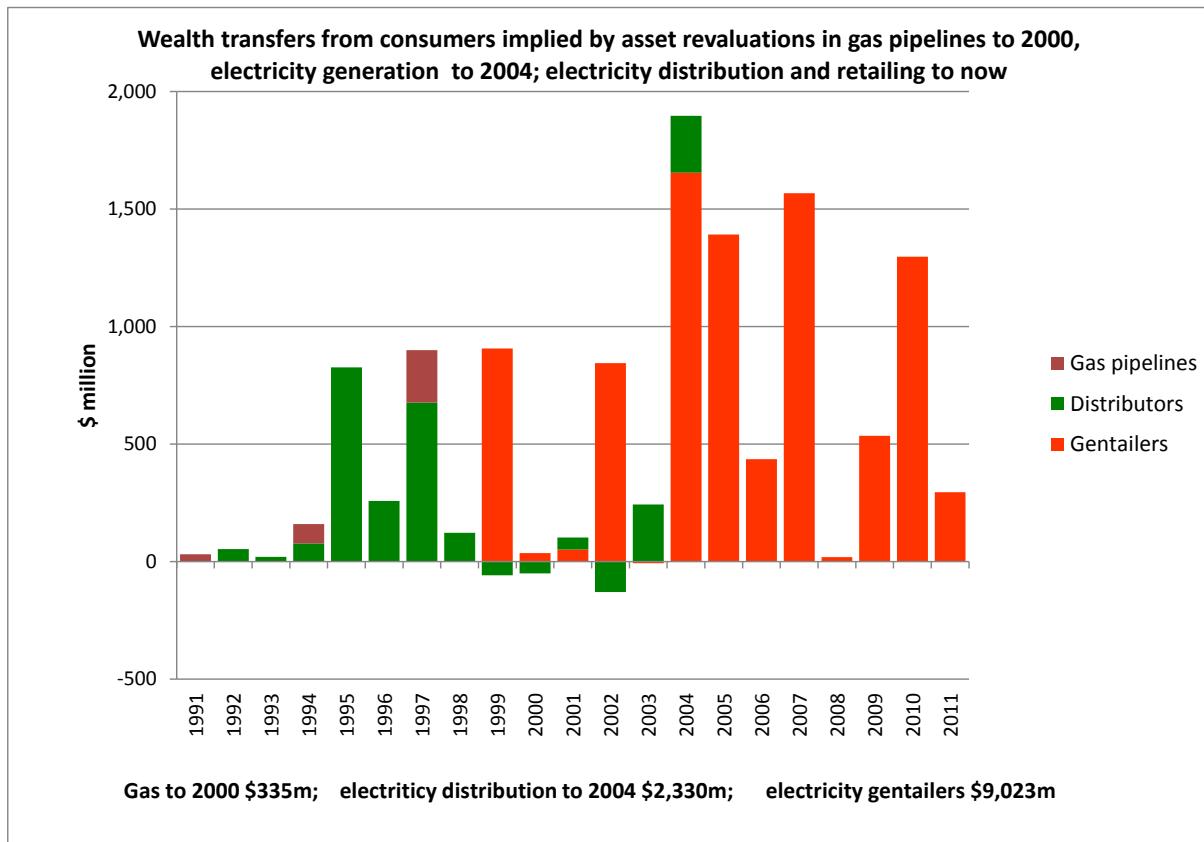
¹³ <http://www.comcom.govt.nz/targeted-control/>

¹⁴ Commerce Commission *Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper* December 2010 <http://www.comcom.govt.nz/assets/Pan-Industry/Input-Methodologies/Final-Reasons-Papers/EDB-GPB-Input-Methodologies-Reasons-Paper-Dec-2010.pdf>

¹⁵ Supreme Court, *Vector Ltd v Commerce Commission* SC 46/2012 [2012] NZSC 99. http://www.courts-of-nz.govt.nz/cases/vector-limited-v-commerce-commission-2/at_download/fileDecision

Figure 1 summarises the two decades of predation.¹⁶

Figure 1

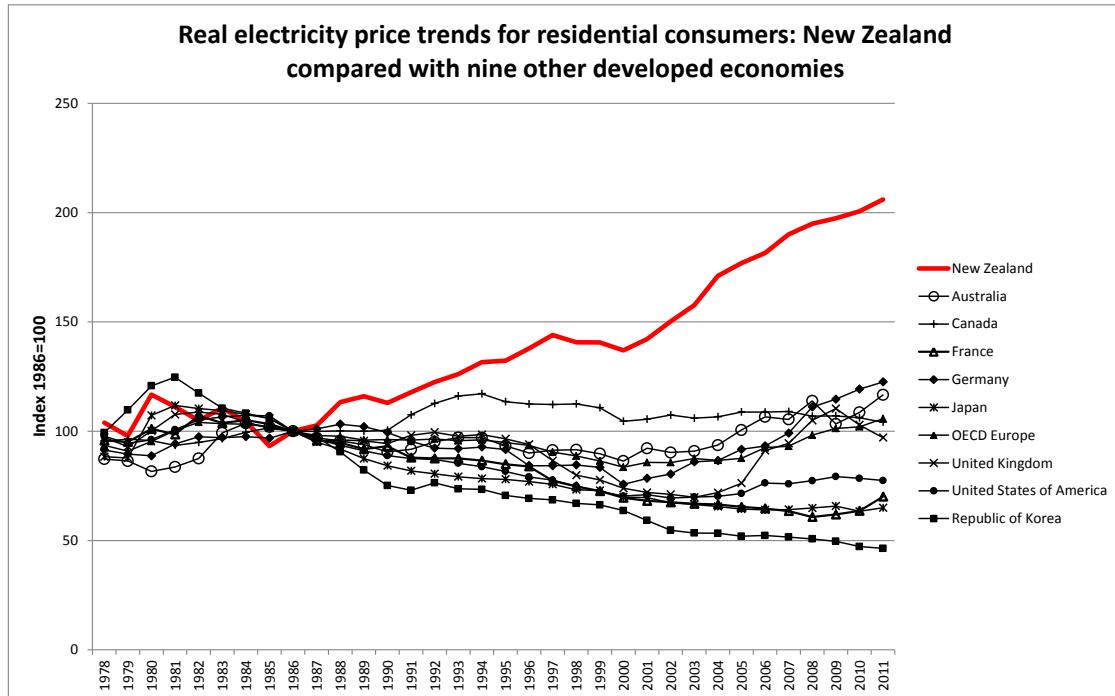


3. Trends in energy sector prices, profits, asset values and investment

Figure 2 is a chart tracing the evolution of the real retail price paid for electricity by the most vulnerable and captive groups of consumers – residential – since the late 1970s, in ten countries which “reformed” their electricity sectors. Since the start of New Zealand’s reforms in 1986 there have been only four years, 1990 and 1998-2001, when residential consumers have not faced price escalation at around 4% above the economy-wide inflation rate. (Not coincidentally, 1998-2001 were the years of the widely-derided “Bradford reforms” which briefly gave life to the notion of actual competitive pressure coming to bear on the industry’s dominant players. Once Max Bradford had been disposed of, and the uncertainty and upheaval of his structural reshuffling had ceased, the business-as-usual price escalator for residential slipped back into gear.)

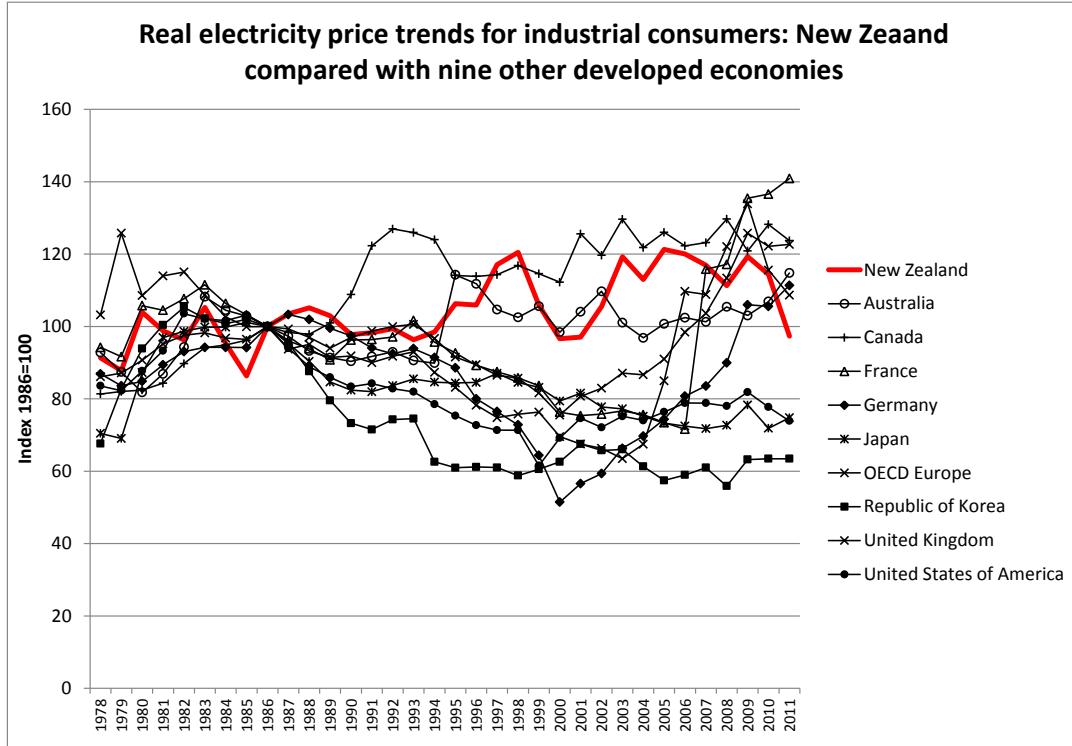
¹⁶ Gas pipeline revaluations after 2000 are not yet included in this chart which is a work in progress.

Figure 2



Source: International Energy Agency database downloaded July 2012 from OECD Library http://www.oecd-ilibrary.org/energy/data/end-use-prices/indices-of-energy-prices-by-sector_data-00444-en.

Figure 3

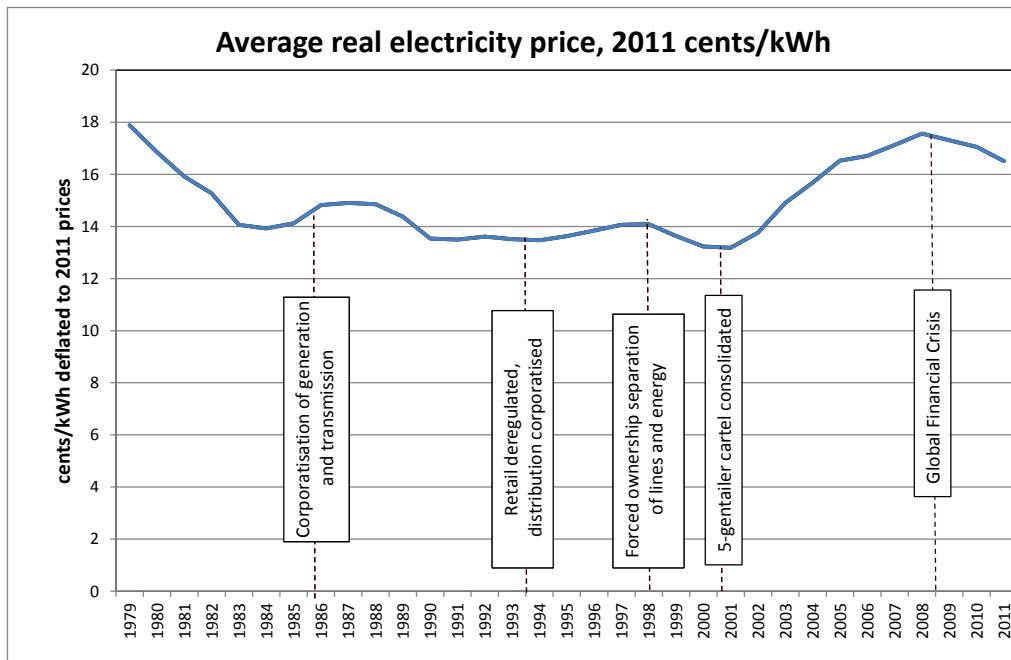


Source: International Energy Agency database downloaded July 2012 from OECD Library http://www.oecd-ilibrary.org/energy/data/end-use-prices/indices-of-energy-prices-by-sector_data-00444-en.

Figure 3 traces the same data for the industrial sector. The contrast between the residential price and the industrial price speaks volumes about the relative leverage enjoyed by industrial interests compared with domestics. Industry is more organised, has some genuine political “voice”, and in particular large industrials (which account for around half the sector’s total electricity use) are represented by a powerful lobby group, MEUG, which wields serious countervailing power against the generator-retailers. Consequently, the real price to industry in 2011 was the same as in 1986, after a GFC-induced drop from levels reached through steady upward price pressure in the mid-1990s and early-2000s.

Averaging across all the electricity sector’s customers (including commercial users, who faced falling real prices but do not appear in Figures 2 and 3), Figure 4 shows the average overall real price trends for electricity – downward until the 1990s when restructuring kicked in, then steadily up (except for the Bradford interlude) until 2009, then softening under the impact of economic recession and strategic overbuilding of generation capacity by the big five.

Figure 4



Source: Prices and volumes from *Energy Data File 2012* Table I.1a and Table G.5a. Deflated by the author using CPI for residential and PPI (Inputs) for commercial and industrial, but using CPI for years before the PPI series begins

Figures 5 and 6 tell the same story for natural gas.

Figure 5

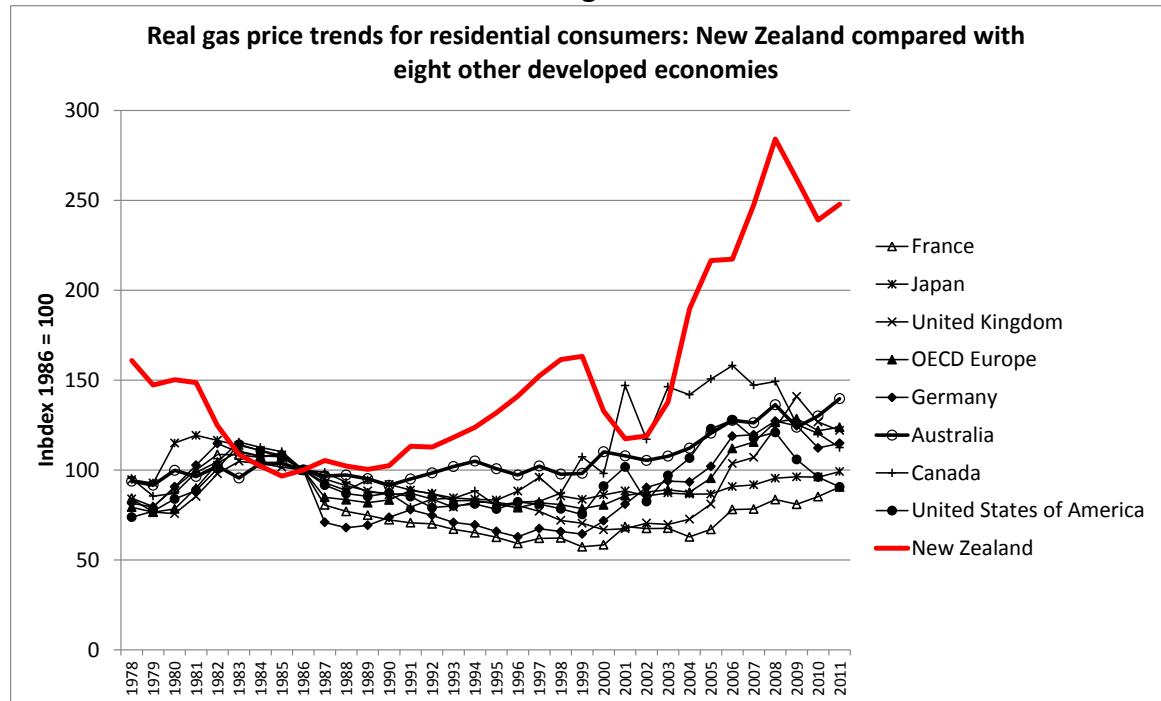
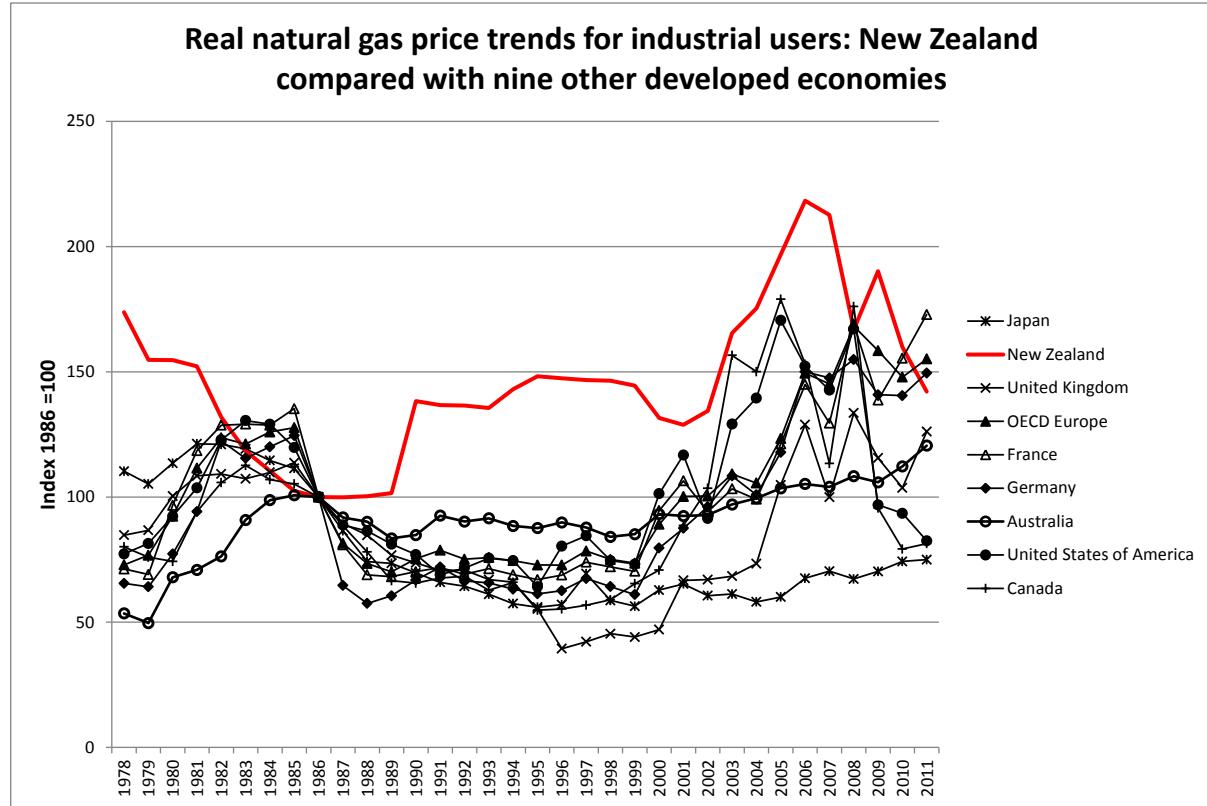


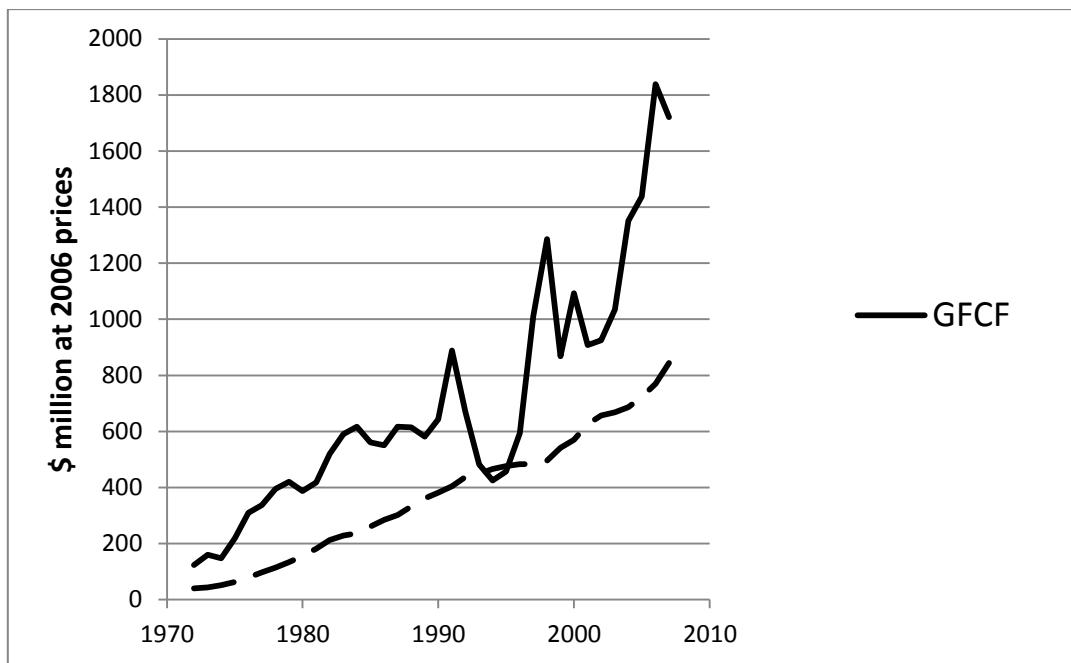
Figure 6



A second indicator of industry performance is investment, both in maintaining existing capacity and in expanding capacity to meet future needs. Figure 7 shows the collapse of new investment after

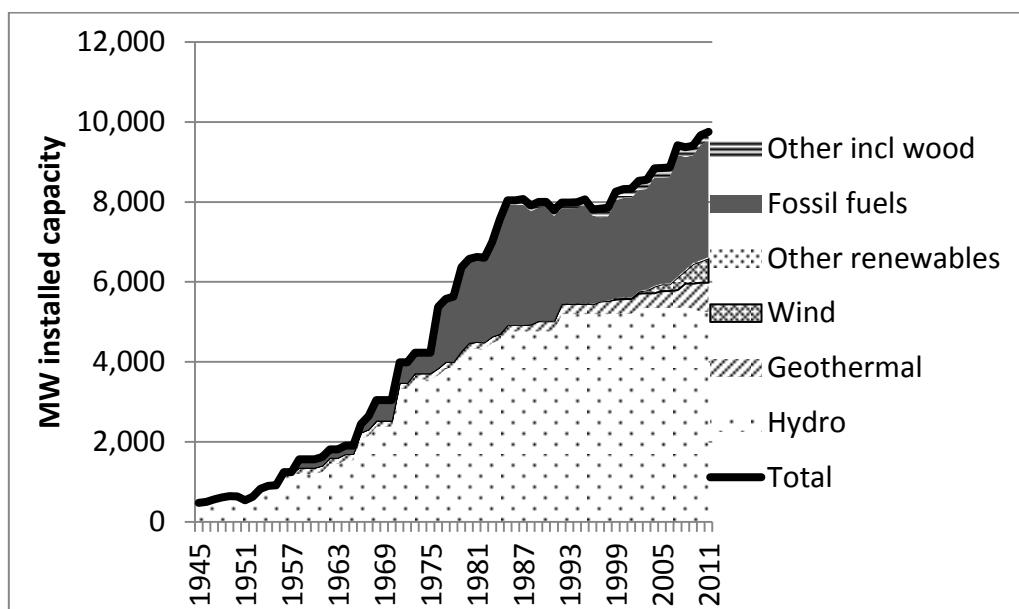
1991, followed by the onset of violent fluctuations as cycles of boom and slump replaced the steady pace of the old administratively-determined investment programmes.

Figure 7
Investment performance of “electricity, gas and water” sector, 1972-2007¹⁷



Source: National accounts published by Statistics New Zealand. The published sectoral data ends at 2007.

Figure 8
Installed generating capacity in the New Zealand electricity system, 1945-2011



Source: 1945-1975 data assembled from annual reports of the New Zealand Electricity Department; 1975-2011 from Ministry of Economic Development *Energy Data File 2012*, p.112 Table G.3a

¹⁷ Official national accounts data at sector level are currently not available for years after 2007.

Figure 8 shows trends in generation capacity in electricity, again highlighting the unstable investment track post-reform, and the consequences of new construction during the 1990s being offset by the profit-driven destruction of much of the system's dry-year reserve thermal capacity.¹⁸

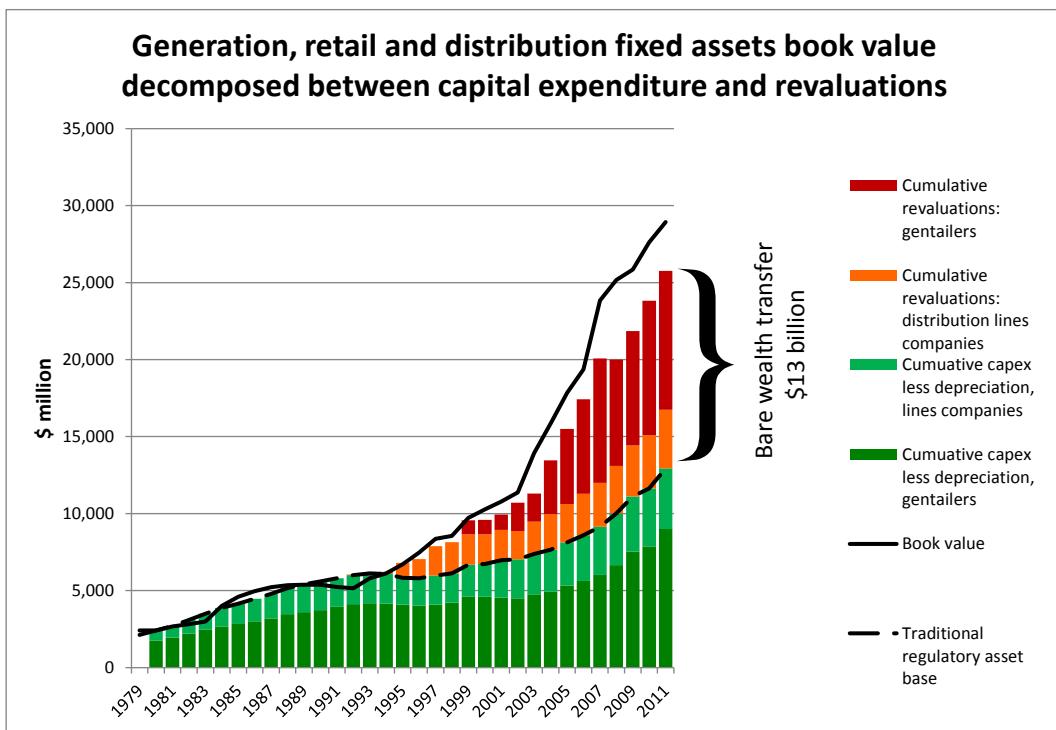
Meantime the transmission grid was allowed to run down for a decade and a half while large cash dividends were extracted from Transpower by the New Zealand Treasury. The grid assets inevitably deteriorated and eventually key components began to fail, a process dramatically illustrated by a blackout of much of Auckland in June 2006, and by the 2007 reduction in the capacity of the inter-island high-voltage DC link which is a key part of the grid backbone¹⁹.

A third key indicator of performance is capital value. Figure 9 shows the book value of fixed assets in generation, retail and distribution lines (i.e. the electricity industry excluding the Transpower grid) since 1979. Until 1994, assets were valued in the way a traditional ("heavy handed") regulator would have done, on the basis of historic cost (actual past investment outlays, net of accumulated depreciation). Over the following five years the distribution lines companies marked up their \$2 billion of historic cost to \$4 billion of "optimised deprival value", an arcane concept foisted on the industry by the Government which in effect allowed assets to be revalued to replacement cost with the resulting higher "capital charges" passed through to consumers – a technique for driving up prices, which effectively transferred \$2 billion of wealth from consumers to the companies. Then starting in 1999 the vertically-integrated generator-retailers marked up their asset values using the techniques of so-called "fair value" accounting, which capitalises the expected future earning capacity of the assets. For this technique to produce rising valuations, operating margins have to rise to provide the required revenue stream; and since operating costs were not falling for these companies, the increasing margins to underpin asset revaluations rested entirely upon the driving-up of prices. By 2011 these "fair value" revaluations had reached \$9 billion while distribution lines asset revaluations were approaching \$4 billion. Altogether the bare wealth transfer from consumers embodied in these asset revaluations totalled \$13 billion, which meant that electricity was being priced off an asset base more than double what a traditional regulator would have allowed.

¹⁸ On this see Geoff Bertram, "'Restructuring of the New Zealand Electricity Sector, 1984-2005', in *International experience in restructured electricity markets: What works, what does not, and why?*, edited by Sioshansi, FP and Pfaffenberger, W (Amsterdam, Elsevier, 2006), chapter 7, pp.224-225. The same aversion of profit-oriented managements to having their market overhung by reserve thermal capacity was manifest in the short life of the state-owned reserve plant at Whirinaki, built for \$150 million in 2004 and sold to Contact Energy in 2010 for \$33 million. (<http://www.stuff.co.nz/business/6096691/Contact-buys-Whirinaki-power-plant>).

¹⁹ A useful overview of the HVDC is at http://en.wikipedia.org/wiki/HVDC_Inter-Island , (accessed July 2012). The HVDC link had been installed in the 1960s, and upgraded in 1987-1992 by addition of a new thyristor converter alongside the original mercury valves, plus the laying of three new undersea cables. Pole 1 of the system continued to operate with the original 1960-vintage equipment until 2007, leaving the link increasingly vulnerable to failure as Pole 2 also began to age. The coldest day of the 2006 winter, June 19, brought a grid emergency and blackouts in the North Island due to a sudden outage on the HVDC; and in September 2007 Pole 1 finally had to be taken out of service. The next year it was reactivated for a while using old equipment salvaged from Denmark, but the link effectively was reduced to a single pole, meaning that normal industry standards of grid security were not met, and wear and tear on the operational pole increased sharply. In 2008 planning finally commenced on a new pole for the HVDC; work began in 2010, and the new pole is finally due for commissioning in the next few months, restoring the (n-1) level of security which should never be breached in a state-of-art electricity system.

Figure 9

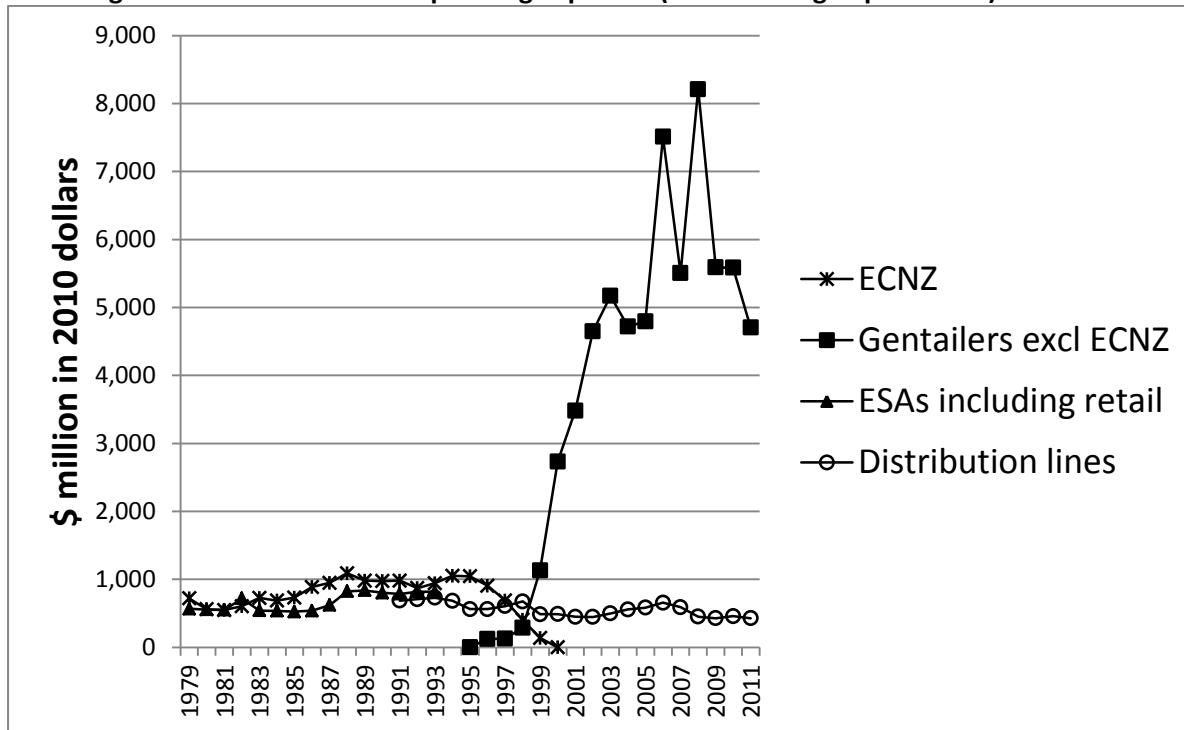


To put this in context, suppose (optimistically) that capital charges are recovered on this \$13 billion of fictional capital at a 7-8% rate of return - \$1 billion annually. Then consumers in aggregate are being required to pay this sum as a levy to sustain the industry's unilateral appropriation of \$13 billion of wealth from them – that is, to allow investors to recover \$1 billion more than would have provided a fair return on past investment spending. Relative to total annual sales revenue of \$38 billion this is only 3%; but the burden of servicing the revaluations is carried not by all consumers but by the politically disenfranchised residential consumers, whose total annual expenditure on electricity is \$13 billion²⁰. So 8% of their bill is this levy.

To add insult to injury, consumers are also having to pay for an uncontrolled blowout of operating costs in the retail market, where the five-gentainer cartel continues to reign supreme and financial engineering, advertising, playing competitive games, high salaries and expenses have all played a part. Figure 10 shows the rise in the reported operating costs of the five gentailers since their cartel was consolidated in 2001. Figure 11 shows how the cost blowout has been concentrated in retail, metering, market services and “governance” expenses. The average electricity user in 1990 paid less than a cent/kWh (in 2011 dollars) for these services; by 2010 they were approaching 5 cents/kWh on average across all users, and nearly 9 cents/kWh for residential customers – 40% of the residential price. (The additional costs for gentailers of the much-hyped “what’s my number” campaign and encouragement of customer churn by the Electricity Authority can be expected to show up in both operating expenses and residential prices.)

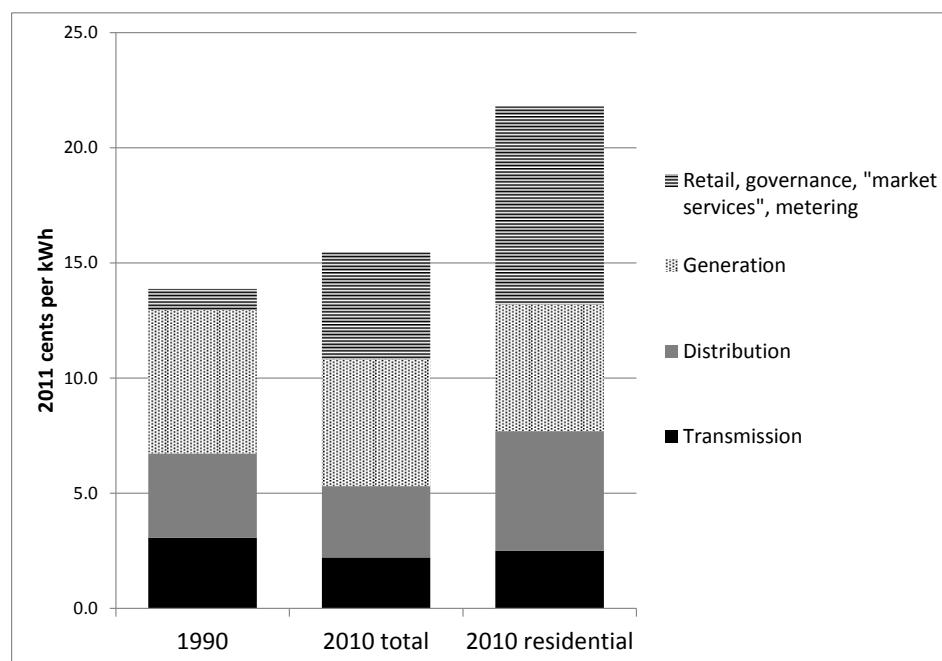
²⁰ Figures from *Energy Data File 2012 Table G6a*.

Figure 11: Gentailers' real operating expenses (not including depreciation) 1979-2011



Source: Assembled by author from annual financial statements. Deflated using the PPI (Inputs). Note the absence of data for the retail businesses of distributors 1994-2999.

Figure 11
Breakdown of final electricity retail price excl GST, 1990 and 2010



Source: 1990 from Electricity Statistics 1990. 2010 based on Electricity Authority *Fact Sheet 3* p.1, with the four sectors aggregated to the total using sectoral consumption weights from *Energy Data File 2011* p.118 Table G.6a.

The record to date shows the symptoms that in most jurisdictions would long ago have triggered public outrage and policy changes to bring in more effective regulation. In New Zealand the policy landscape in relation to electricity generation and retailing remains virtually unchanged - apart from the rush by Treasury to raise several billion dollars in cash by unloading three bloated electricity SOEs onto private investors. It is noteworthy that the political will to regulate showed up for the natural-monopoly gas pipelines and electricity networks only after they had locked-in their wealth transfers from a shift to monopolistic limit pricing. The political will to regulate generation and retail today would put immediately at risk several billion dollars of so-called "fair value" in the SOE books, which Treasury is seeking to convert to cash revenue via share floats. These wealth transfers are not yet locked in and are subject to genuine regulatory risk – which surely provides a clue as to why there is no regulation on the horizon. Reluctantly closing the stable door after the horse has bolted – after the big wealth transfers from consumers in those sectors had been banked and locked in via balance-sheet revaluations and ownership transfers in gas and electricity networks – is much easier than tackling sectors where predation is ongoing and in mid-flight – airports²¹ and electricity gentailing being leading examples.

4. Some regulatory theory

Light-handed regulation, as originally proposed in economic theory, was not deregulation. It was dreamed up, primarily in the UK, as a set of institutional arrangements and regulatory procedures that would allow greater scope for regulated businesses to exercise creativity and entrepreneurship free of detailed day-to-day regulatory intervention, while still meeting a regulator's goals. To put the idea in context, a little history is needed.

In the USA, public utilities such as electricity and gas were always supplied mainly by the private sector. Experience of anticompetitive profit-taking behaviour by railroads in the nineteenth century and oil pipelines in the early twentieth century had resulted in the Sherman Act and the Clayton Act outlawing profiteering by natural monopolies. Over the first half of the twentieth century the institutional arrangements for regulation developed in the form of Public Utility Commissions which set utility rates and controlled profits. For several decades the regulated industries were able to use creative accountancy devices - such as asset revaluations and manipulation of depreciation and depletion allowances - to subvert the effectiveness of regulators, but the US Supreme Court's *Hope Natural Gas* decision of 1944 outlawed these practices and ruled that regulation should allow only a fair return on actual capital expenditures, recorded at historic cost. The resulting regulatory system, stigmatised by neoliberals as "heavy handed regulation", remains largely intact and has been reasonably effective in achieving the primary goal of blocking the use of monopoly power to gouge excess profits out of consumers²².

²¹ See the recent Commerce Commission report on Wellington International Airport's excess profits at <http://www.comcom.govt.nz/airport-services-media-releases/detail/2012/commerce-commission-issues-draft-report-on-wellington-international-airport>, which recommended against taking any action; and recall Lianne Dalziel's 2003 refusal to regulate Auckland International Airport even when the Commission recommended she should do so (as Minister of Commerce) in 2002.

²² This is not to say the US regulatory system is perfect – there are well-known problems with asset gold-plating (the Averch-Johnson Effect), and with recovery of the cost of stranded assets (such as nuclear projects cancelled on earthquake-prone areas of California).

In the UK and many former British colonies, the problem of natural monopoly was solved by the alternative route of nationalisation. State-owned monopolies provided essential services to the mass of the population at (or sometimes below) cost, under political/bureaucratic control and management. The neoliberal campaign for privatisation of these public utilities had to confront the issue of how monopoly profiteering could be restrained once private owners were endowed with the market power to gouge consumers. The answer most congenial to the business community (and to right-wing fractions of the economics profession) was to throw consumers to the market wolves, but this answer was judged politically unsaleable in Margaret Thatcher's UK and so regulation was introduced at the same time as privatisation. US regulatory practice, notwithstanding its decades-long track record, was deemed too intrusive. Stephen Littlechild, one of the intellectual architects of the Thatcher revolution, argued that that privatisation under the watchful eye and light hand of a dedicated, skilled, but arms-length, regulator could deliver a win-win outcome: falling prices for consumers and healthy profits for the new private owners, all funded out of the efficiencies and cost reductions that (he took it for granted) would flow from private ownership and commercially-oriented management replacing the supposedly hidebound and wasteful nationalised industry managements²³.

In place of the “heavy-handed” cost-of-service regulation used in the USA, Littlechild’s light-handed alternative was “RPI-X” which put a sinking lid on final prices of electricity, gas, telecoms and so on, and then left private managements free to work out for themselves how to reduce costs while maintaining standards of service. This arrangement was light-handed so far as detailed intervention went, but actually very tightly constrained insofar as the price cap was made binding on the privatised businesses by credible enforcement relying on the ultimate coercive power of the state. If enforced, an RPI-X cap meant that whether the privatisation experiment succeeded or failed in reducing costs, consumers would benefit from lower prices for unchanged or improved services – in other words, better value for their money. Any failure by private owners to realise efficiency gains under RPI-X would simply reduce their own profits. The Littlechild vision did not contemplate allowing privatised entities to secure monopoly profits by the easy route of raising prices; his focus was on efficiency gains.

New Zealand neoliberals loved the privatisation part of Thatcherism but found Littlechild’s version of light-handed regulation still too restrictive. Throwing consumers to the market wolves was politically feasible in New Zealand, in contrast to the UK, and so the specialist regulatory agencies for electricity, gas, water and telecoms set up by Thatcher were not imitated here. The New Zealand Treasury had formed the view in the 1980s that the main problem with state-ownership here was not so much allocative or productive inefficiency as low profits, and a series of Treasury documents made the case for exploiting the monopoly power of State Coal, the New Zealand Electricity Department, and other state-owned entities, in order to secure more revenue to balance the budget by driving prices up to “long-run marginal cost” in place of the previous social-service philosophy of recovering only average cost (including the cost of new investments).

Hence as privatisation, and its half-way-house version corporatisation, were applied to New Zealand’s state-owned energy assets, the air was filled with generic claims that consumers would

²³ For a blistering account of the UK privatisation story and Littlechild’s role see James Meek, “How we happened to sell off our electricity”, *London Review of Books* 13 September 2012 pp.3-12.

benefit from efficiency gains – but there was no sign of the CPI-X price caps that, if enforced, could have guaranteed that outcome. Instead, officials argued that prices had to rise to fund new investments²⁴, while at the same time claiming that the scale of the required price rises would be “disciplined” by two separate processes: market competition for those parts of the energy sector labelled as potentially competitive; and for the rest, a process of information disclosure, which allegedly would enable consumers and others to identify abuses of monopoly power and react in some [generally unspecified] ways that would clip the monopolists’ wings. If this exposure to public scrutiny failed to persuade the new commercial managements of ECNZ, NGC, Telecom and so on to restrain their profit-taking, the suggested remedy was political: the Government could step in to impose some sort of regulatory action, if it was genuinely concerned to restrain the taking of excess profits by what used to be essential services.

To be clear: New Zealand in the 1990s did not implement at all, with respect to prices and profits of the utility sectors, the form of regulation described elsewhere as “light handed”. What passed for light-handed regulation here comprised simply information disclosure and the political threat of formal regulation under Part IV of the Commerce Act. Market competition and information disclosure do not amount to regulation even if rigorously enforced (which they were not in New Zealand). As officials explained at the time (emphasis added),

Information disclosure is the alternative to price control which has the least distortionary effect on the use of resources by firms ... Potential competitors can use the information to ensure that they are given access to essential facilities ... at reasonable prices.²⁵

[The Electricity Information Disclosure Regulations are aimed] to make transparent the performance of electricity businesses with market power, and to facilitate negotiations by customers with these businesses and recourse to the provisions of the Commerce Act.²⁶

If the conditions for access being required by the [facility] owner are too onerous (and are anticompetitive in intent) then an appropriately structured information disclosure regime will provide sufficient information to enable the discriminated party to take action under the Commerce Act...²⁷

²⁴ The credibility of this argument was never strong; the previous average-cost-pricing regime – the Bulk Supply Tariff (BST) for electricity, for example – had covered new investments on a pay-as-you-go basis. Raising the BST from average to long-run marginal cost would clearly lead to large surpluses of revenue relative to actual investment funding requirements, unless part of those surpluses was rebated to consumers via multipart (progressive) pricing. See Geoff Bertram, Rents in the New Zealand Energy Sector’, in *Royal Commission on Social Policy: The April Report*, Vol.IV, Government Printer, Wellington, 1988; and “Non-Linear Pricing Theory: the Case of Wholesale Electricity Pricing in New Zealand”, *New Zealand Economic Papers* 30, 1 (1996) pp.87-108.

²⁵ Officials Coordinating Committee, *Review of the Regulation of the Natural Gas Industry: Report to the State Sector Committee* March 1991, p.5.

²⁶ Ministry of Commerce, *Discussion Paper on Proposed Amendments to the Electricity (Information Disclosure) Regulations 1994*, October 1996, p.i.

²⁷ Officials Coordinating Committee 1991 p.25 paragraph 73.

The state, in short, simply abdicated to customers and potential competitors the responsibility for enforcing good behaviour. Unless and until a political decision was made to initiate actual regulation, no regulatory institutions would oversee the behavior of monopolists and cartels; the sole discipline would be transparency and a frequently-stated hope that the companies would self-regulate in a socially responsible fashion, notwithstanding the fiduciary duty of their boards to maximize shareholder returns. For the first decade of reform these remained the only notional restraints on profiteering. Attempts to use the courts to force providers of essential services to charge no more than fair and reasonable prices were unsuccessful because David Caygill's Commerce Act 1986, as interpreted by the Privy Council in *Telecom Corporation of New Zealand Ltd v Clear Communications Ltd* [1995] 1 NZLR 385, had suppressed the old common-law rights of consumers²⁸. Successive Ministers of Energy puffed out their chests and issued solemn warnings about their ability to "bring out the club" (Doug Kidd's expression) if companies erred, but these threats were revealed as hollow when tested by company managements. (The economist's technical term for this is incentive incompatibility: it is one thing to threaten in advance, it is quite another to act to reverse price rises after the fact when faced with a *fait accompli*.) Many years into the reforms an "Electricity Complaints Commissioner" was set up in 2001 – but was prohibited by the terms of reference from inquiring into complaints about pricing. Confronted with complaints, ministers and officials still routinely talk as though consumers have avenues of legal redress open to them, but are never able to explain where those avenues lie.²⁹ The Electricity Authority, set up in 2010 as the latest boutique non-regulator, took pains to secure a Memorandum of Understanding with the Minister of Energy explicitly relieving it of any responsibility or considering issues of "fairness" in the electricity market³⁰:

Consideration of fairness or equity issues is not part of the Authority's objective or functions. The Act provides for the Minister of Energy and Resources to recommend the Governor-General make regulations relating to domestic and small business consumers for fairness reasons, after consulting with the Minister of Consumer Affairs and obtaining and considering advice from the Authority.

I spent much of the 1990s gathering data from the information disclosure process to see how effective it might be in disciplining companies' profit-taking, and that research yielded a series of reports and publications to which interested readers are referred for details.³¹ The bottom line was

²⁸ New Zealand Court of Appeal (1997) *Vector Ltd v Transpower New Zealand Ltd* (1999) 6 NZBLR 102,908; *Pacifica Shipping Ltd v Centreport Ltd* [2002] CA279/01; NZ High Court *Metrowater Ltd v Gladwin* [2000] 6 NZBLC 99-487; Taggart, M.(2008) "Common law price control, state-owned enterprises and the level playing field", in L. Pearson, C. Harlow and M. Taggart (eds) *Administrative Law in a Changing State: Essays in Honour of Mark Aronson*, Hart Publishing.

²⁹ In November 2012 I watched a MBIE official tell an electricity consumers' meeting that there were legal remedies open to them through judicial review - but he was unable, when asked, to name any statute under which such review could take place.

³⁰ Ministry of Economic Development (2011) *Memorandum of Understanding between the Electricity Authority and the Ministry of Economic Development, January 2011*, <http://www.med.govt.nz/sectors-industries/energy/pdf-docs-library/electricity-market/electricity-industry/specific-legislation/mou-electricity-authority-MED.pdf> .

³¹ Geoff Bertram, Josephine Grierson and Simon Terry, *Pipeline Pantology: An Analysis of Disclosed Gas Pipeline Information*, report for ECNZ, Contact Energy, Fletcher Challenge Ltd and Shell NZ Ltd, March 1998; Geoff Bertram and Simon Terry, *Supposing Disclosing is Exposing: Review of the Effectiveness of the Gas (Information Disclosure) Regulations 1997*, report for ECNZ, Contact Energy and Shell NZ Ltd,

that effectively no discipline applied other than that of the unregulated market. Both the level and structure of energy prices evolved to reflect the market power of companies in the various industry segments. Where natural monopoly prevailed, limit pricing was the norm: price was pushed up to the level at which new entry – Demsetz’ “competition for the market” – was only just deterred. Where markets were potentially competitive – in electricity generation, primary gas production and processing, and energy retailing – a variety of anticompetitive practices were allowed to run free without falling foul of the weakly-drafted provisions of the Commerce Act. Most spectacularly, vertical integration of generation and retail in electricity, and across the whole supply chain in gas, made possible the establishment and entrenchment of de facto cartels which proceeded to erect self-serving market rules under the banner of “industry self-regulation”, foreclosing new entry and raising retail prices in tandem, with the greatest price hikes falling where the imbalance of power between suppliers and consumers was greatest – the residential market.

At every step along the way there was an abundance of political rhetoric, promising consumers the long-term benefits that were the ostensible aim of the competition law regime, but there was a conspicuous failure of political will when it came to delivering on threats to regulate. Company managements steadily pushed the envelope on pricing, profits and asset values and were often as surprised as anyone by the Government’s repeated unwillingness to react. In the late 1990s there was much talk by ministers in the then National Government about the possible introduction of an CPI-X price control regime, and surveys of gas industry executives showed general expectation that regulation was looming up, but the election of a Labour Government in 1999 put paid to that - the incoming ministers were quickly persuaded by officials in the key departments (Ministry of Commerce and Treasury) to differentiate themselves from previous minister Max Bradford by disowning his interventionist ideas.

The refusal throughout the 1990s to regulate even when confronted by blatant abuses seems to have had two causes:

- First, Government itself was the owner of the businesses which were to be corporatised and if possible privatised, and the objectives of state-owned utilities had been changed in 1986

December 1998; Geoff Bertram, “Light-Handed Disciplines on the Market Power of Network Owners: New Zealand’s Pipeline Access Code and Gas Industry Information Disclosure Regulations”, *Victoria Economic Commentaries* 16(1):101-27, July 1999; Geoff Bertram and Simon Terry, *Lining Up the Charges: Electricity Lines Charges and ODV*, July 2000; Geoff Bertram, Ian Dempster and Simon Terry, *Pipeline Profits: Gas Pipeline Rates of Return*, July 2001; Geoff Bertram, Ian Dempster and Simon Terry, *Portly Charges: Port Company Profitability*, with I. Dempster and S. Terry, report for KPMG Legal, March 2002, 187 pp.; Geoff Bertram, “Deregulation and Monopoly Profits in New Zealand’s Gas and Electricity Industries”, *Energy Studies Review* 12, 2 (Spring 2004) pp.208-227; Geoff Bertram and Dan Twaddle, ‘Price-cost margins and profit rates in New Zealand electricity distribution networks since 1994: the cost of light handed regulation’ *Journal of Regulatory Economics*, 27(3) (2005), pp. 281-307; Geoff Bertram, *Port company profits to 2004: updating ‘portly charges’*, report for New Zealand Shipping Federation 2005; Geoff Bertram, ‘Restructuring of the New Zealand Electricity Sector, 1984-2005’, in *International experience in restructured electricity markets: What works, what does not, and why?*, edited by Sioshansi, F.P. and Pfaffenberger, W (Amsterdam, Elsevier, 2006), chapter 7, pp. 203-234; Geoff Bertram, “Weak regulation, rising margins, and asset valuations: New Zealand’s failing experiment in electricity reform”, in F.P. Sioshansi (ed.) *Evolution of Global Electricity Markets: New paradigms, new challenges, new approaches*, Elsevier forthcoming 2013.

from social service to profit, which meant that Government was conflicted from the outset. The bigger the monopoly profits extracted from captive consumers, the greater the flows of cash into state coffers, whether from ongoing operation of essential services or from their sale to private interests at prices reflecting expected profits. The Minister of Finance was therefore likely to oppose effective regulation of SOE prices and profits, and the Treasury had strong reasons to subvert any regulatory tendencies within the state bureaucracy that might have curbed SOE profitability.

- Second, all branches of the Government itself – Parliament, officialdom, and Cabinet – were intellectually and politically in thrall to the neoliberal doctrines of the moment, with critical voices sidelined or eliminated and with regulatory capacity being rapidly and systematically reduced both by abolition of key departments such as the Ministry of Energy and by policy decisions made in the process of implementing the Commerce Act 1986 (more on this in a moment).

Inside players in the energy sectors in the early 1990s were clearly and increasingly aware that the New Zealand Government was not merely unwilling to resort to direct political intervention to block profiteering and looting – the Government itself was positioning as one of the leading profiteers and looters. This rise of the “Predator State”³² was not unique to New Zealand, but it was bad news for small consumers (whose experience in the past two decades is reminiscent of the notorious exercise in tax-farming by the French state under Louis XIV and his successors - a process which levied huge profits for the Crown and its private-sector cronies by price-gouging the common people through devices such as the salt tax, and which came to an end only in 1789).

5. Conclusion

The New Zealand state’s objectives changed in tandem with the official adoption of deregulation (misnamed light-handed regulation) and SOE corporatisation/privatisation. The defence of the new policies using arguments from the old order of nationalised essential facilities was never more than a smokescreen for a new age of corporate looting, in which the state was not simply complicit but a central player in its own right. The irony is that when the state sets out to loot its own enterprises, the resulting wealth transfers are internalised in a way that makes them particularly hard to analyse from a welfare perspective. Those groups of consumers that lack organised muscle sufficient to hold predation at bay (in the New Zealand case this means primarily residential users) are gouged for cash, most of which eventually turns up in the public accounts as revenues derived from SOE profits or share floats. These arguably reduce taxes for some part of the population – probably richer and more powerful than the gouged consumers, in which case the overall effect is regressive for income and wealth distribution. Along the way a new class of corporate SOE managers predate on the revenue flows to secure high salaries, bonuses, luxuriously appointed office buildings, and fat expense accounts. Where privatisation removes assets from state ownership at prices below the

³² James K. Galbraith, *The Predator State: How Conservatives Abandoned the Free Market and Why Liberals Should Too* New York: Simon & Schuster, 2008.

true capitalised value of subsequent monopoly rents, the private shareholders are enriched by the pricing and accounting behaviours that are given legitimacy by public policy and SOE practices.

An important implication of the preceding paragraph is that there is no necessary reason in principle why a government with genuine social-democratic policy goals could not have opted to privatise, decentralise, and light-handedly-regulate its electricity sector and to have come out the other end with a working, democratically-oriented, socially responsible result. [Ignore for the purposes of this argument the reflection that a genuinely social-democratic government would not have found the case for privatisation or corporatisation compelling – though it could have been comfortable with a light-handed approach to regulation.] Abandonment of the old social-democratic moral compass, and its replacement by subservience to financial and large-corporate interests, was at the heart of the New Zealand reforms and largely accounts for the outcomes of reform. A social-democratic government would not have lost the ability and will to regulate properly, even if it opted to stay its hand provisionally. A social-democratic government would have continued to plan in order to overcome the problem of coordinating large interdependent energy investment decisions, even if they were decentralised in private-sector hands. A social-democratic government would have had an open mind regarding the relative efficiency of private versus state management and would have avoided dogmatic adherence to the neoliberal vision, while demanding improvements, wherever feasible, in state sector management. (To see what might have been, one could look at Denmark, notwithstanding the obvious differences of detail.)

To conclude, I reproduce a passage from a 1999 paper I wrote about self-regulation and information disclosure:³³

[T]he reluctance of the New Zealand Government to confront the issue of blatant profit-taking by well entrenched natural monopolies has been nothing short of extraordinary. The oft-repeated threat by ministers and officials to "resort to price control" if industry failed to meet government's objectives had little credibility to begin with, given the political constraints and incentives faced by those same ministers and officials. By now the emptiness of the threat is a standing joke. The absence from the information disclosure regulations of provisions that would force disclosure of monopoly profits, and enable individual customers to benchmark the prices charged to them against competitive standards, may well be attributable to the capture by key vested interests of a weak, under-resourced, and often apparently demoralised state regulatory apparatus.

Both of these points recall a distinction made by the Swedish economist Gunnar Myrdal in his 1968 book *Asian Drama*, written about South Asia at the time of the East Asian takeoff. Myrdal drew a distinction between "hard states" and "soft states". Hard states were those which developed and maintained the effective ability and willingness to enforce their policy goals if required. Because such states have effective monitoring mechanisms, it is credible for private sector players to assume they will be caught out if they misbehave, so the incentives to flout policy goals are greatly reduced. At the same time because the state has fully credible capacity to step in and impose outcomes both ruthlessly and efficiently,

³³ Geoff Bertram, "Light-Handed Disciplines on the Market Power of Network Owners: New Zealand's Pipeline Access Code and Gas Industry Information Disclosure Regulations", *Victoria Economic Commentaries* 16(1):101-27, July 1999, pp.22-23.

the need for it actually to do so is dramatically reduced. Light-handed regulation, to be effective, requires a hard state on the sidelines.

Soft states, in contrast, lack the capacity and the will to dictate key outcomes. "There is an unwillingness among the rulers to impose obligations on the governed and a corresponding unwillingness on their part to obey rules laid down by democratic procedures". Soft states do not maintain the analytical capacity to monitor effectively, nor to design surgically-efficient policy interventions. They lack enforcement machinery sufficient to give credibility to their stated aims. It is therefore rational for the private sector to treat them with a degree of contempt and to engage in strategic behaviour which is directly subversive of the declared goals of policy. Light-handed regulation under these conditions is simply non-regulation, punctuated by periodic blundering interventions which tend to do more harm than good.

The New Zealand state has made itself soft in this sense, and this softness has contributed directly to the poor results from the structural reform programme of the past decade, measured in terms of the things that really matter for an economy in the long run: growth, productive investment, sustainability, and the elimination of poverty. Gas industry managements have responded directly to the incentives created by policy design, and their responses have been appropriate in terms of serving faithfully the interests of their share-holders. Our problem is that what is good for gas company balance sheets and shareholders is not necessarily best for New Zealand. If the economy as a whole has lost out as a result of regulatory failure, however, the blame lies squarely with Government, not with the industry.