The nature of competition and the regulatory process

Keynote speech
Workshop on effective competition
Justus-Liebig-University Giessen
Stephen Littlechild
27 May 2010

Outline

- What is competition supposed to do?
- Alternative ways of assessing competition
- Illustrate implications for policy
- Setting and removing price caps
- Safeguard price caps?
- Regulation to better replicate effective competition
- Applications including in Germany
- Conclusions

Effective competition

- To assess whether competition is effective
- What is competition supposed to do?
- Different views on nature of competition
    - Neo-classical economics: perfect competition
    - Austrian economics: market process
- May have different policy implications
- E.g. to allow or prohibit competition
- To impose, maintain or remove a price cap

Neo-classical v Austrian

- Perfect competition & welfare economics
  - Many buyers and sellers
  - Static: cost and demand curves given
  - Price = marginal cost = average cost
  - Benchmark: market in equilibrium, Zero profit,
- Market process: Smith Schumpeter Hayek
  - Rivalry regardless of number of competitors
  - Dynamic: search for profit via discovery/creation of shifts in cost & demand curves, innovation
  - Profits & losses as market tends to equilibrium
  - “Perennial gale of creative destruction”

Properties of effective competition

- Neo-classical and Austrian approaches
  - A: eliminating excess profits
- Austrian approach
  - B: discovering more efficient production
  - C: discovering what customers want
- A has attracted most interest
  - E.g. SSNIP test
- But B and C arguably more important

Nationalisation & no competition

- UK nationalised industries 1960s, 70s
- Economists used static welfare economics
  - Problem: what prices for nationalised industries?
  - Answer: optimal pricing and investment rules
  - These take cost and demand curves as given
- But real problems were dynamic
  - Inefficiency, excessive costs, uneconomic investment, old products, too little innovation
  - Need to discover better ways of doing things
  - Need to *change* cost and demand curves

Privatisation with competition

- How to solve the real problems?
- Private ownership and competition
  - Better incentives to find more efficient production methods, & deliver products customers prefer
  - Opportunities for others to challenge – rivalry
  - Lower costs & prices, new products & innovation
- RPI-X price cap regulation reinforced this
  - Provide incentives to efficiency and innovation
  - Not for regulator to specify these outcomes
  - For companies to discover them

Successes of incentive regulation

- Property A: eliminate excess profits
  - Became a central regulatory focus
  - Building block: efficient opex & capex, low WACC
  - Led to tough price caps - lower prices
- Property B: discover efficient production
  - Privatisation, competition and regulation worked well
  - Significantly Increased efficiency e.g. 1/3 workforce
- Property C: discover what customers want
  - greater investment, better quality assumed preferred

Downsides of incentive regulation

- A: Tight price caps can discourage effective competition where that is feasible
  - This limits scope for deregulation
- B: How to discover efficient opex & capex?
  - Price control processes burdensome (8-fold inc)
- C: How to discover customer preferences?
  - What tradeoffs between quality and price?
  - Can vary with particular circumstances of each area – but centralisation limits ability to tailor control
  - Uniformity reduces innovation and learning

Transitional price caps 1

- Regulators set transitional price caps
  - Set equal to cost as for networks
  - Wait for competition to arrive before removing them
  - Competition judged by market shares or SSNIP test
- But this assumes that
  - Growth of competition independent of price caps
  - Price more important than choice & innovation
- These assumptions do not always hold

Transitional price caps 2

- Price caps may underestimate costs & prices that characterise actual competitive process
  - Removes element of monopoly profit
  - Removes price disparity due to different information
  - Reduces disparity due to different efficiencies
  - Reflects projected greater efficiency in future
  - Cost of capital may not reflect higher risk in competitive markets and cost of regulatory risk
- Price caps also reduce customer switching
- Hence transitional price caps may make entry more difficult and deter competition

Example 1 retail telecoms

- 1984 RPI-X retail price cap set “to hold the fort until competition arrives”
  - BT’s profitability higher than would be expected in competitive market; competition not yet fully effective (Oftel repeatedly including 2001)
  - Price caps retained and repeatedly tightened
  - “Retail Price Caps have brought about a steady reduction in prices to the point that the UK has some of the lowest prices for residential telephony among developed countries.**”** (Ofcom 2006)
  - But was this conducive to competition and choice?
- 2006 Ofcom ends price cap – after 22 years!

Example 2a retail electricity

- 1998 transitional retail price restraints
  - “the restraints should not seek to do the job of competition, or discourage its development.”
  - “The aim is to … leave scope for competitors to purchase and operate more efficiently than the incumbent PESs. It is then for the competitive process to bring these further benefits to customers” (OFFER 1997)
- 2002 Ofgem soon removed price cap
  - Courageous given opposition, but GB has led the world in retail electricity competition ever since

Residential Retail Electricity Markets

Aggregate Market Shares of Non-Incumbent Competitors

No or light price control

Great Britain	**52%**
South Australia	47
Victoria	45
Texas	44
Sweden	>32
New Zealand	32
Norway	>28
Netherlands	28

Moderate price control

New South Wales	30%
Finland	21%?
New York	16%

Heavy price control or other barriers

Spain	8%
Germany	5%
Austria	5%
Denmark	2%
Italy	1%
France	<1%
Ohio	6%
Pennsylvania	3%
Connecticut	2%
Maine	1%
California	1%

Competition is more than prices

- “Lower prices are by no means sufficient if the process of rivalry is weakened”
- “several dimensions of rivalry will often still be diminished, including the choices available to consumers concerning the number of independent sources of new ideas, new strategies, innovative products or processes and the like.
- This reflects that competition is, to an important extent a mechanism by which new ideas emerge and the best ones survive, only to be superseded by other still better ones.” (Sir Derek Morris, chairman Competition Commission, 2003)

Competition in Germany

- “when the Berlin Wall came down, West Germans were not amazed at how high prices were in the East; they were amazed at the extraordinary lack of choice and poor quality of the products which were available, suggesting that this had been the real, enduring benefit of a competitive market economy.” (Sir Derek Morris 2003)

Example 2b retail electricity

- Monopolies used to set single variable tariff
- Competitors now offer choice of contracts
  - UK price guarantee tariffs (1-3 yrs) 4.6m customers
  - Fixed prices up to 10 years have been offered
  - Norway: spot price contracts c25% customers
  - Sweden: fixed price winter, spot price summer
  - Market contracts >50% Sweden, 69% S Australia
- Competition seeks to discover and provide the terms that customers prefer
  - Not replicated by a regulated price for single tariff
  - And less likely if tariffs held down by price caps

Example 3a UK airports

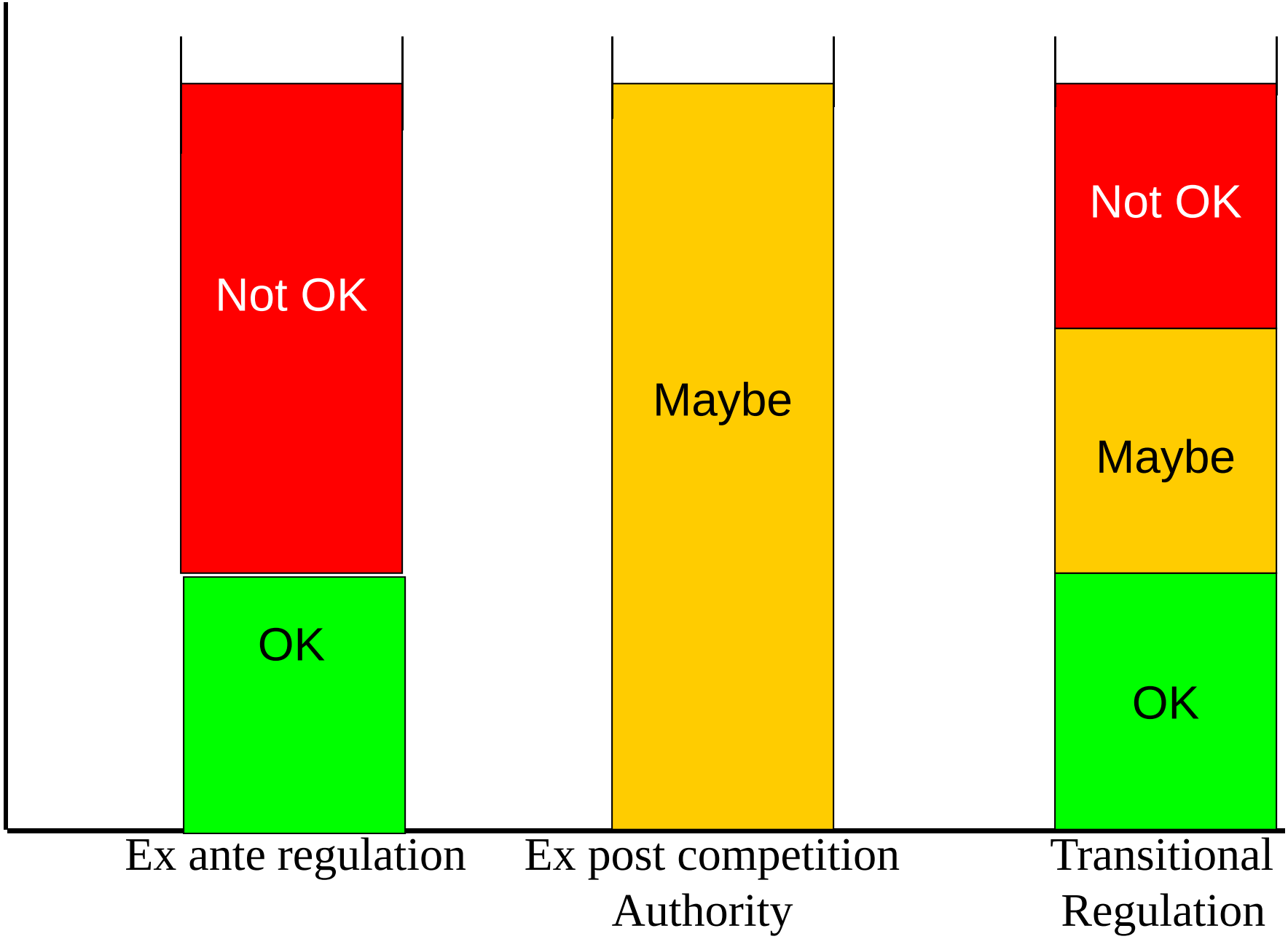
- CAA recommended de-control of Stansted
- Dept Transport rejected this
  - “On balance significant market power is unlikely now but more likely than not in future although this conclusion is finely balanced”
- Comment
  - Hard to judge whether market is competitive now, even harder to assess course of competition in future
  - Easier to assess competition by removing control
  - Elsewhere long-term contracts with airlines facilitate coordination of investment and reduce risks
  - Control thus distorts competitive market process

Example 3b UK airports

- CAA “safeguard” price cap for Stansted
  - Problems of conventional building block approach
  - Risk of investment distortion > risk of market power
  - Safeguard cap just below level at which prices might be excessive under general competition law
- CC rejected this approach
  - Risk of investment distortion < risk of market power
  - Building block approach (WACC 7.1%) more certain
- Explore implications of a safeguard cap
  - To allow greater scope for effective competition

Ex ante v ex post regulation

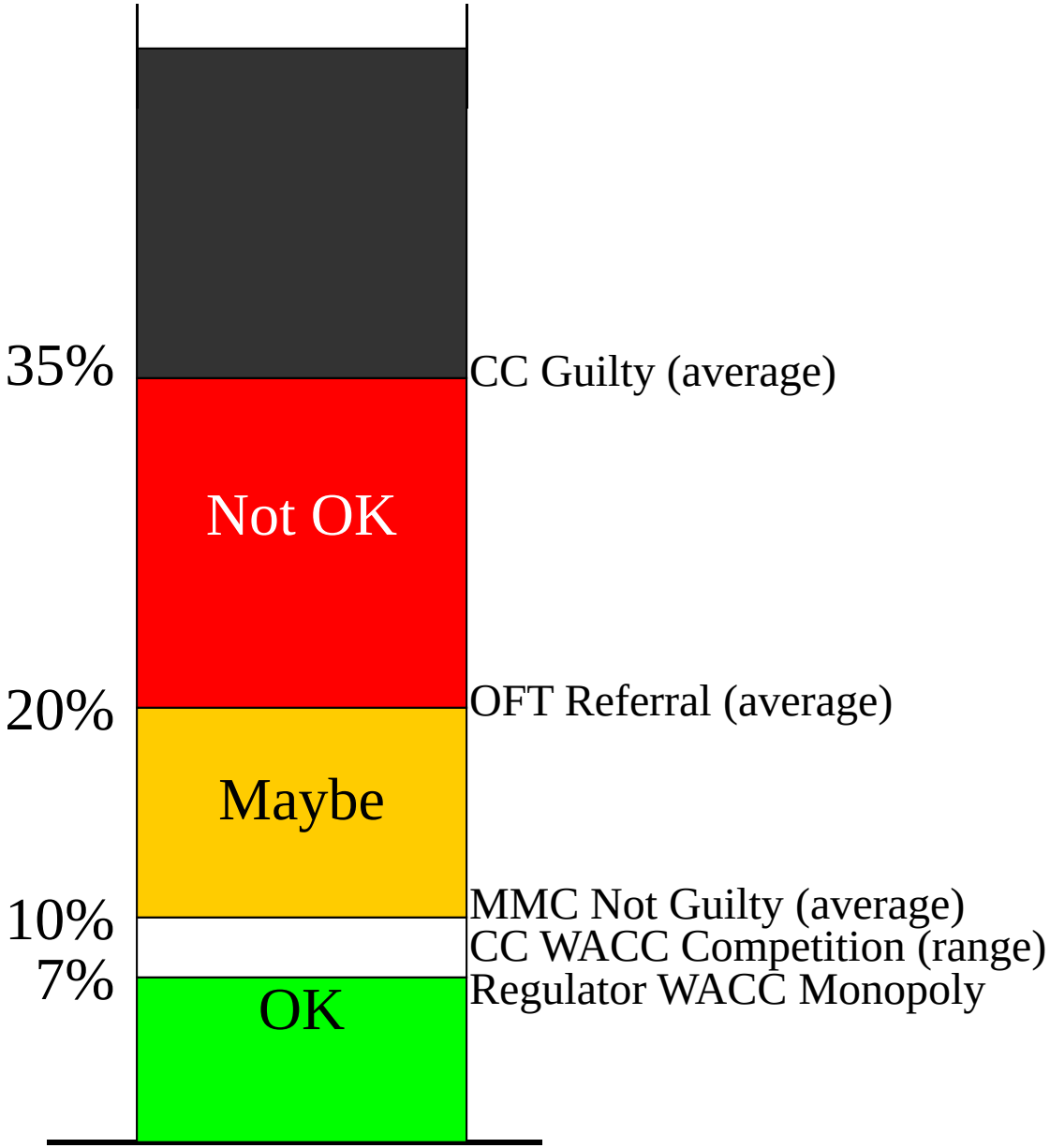
- Remove price control: ex ante to ex post regulation
- Ex ante regulation provides certainty
  - Prices below this level OK, above this level NOT OK
- Ex post means uncertainty (MAYBE OK – or NOT)
- Risky for customers, companies – and regulator
- A safeguard price cap could reduce risk?
- Could combine ex ante and ex post regulation to indicate zones of OK, MAYBE and NOT OK


Not OK
OK
Maybe
Not OK
Maybe
OK
Ex ante regulation
Ex post competition Authority
Transitional Regulation

Calibrating the diagram

- What are acceptable competitive returns?
- Regulators: profit about equal to cost of capital
- Competition authorities accept higher profits?
  - “profits are the key signal and incentive for the proper functioning of a market economy…There is no per se reason why profits in excess of the cost of capital represent anything other than the effective working of a competitive market.” (Sir Derek Morris 2003)
- What are acceptable returns for OFT (in referring cases) and CC (in judging them)?
  - Own calculations and results of study by Grout and Zalewska

Possible zones for safeguard price cap



Transitional price control criteria

- Regulators agonising about WACC c 7%
- MMC in range 7 – 10% real (all pre-tax)
- CC Not Guilty about 10% real
- OFT referrals for returns about 20% real
  - About 3 times regulatory WACC
- CC Guilty returns about 35% real
  - About 5 times regulatory WACC
- Transitional caps too severe at present?
- Regulatory safeguard caps c 10 - 15%?
- Is this plausible in regulatory practice?

Regulation where competition is not effective

- Standard approach A: how to set price?
- But effective competition also poses B & C:
  - How to discover efficient production & investment?
  - How to discover what customers want?
- Increasing dilemma for Ofgem
  - RPI-X@20 review
  - Documents great success over last 20 years
  - But won’t be appropriate for future conditions
  - How set price controls when future needs unknown?
  - Greater incentive on companies to discover them

Alternative approaches

- New approaches to regulation better replicate effective competition
- By greater involvement of companies and users/customers in decision-making
- Regulator facilitates the market discovery process, instead of replacing it
- Now illustrate with some examples of this
    - Argentina, US, Canada, UK, Australia, Germany, EU

Public Contest method

- Argentina electricity privatisation 1992 – govt did not trust companies or regulator
- Existing transmission grid: RPI-X price cap
- But new investment proposals had to be proposed, voted for and paid for by users
- Then put out to tender to determine cost
- Initial problem but generally worked well
- Users work together to decide investments

US energy regulation

- US federal energy regulators encouraged parties to settle (to cope with backlog)
- 1994-2000: 41 gas pipeline cases, 34 settled in full, 5 in part, only 2 litigated
    - Wang 2004
- Main gain: different process led to innovative rate freezes – more certain, better efficiency incentives
- Regulator could not legally impose these

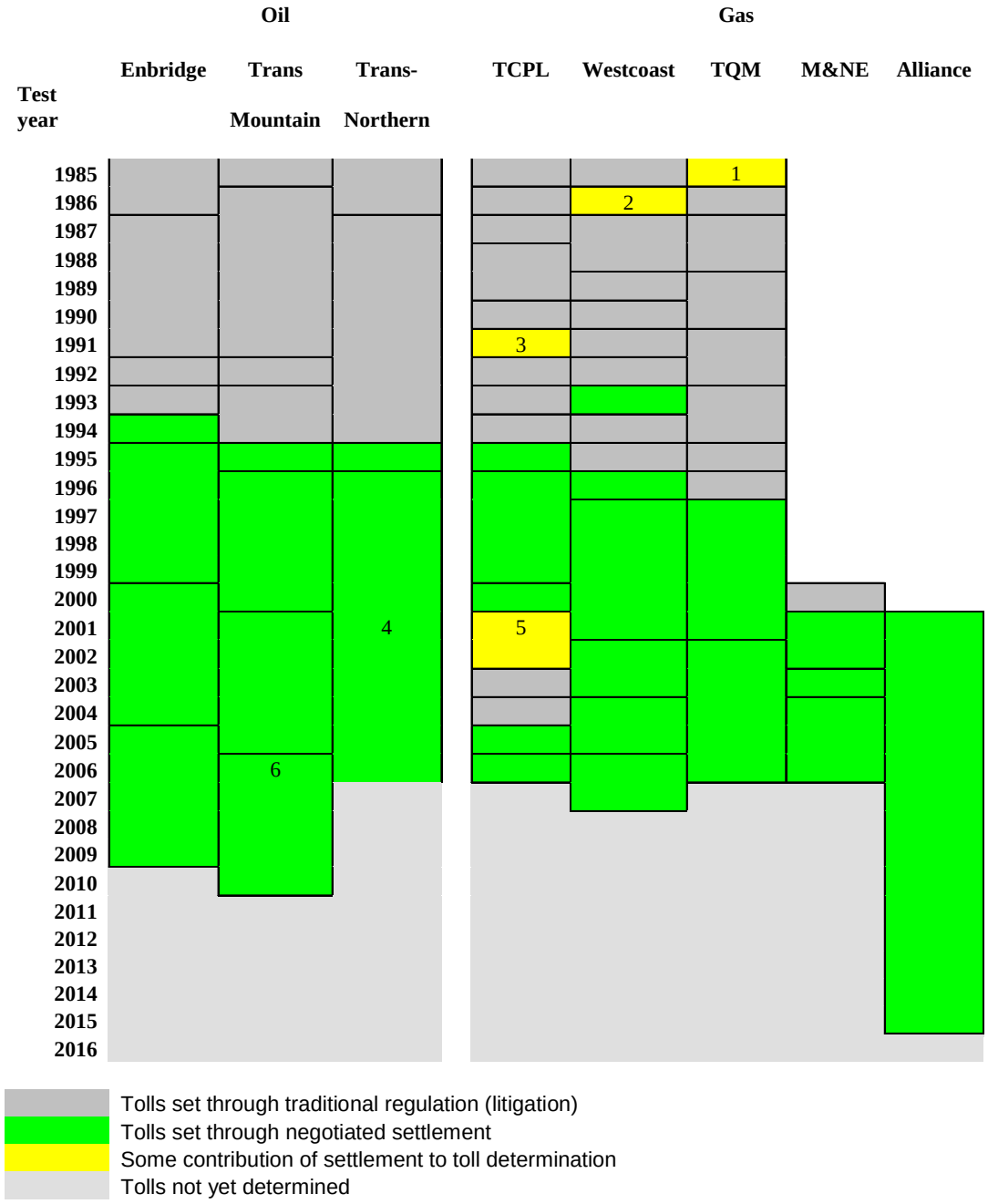
Consumer advocate in Florida

- Public Service Commission is regulator
- But consumer advocate (Public Counsel) has negotiated settlements with utilities
  - Electricity: over ¾ total rate reductions worth $4bn
  - Customers preferred this to building reserves
- Utilities got greater accounting flexibility
- And revenue-sharing efficiency price freezes instead of rate of return control

Pipelines in Canada

- Before: National Energy Board long hearings
- Since 1997 almost all rate cases settled
  - Especially multi-year incentive systems
  - Also provision of info, quality of service provisions
  - Better info and customer relationships in industry
- Generic cost of capital to aid negotiation
- Policy: if process sound, accept outcome
  - Don’t substitute own view of public interest

Settlement activity since 1985



Source: NEB toll decisions

General principles

- Regulatory responsibility does not mean that the regulator has to take all the decisions
- Role of regulation is to facilitate market discovery process (A, B & C) not replace it
- If regulator removes monopoly power, market participants can determine outcome
- Parties are willing and able to participate
    - Transactions cost not a problem in practice

Still a role for regulator

- To set timetable & process
- Satisfy itself on who represents customers
- Protect those not at the table
- Specify constraints eg government policy
- Enforce rules on information disclosure
- Provide further information
    - E.g. benchmarking, cost of capital
- Fallback process if failure to agree

Airport regulation UK

- Civil Aviation Authority (CAA) had concerns about previous price control process
- Proposed constructive engagement
  - Asked airlines & airports to try to agree traffic forecasts, quality of performance standards and future investment programme
  - CAA retained responsibility for opex, cost of capital, financing and final price control
- Largely achieved at Heathrow & Gatwick
  - Plus improved relationships and understanding

Airport regulation Australia

- 2000 Airports privatised, 5 yr price caps
- Then monitoring with *threat* of price control
  - Hoped for effective competition but not in practice
- 2006 Productivity Commission review
  - Some airline concerns eg definition service quality
  - But investment better, prices not excessive
  - More information exchanged, relationships better
- 2007 Government continued policy
  - Clarified valuation of initial assets
  - Plan to clarify threat of regulation – abandoned
  - Binding dispute resolution more useful?

Airport regulation Germany

- Competition between airports not effective
- Traditional cost-plus regulation of charges
  - Low incentive to efficient opex and capex
  - Airports content – state regulators also owners
  - Airlines not – not transparent, certain or effective
  - Economists argued for proper price control
- Civil law cases brought by airlines 2000+
  - Are charges equitable, transparent, cost-related?
  - Courts (eventually) found against airports

Impact of airport privatisation

- Framework agreements 2000+
  - Hamburg, Frankfurt, Hannover, Düsseldorf
  - Stability for fixed period of time (often 4 yrs)
  - Sharing benefits and risks of traffic changes
  - Quality monitoring, consultation, cooperation
  - Flexibility of response eg suspension after 9/11
- Airlines & airports prefer these aspects
- German regulatory framework is defective
- But standard regulation not the solution?

Airport regulation EU

- EU Airport charges Directive 2009
- Consultation procedure airport & users
  - Structure & level of charges, quality of service
  - Transparent – exchange of information
  - Cost structure, traffic forecasts, investment impact
  - Changes where possible by agreement
  - Independent dispute resolution procedure
- To apply where competition not effective?
  - For all airports over 5 m passengers/yr
  - But in UK effective competition to 30m passengers
  - Where is effective competition cut off in Germany?

Conclusions

- Interpretation of effective competition (EC) should reflect dynamic market discovery process
  - Not just price A, also efficiency B & customer preferences C
- Analysis of EC has informed policy decisions
  - Privatisation, competition, regulation esp A & B, less C
- Regulation may not replicate EC & may deter it
- Safeguard price cap worth considering
- Where not EC, newer regulatory approaches better replicate the market discovery process
- This is the essence of effective competition?