

# Competition and the UK retail energy market

Stephen Littlechild

Meridian Energy Seminars, Wellington

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# Outline

- Opening the UK retail energy market 1998-2008
- Ofgem's diagnosis and remedies 2008-2014
- CMA investigation and remedies 2014-2016
- Government and price control 2017
- Understanding Ofgem's policies & possible remedies
- Critique of CMA analysis & need for more challenge
- Behavioral economics: its use & misuse
- Reforming economics
- Latest developments – retail market is working & impact of price cap

# Opening the retail energy market 1998-2008

- 1986 British Gas privatized & restructured later, competition
- 1990 Electricity industry privatized & restructured, competition
- 1990-1998 Retail competition phased in
- 1998-2002 Transitional price cap, consolidation into 5 major electricity suppliers + British Gas, all selling both fuels [Big6]
- 2002 Ofgem removed price cap: “evidence is overwhelming competition is effective over all social groups & methods of payment”... “ongoing price controls would pose serious risks to development of competition”
- 2002-08 Vigorous price competition & innovation, switching rate 20% p.a.
- Jan 2008 “Market is sound, Ofgem assures Chancellor”

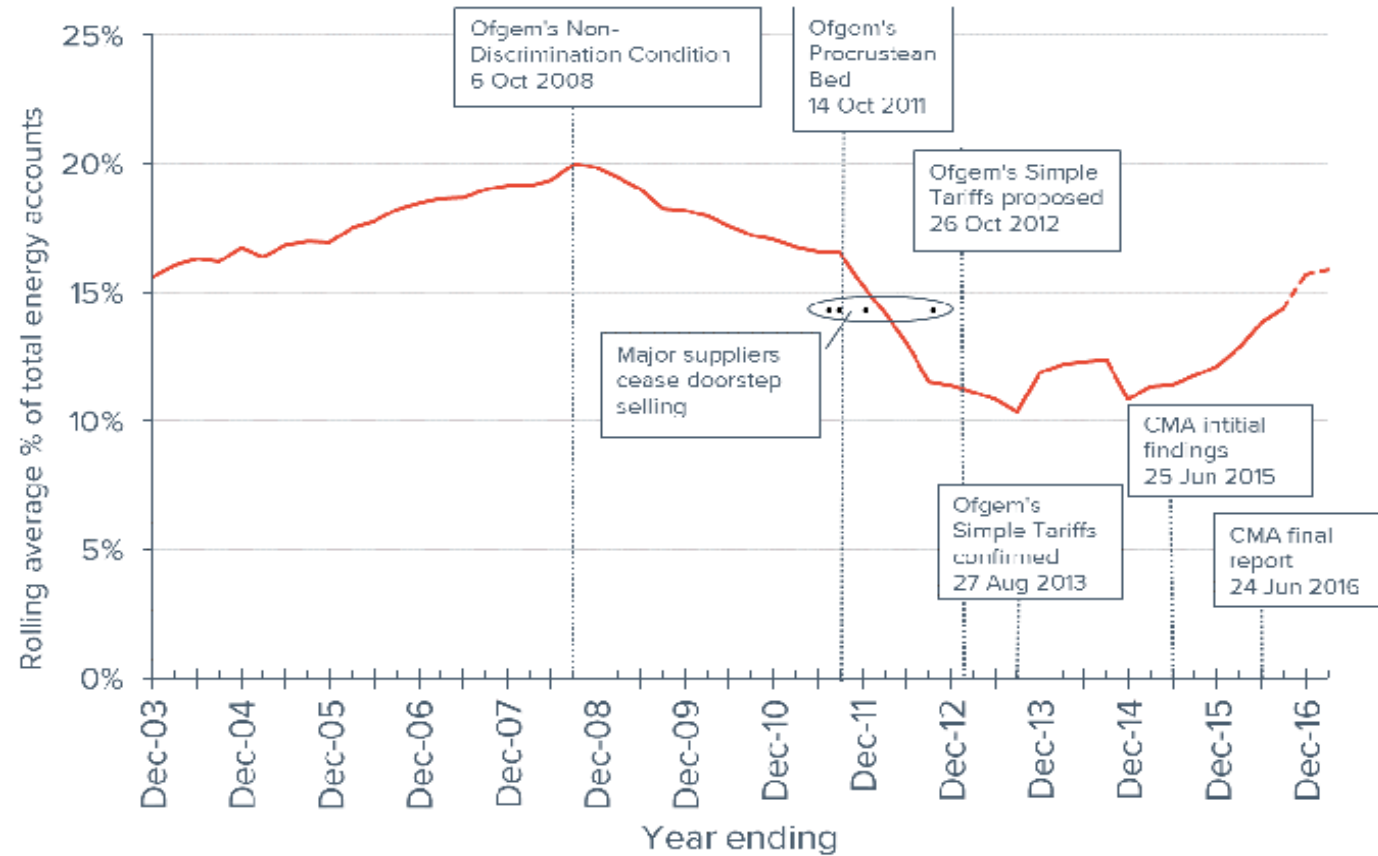
# Ofgem's Probe 2008

- Feb 2008 Ofgem Probe “to address mounting concern among customers” about domestic (residential) market
- Did not find excessive profits, did find high levels of switching
- But relatively few customers proactively & confidently engaged
- Less active customers paying £1bn per year more than active ones
- Esp concern “unfair price differentials” between prices that suppliers charged inside & outside former monopoly areas
- Proposed 20 measures to promote more customer engagement
- Especially non-discrimination condition: prices to reflect costs

# Results of non-discrimination condition

- Economists very critical, George Yarrow resigned from Ofgem board
- Condition implemented 2009-2012
- Lower tariff differentials but also higher prices
- Ofgem: 38% increase in net retail profit margins by 2010
- Note also crackdown on door-to-door selling, suppliers abandoned 2011-12
- Suppliers less able to engage customers in lower socio-economic groups
- Adverse impact on customer switching (churn): 2003 15% up to 2008 20%,
- Then fall to 2011 16%, then more sharply to 2013 10% ie halved in 5 years

# Customer energy switching rate 2003-2017



# Ofgem's Retail Market Review (RMR) 2011

- Ofgem attributed fall in switching to “complex pricing structures” and “increase in number of tariffs available”
  - Retailers were now looking for other ways to compete including internet
- “Further radical actions required to make it easier to compare prices”
- 2011 Prescriptions re Tariff Information Label, bill format etc
- Ofgem proposed to restrict suppliers to 1 tariff & Ofgem set monthly fixed charge, so competition on single p/kWh (Procrustean Bed)
- 2012 Instead, Simple Tariffs (max 4/supplier, most discounts banned)
- Many more proposals eg PM put customers on cheapest tariff in market
- Miliband (Labour party leader): freeze tariffs til next election

# Consequences of Simple Tariffs policy

- Introductory discounts, cash-back schemes, loyalty discounts banned
- Prompt payment discounts banned
- “best offer in market” banned because discount higher in yr 1 than yr 2
- StayWarm tariff (fixed monthly bill to over 60s) banned
  - Ofgem 2001 had described it as “major initiative to meet the needs of the fuel poor”
- Focus on 4 most popular tariffs, minority tariffs (eg Green) withdrawn
- Innovation restricted e.g. wholesale tracker tariffs banned
- Outcome: 1 Standard Variable Tariff (SVT), 2-3 fixed price tariffs 12,18,24 mos
- This militated against long-term customer relationships



# Competition & Markets Authority (CMA) Investigation 2014-2016

- Ofgem referred sector to CMA & identified 5 issues of concern
  - Weak customer response, incumbency advantage, tacit coordination, vertical integration, barriers to entry & expansion
- Excluded large customer market: “little evidence of harmful features”
- CMA found no problem with last 4 issues, or with wholesale markets
- But 10 market features had an Adverse Effect on Competition (AEC)
- Including Ofgem’s Simple Tariffs policy – remedy to remove it
- Also “lack of robustness & transparency in regulatory decision-making”
- Weak customer response + technical constraints re PrePayment Meter (PPM) customers (16% total) - remedy PPM price cap

# Weak customer response & detriments

- CMA found customers not responding to large price differentials
  - Max dual fuel saving ave £164/year 2012-15, £330 in Q2 2015 (ave bill c £1000/year)
  - Low income, less educated, renting, older customers less engaged
- “Weak customer response” AEC - gave suppliers market power, which they exploited via level of prices & price discrimination
- Customer detriment average £1.4bn pa, £2bn in 2015
  - Calculated via CMA’s “direct approach”
- Remedies for weak customer response AEC
  - Promote greater customer engagement
    - Disengaged Customer Database: 3 yr SVT customer details made available to other suppliers
  - Let price comparison websites compete by offering tariffs not available elsewhere

# More extensive price controls?

- CMA Majority: would undermine competitive process, with potentially worse outcomes for customers in long run, by reducing customer incentives to engage, reducing supplier incentives to compete, and increasing regulatory risk
- CMA Minority (Prof Martin Cave): present harm very severe (£2bn/yr = £75/household), remedies will take time & untried & untested, other information remedies 'had not made a dent' in customers on SVTs
- He proposed to extend PPM price cap to SVT customers (about 70% of total) for 2 years

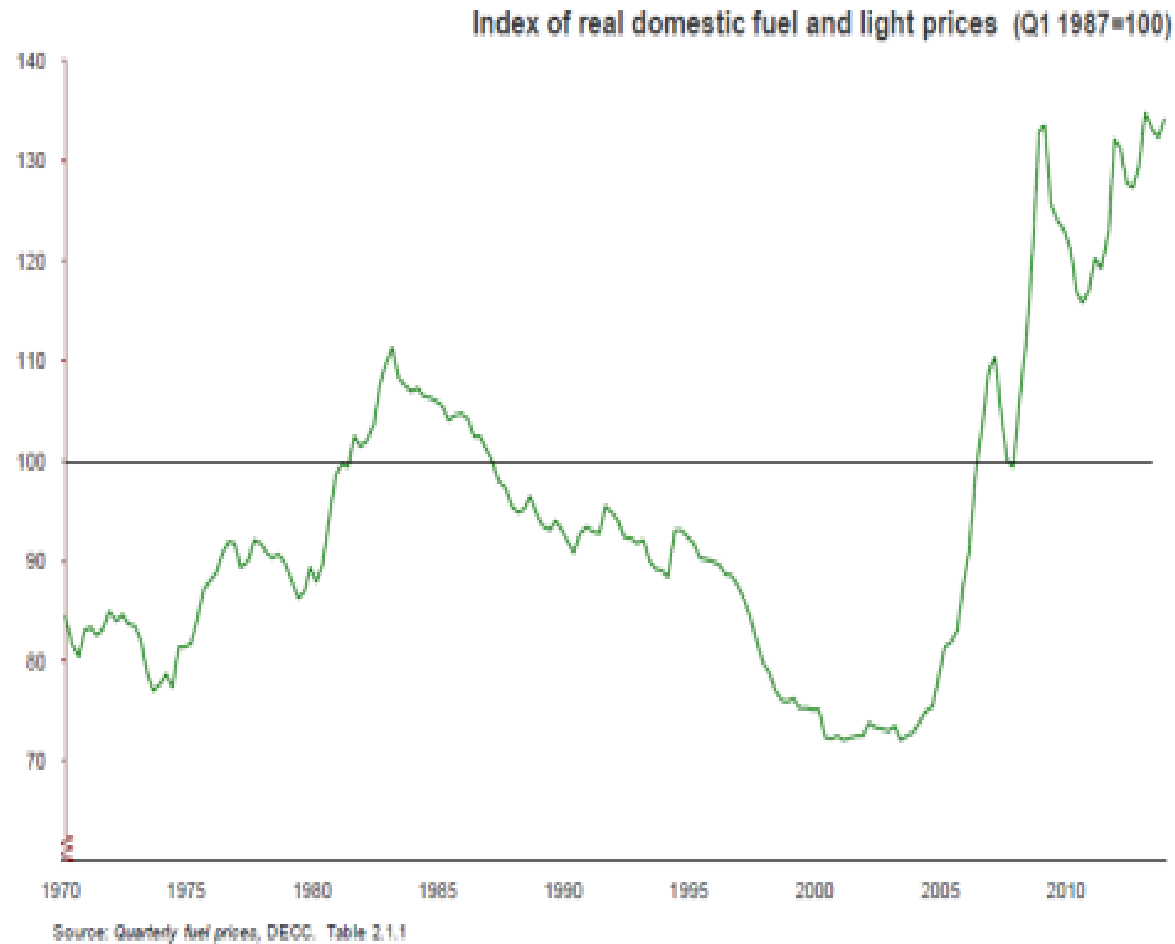
# Political developments 2017

- Feb: March large suppliers announce price increases
- April: PM declares election, intends to deal with 'rip-off energy tariffs'
  - Most election manifestos proposed price controls & other measures
- June: Sec of State asks Ofgem what it intends to do
- Ofgem: extend PPM price cap to another 2m vulnerable customers, but argued that suppliers would contest imposing cap on SVTs
- Sept: Sec of State gives Ofgem 'final warning' to eliminate £1.4bn customer detriment. Ofgem declines to do so.
- Oct: Bill to order Ofgem to impose price control. No appeal provision
  - Nov: Sel Committee begins pre-legislative scrutiny 'to fix broken energy mkt'

# Understanding Ofgem's policy & remedies

- Why did Ofgem reverse policy in 2008?
- Energy prices roughly doubled (see next slide) – Ofgem under pressure
  - Energywatch: “Ofgem complacent at best, negligent at worst”
- Ofgem Probe noted increases in world fuel prices, but discussion technical
- Left suspicion of excess retail profits – but not justified by data
  - Data showed average profit margin 2005-2007 was negative
- CMA concluded “Ofgem's inability to address concerns about profitability ... led to Ofgem interventions that had adverse effect on competition”
- CMA remedy: Better reporting on retail profits (including balance sheets)
- SCL: Sensible, but sector regulator exposed to pressure if prices increase, better to leave to occasional investigations by competition authority

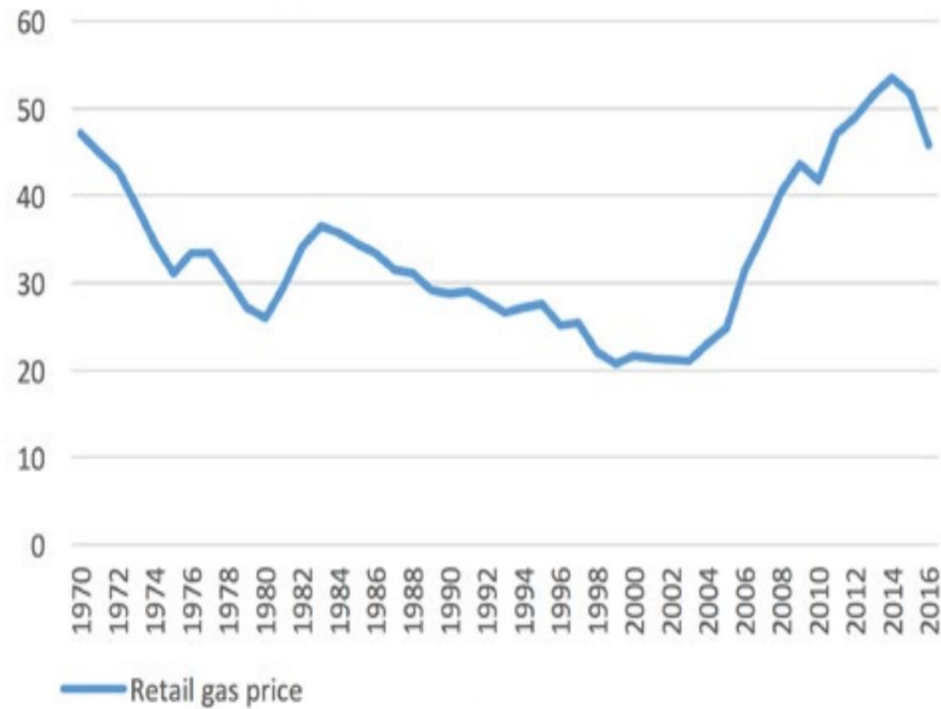
# Context: energy prices suddenly doubled



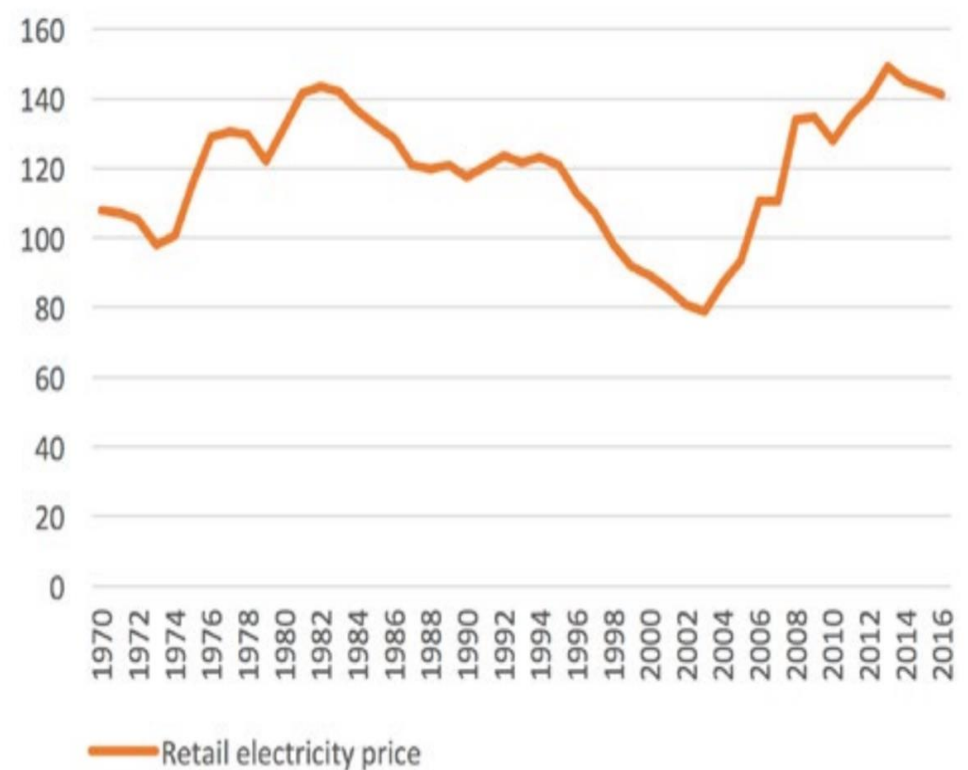
# Energy price increases 2004 - 2008

**Figure 1.3** Average retail energy prices: 1970 to 2016

Average retail price (£ per MWh)



Average retail price (£ per MWh)



Source:

BEIS, Annual domestic energy bills data, 2017.

# Analysis of price differentials

- Ofgem 2008: price differentials without cost justification are “unfair”
  - Shows competition not working – must “accelerate transition to competition”
- But economic literature shows differentials can indicate competition
  - Competition can force firms to discriminate (Baumol)
- True in retail energy sector: more active customers force prices down to marginal (energy) cost, less active customers cover overheads
- But at margin all can switch, both sets of prices competitive, overall profits in UK not excessive
  - 2005-2007 on average loss-making, 2009-2014 two out of Big6 were loss-making
- Differentials may be public interest concern
  - Could justify assistance e.g. to vulnerable customers
  - But more switching could increase differentials if overheads spread over fewer less active customers – some customers benefit at expense of others
- Distortions in UK since small suppliers exempt from social/environmental levies



# CMA on customer detriment

- Customer detriment “direct approach” average £1.4bn per year (2012-15)
  - Cited in election manifestos and by PM & SoS, used to pressure Ofgem
- But how soundly based is this calculation?
- CMA aimed to compare prices: Big6 v 2 mid-tier suppliers
- But had to make substantial adjustments to ensure comparability
  - “10.27 We have based our assessment on the principle that ... **a competitive benchmark price** ... should be reflective of the costs of an **energy supplier which has reached an efficient scale** ... and which is **in a steady state** ... and it should generate revenue that is consistent with **a normal return**”
  - “**10.2 [This] is not an idealised perfectly competitive market**”
- ? Economists in audience can decide on that
- Detriment is comparison with hypothetical efficient state, not excess profit

# CMA detriment calculation: further concerns

- Big6 claimed unrealistic & too high (naturally)
- Difference of opinion was significant
  - Oxera (March 2017) advising SP: Correct detriment in range minus £720m to plus £755m
- Also important is lack of transparency (cf Oxera)
  - CMA made 2 final adjustments not made previously, total c. £1bn.
  - Made after closure of data rooms
  - So no-one could see & comment on details of calculation
  - CMA could not benefit from such comments

# CMA on excess profits: critique of “indirect approach”

- CMA calculated excess profits (usual for competition authorities) ave £303m
- But by standards CMA applied to large customer market, no excess profit
  - Applying CMA’s risk-adjusted I&C EBIT margin benchmark in domestic market would remove £300m
- Large customer market competitive: didn’t need investigation – ditto domestic
- “To indicate failure of competition, profits should not be specific to particular firm – most innovative & efficient suppliers will have higher profits” (CC 2009)
- But retail profits *were* specific: BG had 2/3 total sector retail profits, BG+SSE 95%
  - BG & SSE most effective suppliers, growing market share until 2008 & lowest costs
- 2 other Big6 suppliers had ave profits below CMA competitive level, 2 had losses
- Industry profits not excessive nor attributable to sector-wide “weak customer response”

# CMA on inefficient costs

- CMA: inefficient costs average £420m pa 2007-14
  - Difference between actual costs & costs of lower quartile supplier
- But is this justifiable basis for deducing customer detriment?
  - Cost differentials in all real markets – costs only equal in theoretical perfect competition model
  - Implies competition in capital market not working – is that plausible?
  - Ignores other possible factors eg (French) government ownership of least efficient supplier
- Inefficient costs previously considered in UK, but very limited
  - SME Banking 2002: only one bank inefficient, 15% total detriment
  - CC Groceries 2008: “two of the major parties had higher costs than the other three ...In both cases, there was clear evidence that profitability had suffered accordingly, so that shareholders rather than consumers were bearing the consequence.” (2.153)
- Contrast CMA Retail energy investigation
  - “large part of detriment [over 50%] likely due to inefficiency rather than excess profits”
  - No adjustment for unprofitability of two energy retailers where shareholders suffered

# What went wrong & what remedies?

- CMA £1.4bn customer detriment calculation not sustainable
  - Actual profit & other data consistent with broadly competitive market
- Hence need for more challenge to CMA analysis during investigation
- Four possible ways to encourage this:
  - 1. Access to data room while CMA calculations changing & after final report
  - 2. Wider public understanding of CMA analysis, with fewer excisions
    - 10,254 items excised from CMA Energy Market Report
  - 3. Widen basis of appeal to include on merits & analysis not just 'decision'
  - 4. Drop requirement for CMA to work with regulators – more independence

# Behavioural economics

- Has become increasingly influential
  - Ofgem Probe 2008 first major use of behavioural economics in UK?
  - 2013 CC/CMA revised Guidelines mentions 50 times
  - 2013 Govt Steer to CMA
    - “consumer behavioural issues should be central to the CMA’s analysis ... and inform the remedies”
- Merit: shows many conventional economic assumptions unrealistic
  - Contrast homo sapiens and homo economicus
- And has led to useful operational suggestions
  - Behavioural Insights Team/Limited (Nudge Unit)
  - E.g. design of recent trial on Disengaged Customer Database (below)

# Misuse of behavioural economics

- Instead of using these behavioural insights to reform economics, economists have tried to reform people
  - Aim to turn homo sapiens into homo economicus
  - To correct for “behavioural biases” (eg loss aversion, status quo bias)
  - Inactive customers are an inferior form of active customers
- Misleading policy implications
  - E.g. Markets require “confident customers, adept at exercising choice” (BIS 2010)  
“Competition only works for active customers”
  - Should eliminate SVTs? But for many customers SVTs are the solution
- Undue focus on weak customer response/engagement
  - CMA Energy Report 410 mentions
- Switching has become an obsession
  - CMA Energy Report 4785 mentions, CMA Banking Report 3162
- Focus on customer failure but little acknowledgement of regulatory failure
- Conclusion: Need to reorient behavioural economics to reforming economics rather than reforming customers

# Competition & CC/CMA Guidelines

- UK competition authorities have a dynamic view of competition
- CC Guidelines 2003 para 1.16
  - “the Commission sees competition as a *process of rivalry* between firms or other suppliers ... seeking to win customers’ business *over time*.... Whatever forms the process of rivalry takes, the Commission will consider its effects over time”
- CC/CMA Revised Guidelines 2013 para 10
  - “Competition is a *process of rivalry* as firms seek to win customers’ business.”
  - “the CC defines such a benchmark [against which to judge an actual market] as ‘a well-functioning market’ ... but *not an idealized perfectly competitive market*.”
- But what do the CC & CMA do in practice?



# Competition & CC/CMA Reports

- Actual reports CC/CMA reports characterised by
  - Variety of different approaches
  - Little or no emphasis on process over time
  - Benchmark basically idealised & static perfectly competitive market
- What CC/CMA practise is opposite of what they preach
- Why? Process isn't in economics textbooks, perfect competition is
  - Johansson & Malm, *Econ Journal Watch*, May 2017
- Qualifying as a professional economist requires ability to explain why perfect competition is appropriate benchmark without reference to any process of rivalry over time
- Revise CC/CMA definition to fit textbooks? No, revise economics textbooks
- This will require retraining economics profession? May be happening

# The latest economics textbook

- *The Economy*, textbook by CORE, OUP 10 Oct 2017
  - “In response to student allegations of irrelevance of economics”
  - Opening chapter headings:
    - 1 The capitalist revolution 1.1 Inequality
  - “Essential concept to understand inequality is Fairness”
- Schumpeter ch 2.5: dynamism of capitalism, innovation rents, creative destruction, entrepreneur
- Hayek ch 11: prices are messages, meaning of competition, dispersal of knowledge
- But don't get too excited
  - about 500 Glossary definitions do not include Competition
  - but do include 50 references to equilibrium

# Finally, recent developments in energy market

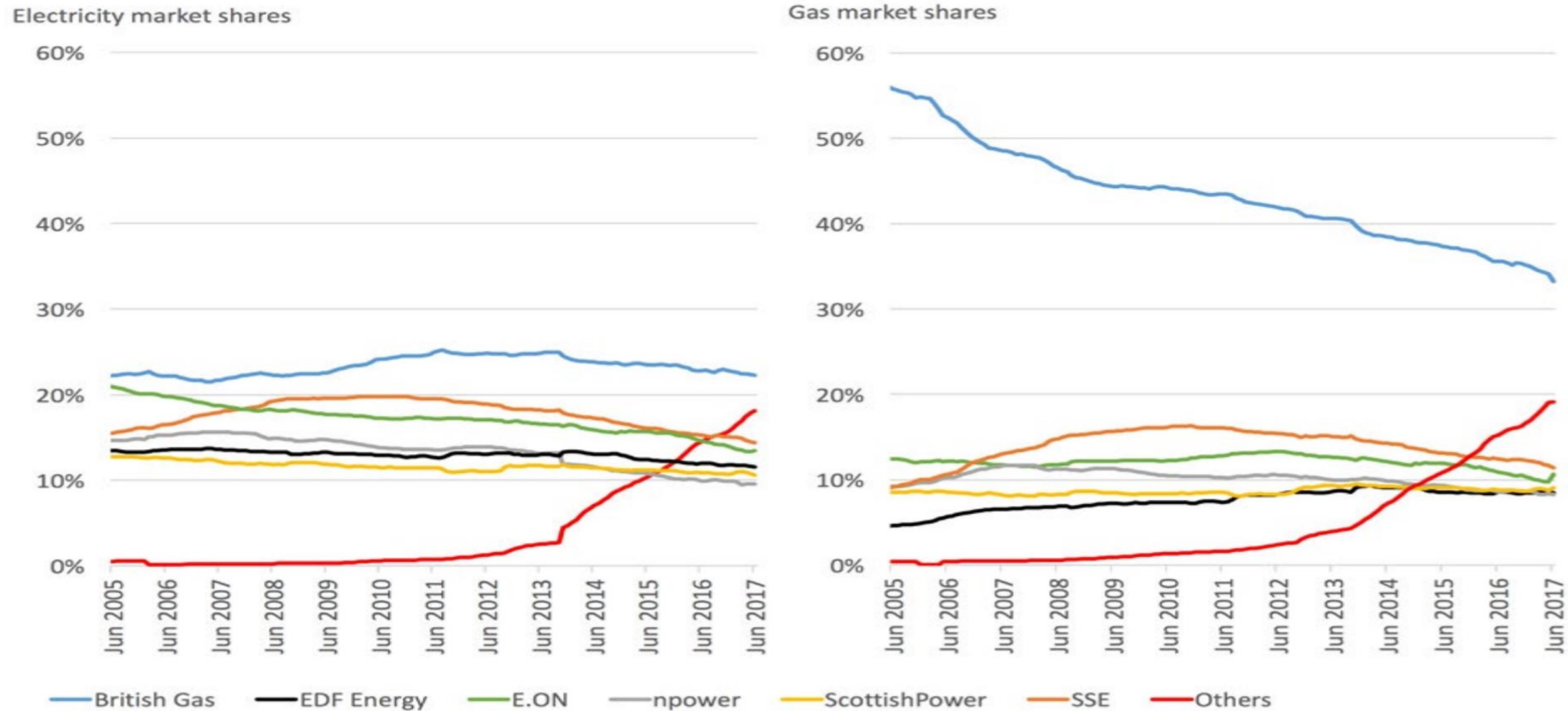
- Evidence that even “disengaged” customers respond to price signals and prompts
  - undermining assumption of “weak customer response”
  - Indicating lack of market power of incumbent suppliers
- Evidence that switching is leading to significant growth of new entrants in UK, reducing market shares of incumbents
  - Two Big 6 suppliers last week agreed merger to cope with pressures
- Evidence that price caps reduce competition

# Disengaged Customer Database: update 1Nov

- Ofgem trial: Will disengaged SVT customers switch supplier/tariff (in 4 mos)?
  - Sent 6 marketing letters from other suppliers 13.4%
  - Sent Ofgem 3 Best Offers Letter 12.1%
  - Sent Nothing: control group 6.8%
- Average savings £131 per year
- But very few customers switched to suppliers they were sent info about
  - Most went to Price Comparison Website or phoned own supplier
- More customers called own supplier & negotiated better deal (8.3%) than switched supplier (6.7%)
  - And got slightly higher savings (£132 v £121) but data limited
- SCL comment: Timing atypical – c.f. controversial Big 6 price increases – but shows even “disengaged” customers respond to price increases & other info. Market is more competitive, and less market power, than often assumed.

# New entry has doubled since CMA study

**Figure 2.2** Electricity and gas market share evolution



**Note:**

Data correct as of June 2017.

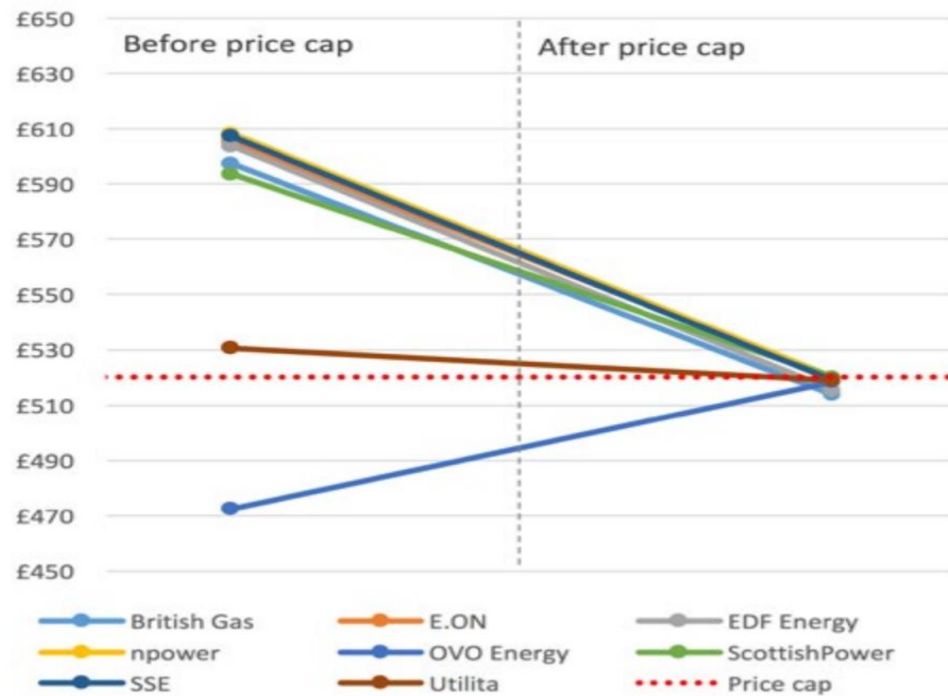
**Source:**

Ofgem analysis of Distribution Network Operators and Xoserve data.

# Effect of price cap on PPM tariffs

**Figure 2.13** Prepayment tariffs before and after the price cap

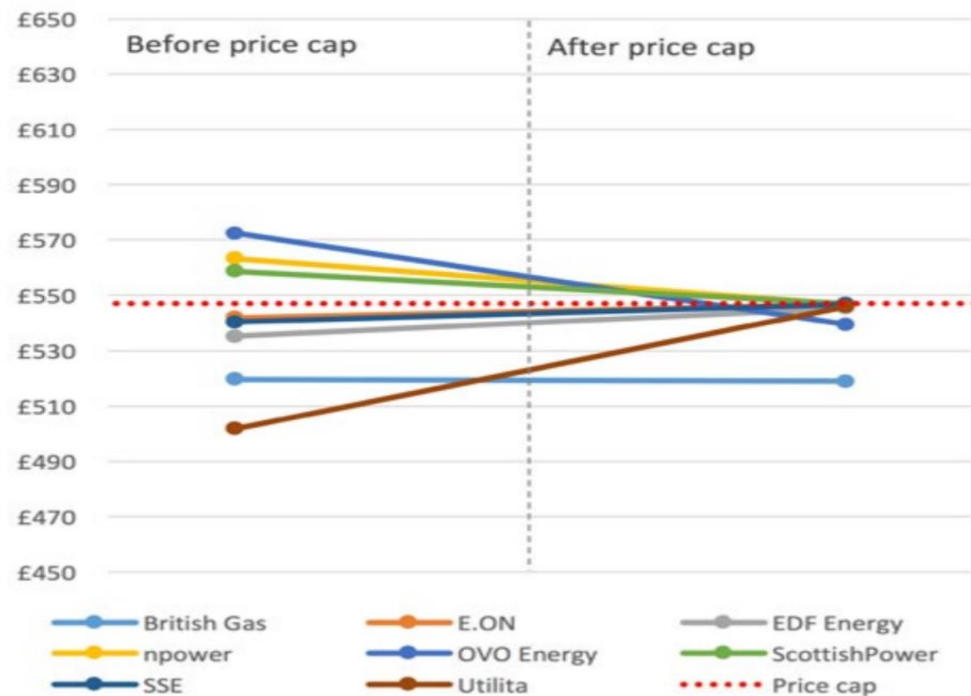
Annualised cost of gas for a typical household



**Note:**

The chart shows each supplier's standard variable prepayment tariff only. These suppliers serve 90% of consumers using prepayment meters.

Annualised cost of electricity for a typical household



**Source:**

Ofgem's analysis of Energylinx data

# Conclusions

- Increasing concern about UK retail energy market since 2008
- “Market is broken” – proposals for extensive price controls
- But concern mainly driven by price increases, not fault of retail market
- Economic analyses by Ofgem & CMA deficient in various respects
- Problems too with some uses of behavioural economics & economics
- Scope for improvements in regulation & analysis
- Evidence suggests that UK competitive retail energy market is working
- And evidence that imposing price controls will stifle competition – against interests of customers over the longer term