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for all gas and electricity customers

Policing wholesale energy markets: Reflections from GB experience

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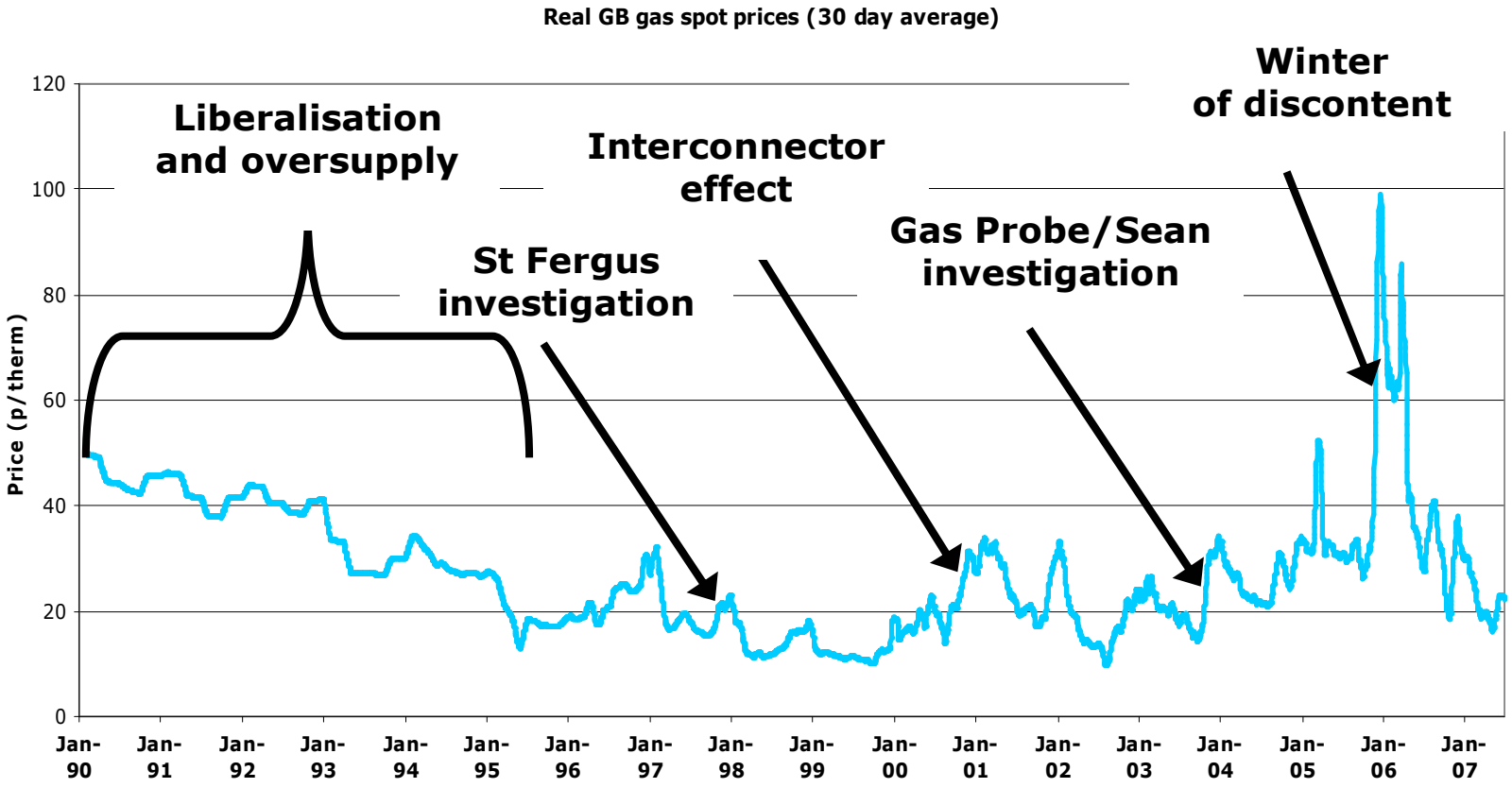
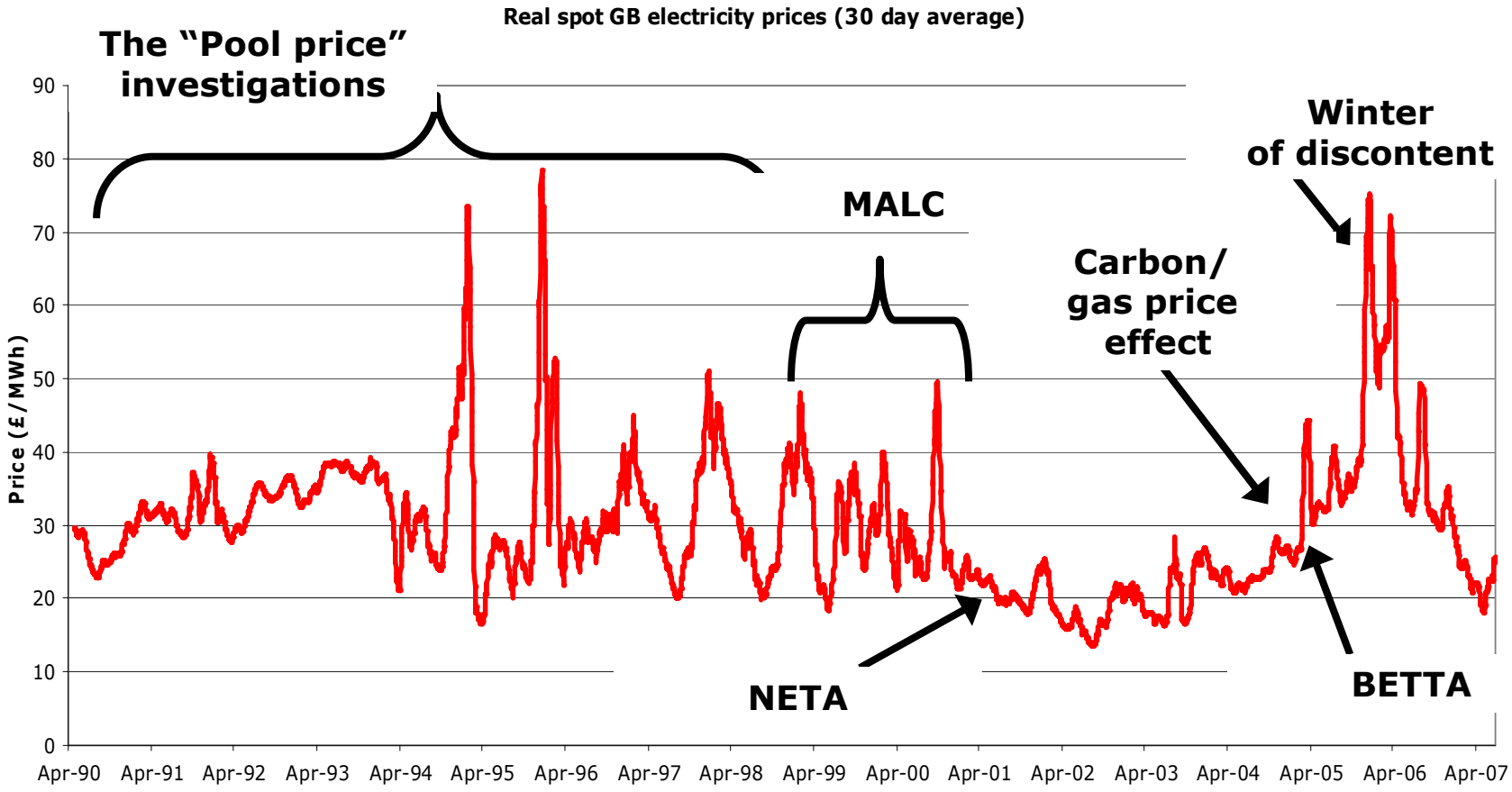
Overview

- A brief history of time
- Lessons from history
- Are energy markets different?
- Lessons from the past
  - Structure v conduct
  - Conduct v market rules
- Is competition law an effective tool for policing wholesale energy markets?
- Current issues in UK markets
  - Liquidity
  - UK gas market interactions
- Current issues in European markets
  - EU Sector Inquiry
- Conclusions and outlook

A brief history of time – gas



A brief history of time - Electricity



Lessons from history

- Mixture of cases and concerns over the years and many pre-date Competition Act 1998
  - Price concerns
    - Numerous pool price investigations
    - Gas probe
  - Capacity/constraint concerns
    - 1991 Pool Price investigation
    - St Fergus investigation
    - Scottish constraints

Range of remedies/policy measures deployed: structural, conduct, market rules, role of system operator and incentives

CC decided not to grant Ofgem sectoral powers – Market Abuse Licence Condition

Sectoral powers used successfully in gas in pre-financial penalty era

Competition Act remains untested in GB wholesale energy markets

Are wholesale energy markets different?

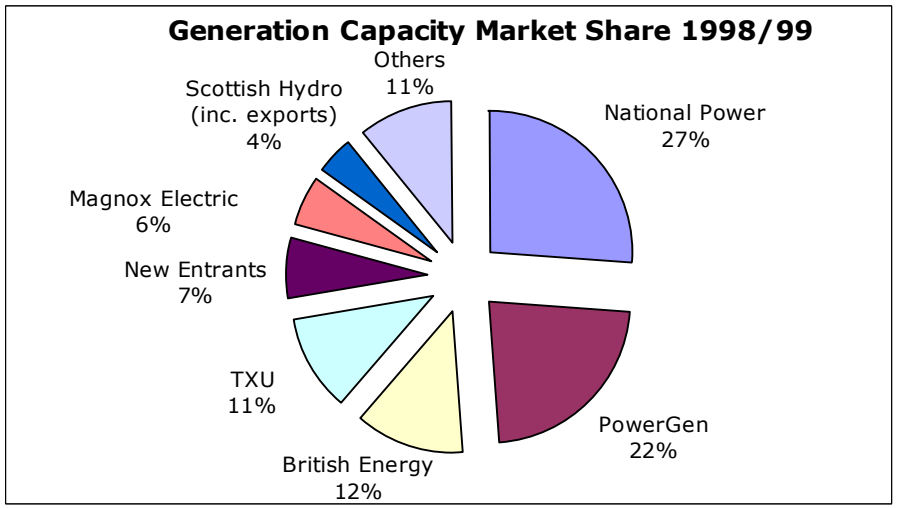
- Special features of wholesale energy markets
  - Highly inelastic demand close to real time
  - Supply relatively inelastic in short term
  - Need to keep network in balance second by second
  - System Operator must clear the market in short run – not fully exposed to costs of actions

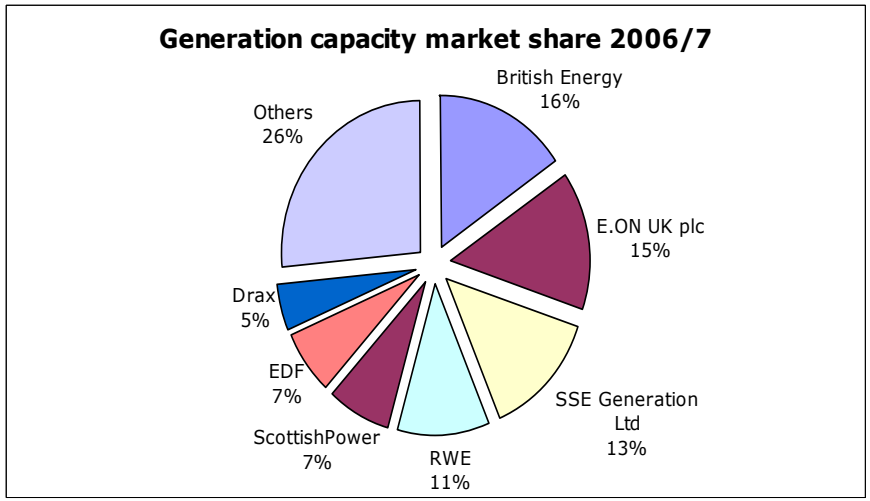
Companies with relatively low market shares (<10%) by typical competition law metrics may have significant market power

Impact on competition and customers:
Competitors see immediate effect through imbalance prices
I&C customers increasingly exposed directly to wholesale prices

Combination of features make energy markets more prone than other markets to abuse and significant and immediate impact on competitors and customers

Lessons from the past: Structure v conduct





- Change in market structure driven by combination of factors
  - Forced divestment
  - Creation of GB market
  - New entry/corporate activity

Right market structure necessary but not sufficient for competitive wholesale energy markets?

Lessons from the past: conduct v market rules

- Market rules and regulatory framework matter
  - Pool arrangements made tacit collusion easier (litany remains persuasive)
  - Significant reduction in no. of investigations post change in market rules (New Electricity Trading Arrangements)
  - Role of System Operator and incentives/regulatory obligations also important (and often overlooked)
- Governance of market rules governance is also very important
  - Market rules need to change and evolve over time (technology e.g. smart metering and renewables)
  - Need governance that allows all participants (inc. small players/customers) to propose change and prevent incumbents blocking change – regulator takes final decision
  - Checks and balances – appeal to CC of Ofgem decisions a positive step?

Some unresolved issues: imbalance arrangements (under review) and role/incentives of system operator (under review)

Competition law v energy specific regulation

- Competition law still largely untested at GB or European level
  - Some transmission constraint cases in Spain/current EU Sector Inquiry cases
- Concerns stem from ***principle…***
  - *Lack of case law on excessive pricing?*
  - *Establishing dominance with low market shares?*
  - *Establishing locational markets to deal with transmission constraints*
- And ***process…***
  - *Typical case under CA98 takes 18 months – two years to decision – too slow given size and impact of customer/competitor harm?*

BUT…

Competition law not yet tested – including use of interim orders
Sectoral investigations can be lengthy and no appeal on merits (only process)

Is reform of competition law process or additional sectoral powers (with right of appeal) the best approach?

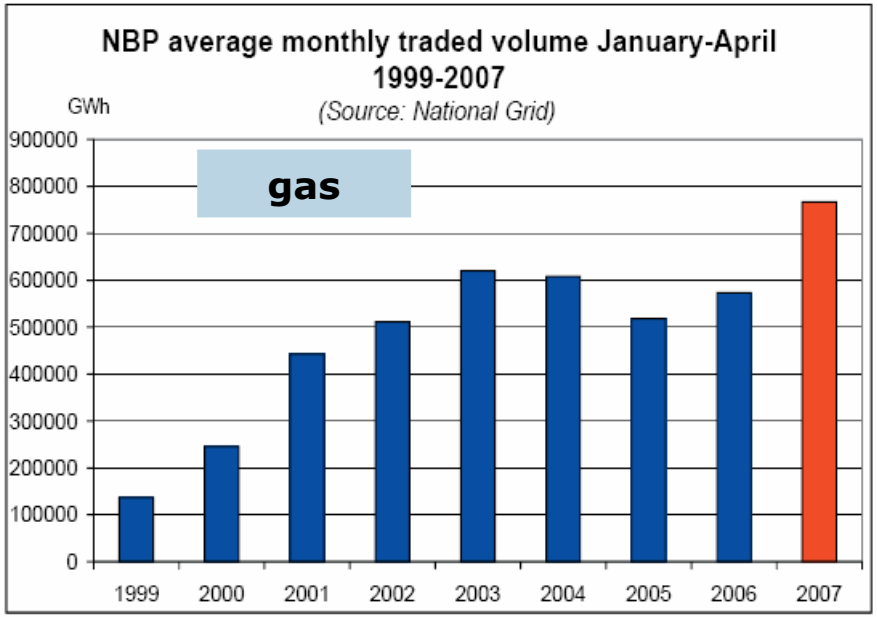
Current issues in UK markets: liquidity

- In late 1990s expectation was that gas/electricity markets would develop in same way as capital and other commodities (oil, coal etc)
  - *Deep, liquid, traded spot and forward markets in energy and capacity*
  - *Physical and non-physical players – better risk management, facilitate new entry in supply and generation*
  - *Easier market surveillance – transparent reference prices that can be reconciled to supply and demand*
- Collapse of Enron, withdrawal of US trading houses and increased vertical integration lead to significant fall in liquidity
- Raises a range of issues for wholesale energy market surveillance
  - *Are liquid wholesale markets necessary or sufficient for competition* ***and/or*** *effective surveillance by regulators and authorities?*
  - *Is vertical integration an efficient capital market response to nature/risks in energy production – should regulator's be concerned?*

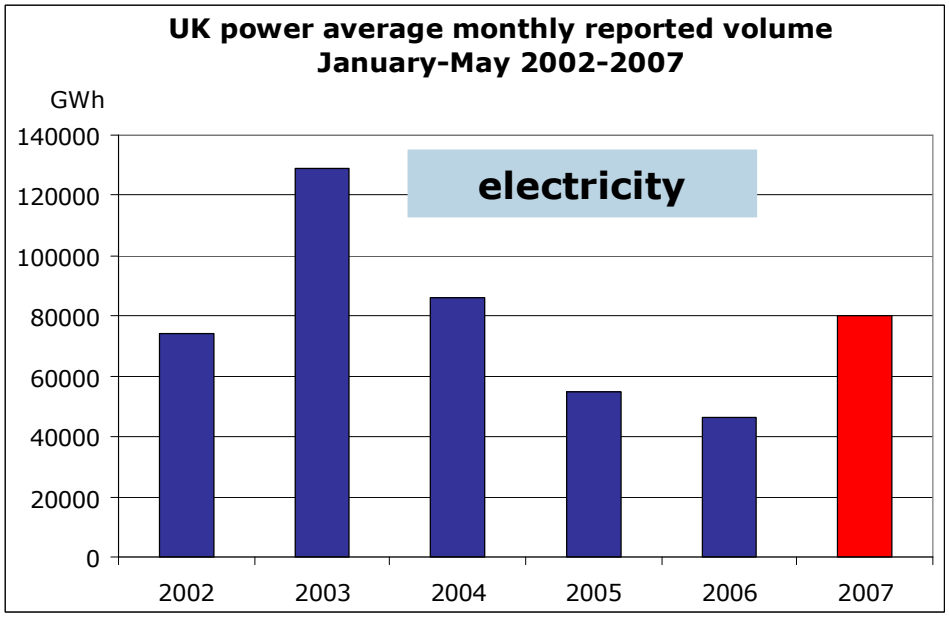
Jury still out but liquid wholesale markets *does not equal* **competitive energy markets – Germany now most liquid power market in Europe**

Current issues in UK markets: liquidity

Declining liquidity remains a concern but some encouraging signs



Source: Heren Energy

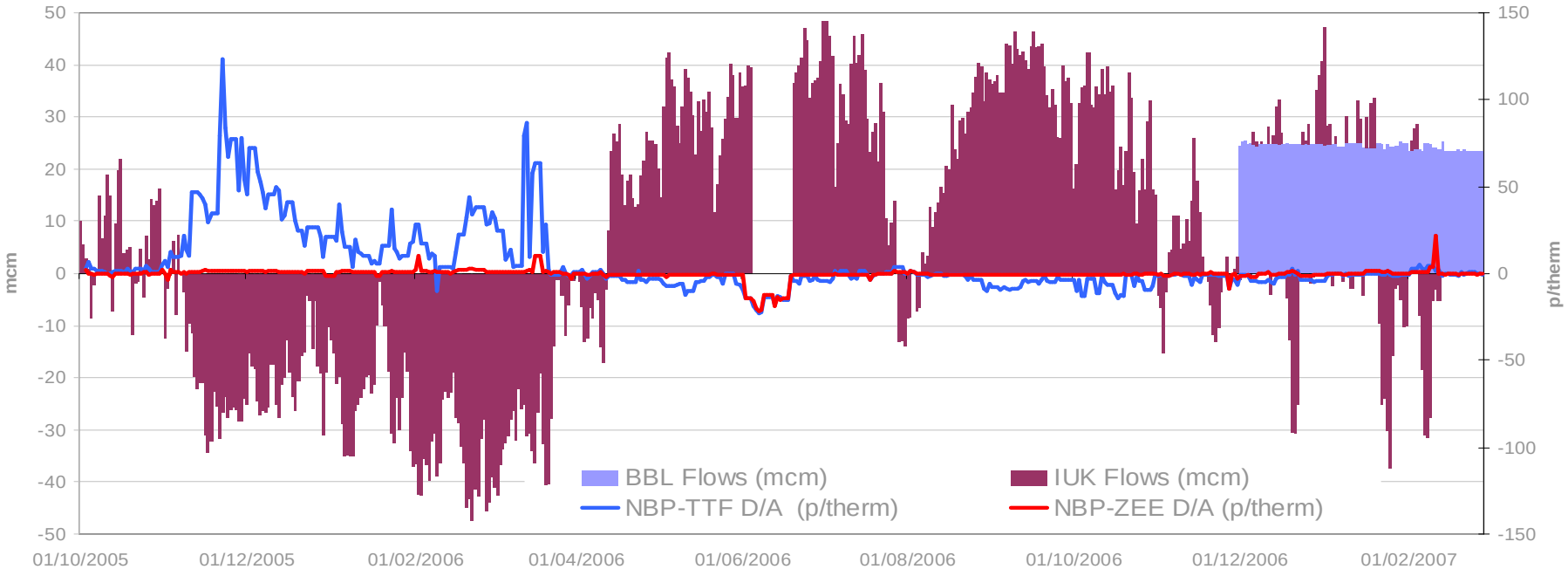


Source: Heren Energy

"The increasing liquidity in the forward ... market has been one of the most interesting developments … over the past year or so" – Citigroup comment on BE results

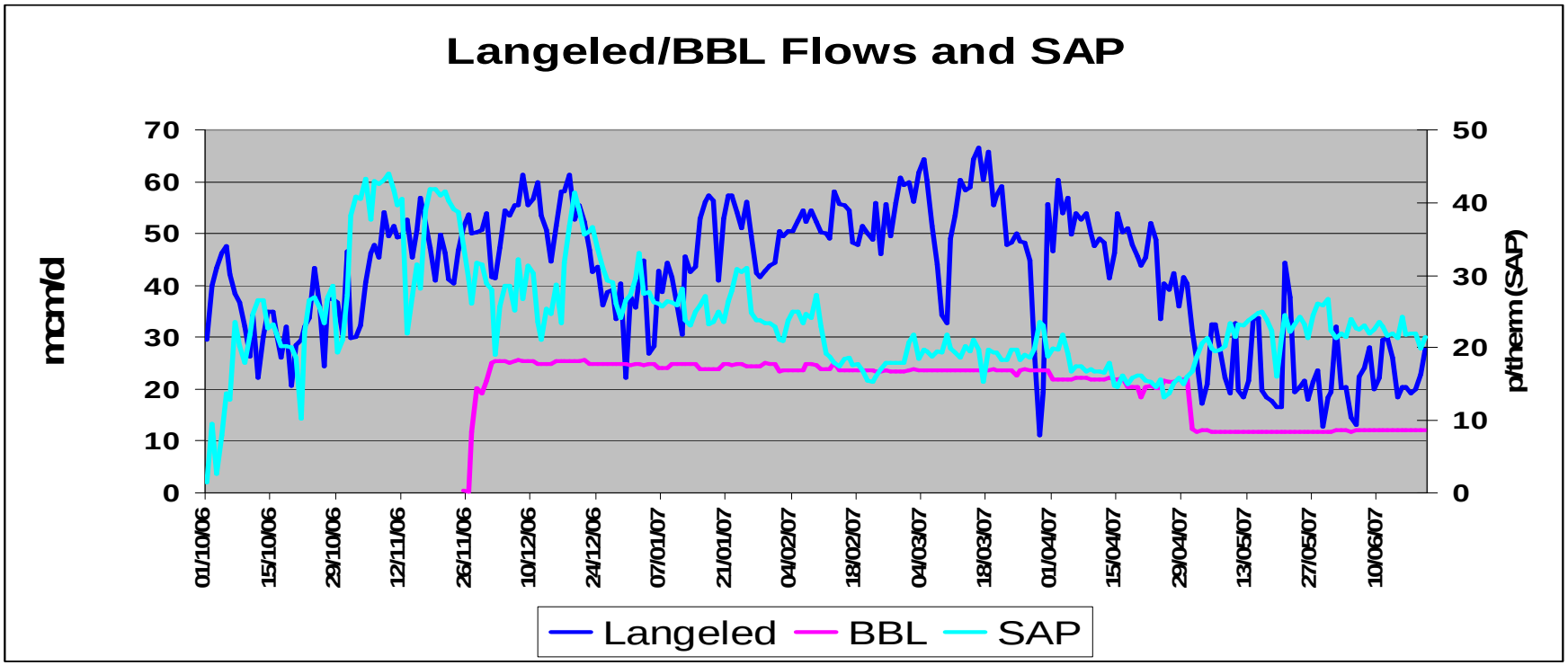
10 new supply licences and 20 shipper licences issued to banks and other new entrants in last 12 months

Current issues in UK markets: Dysfunctional European gas markets?



In winter 2005/6 significant concerns about responsive of flows from NW Europe to Britain during periods of very high prices

Current issues in UK markets: Dysfunctional European gas markets?



Winter 2006/7 Norwegian and Dutch gas flows don't appear to respond to UK gas prices

EU Energy Markets: the Sector Inquiry

- Ofgem key player in persuading Commission of need for sector inquiry
- Launched June 2005 – Findings published January 2007
- Significant problems identified in gas and electricity markets:
  - *Market concentration*
  - *Vertical foreclosure*
  - *Market integration*
  - *Lack of transparency*
  - *Price formation*
  - *Lack of competition in retail markets*
  - *Problems with balancing markets*
  - *LNG markets*

Compelling, comprehensive evidence and analysis of major barriers to creating effective competition in EU energy market despite two gas and electricity directives

EU Energy Markets: the Sector Inquiry

Market concentration in major EU gas markets

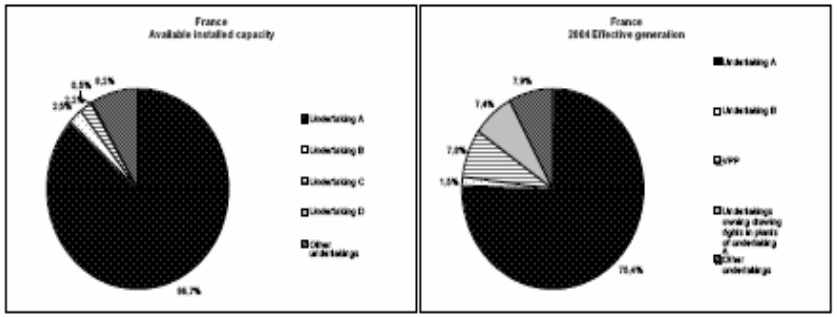
Incumbents control the majority of the gas in their home countries				
	Total imports (2004, in bcm)	Incumbent share of imports (2004)	Total domestic production (2004, in bcm)	Incumbent share of domestic production (2004)
Austria	9	80-90%	2	-
Belgium	16	90-100%	0	-
Czech Republic	9	90-100%	<1	-
Denmark	0	-	10	80-90%
France	49	90-100%	1	-
Great Britain	13	20-30%	105	40-50%
Germany	88	90-100%	18	80-90%
Hungary	11	90-100%	3	90-100%
Italy	67	60-70%	13	80-90%
Netherlands	18	50-60%	73	90-100%
Poland	10	90-100%	5	90-100%
Slovakia	7	90-100%	<1	-

Source: DG Comp Sector Inquiry January 2007 report

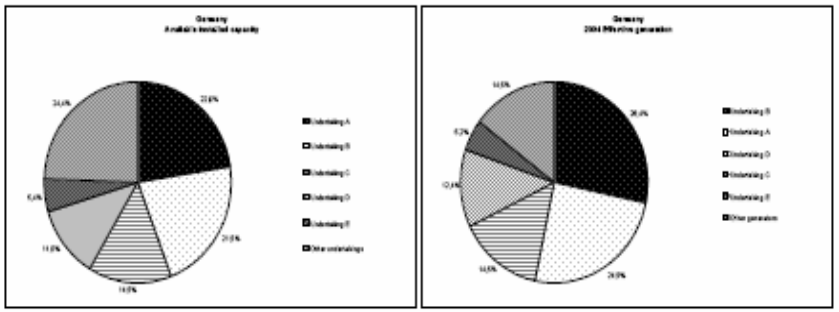
EU Energy Markets: the Sector Inquiry

Market concentration in major EU electricity markets

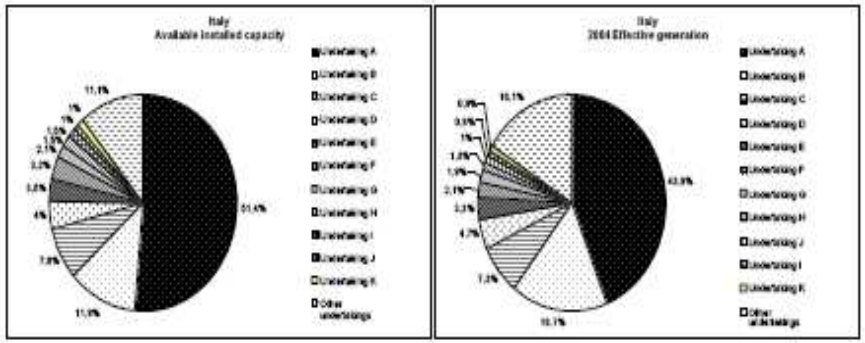
France



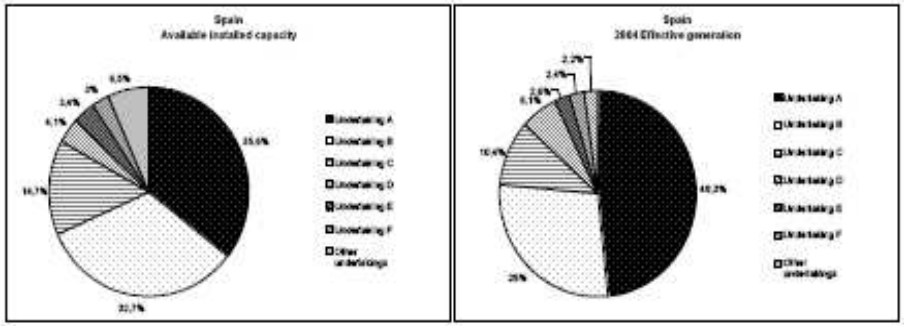
Germany



Italy



Spain



Source: DG Comp Sector Inquiry January 2007 report

EU Energy Markets: the Sector Inquiry

- Remedies will require a range of measures
  - New legislation – the 3rd package
    - Institutional reform – power and scope of energy regulators and European regulator?
    - Unbundling of transmission from supply/production?
    - Transparency
  - Anti-trust action
    - Current DG Comp 13 cases incl. Distrigas, ENI and RWE
  - Regulatory action
    - Regional initiatives – create regional markets as stepping stone to creation of European market

Crucially important for Britain – decline of N Sea – now increasingly reliant on imports from Netherlands, Norway, Belgium, Germany (and Russia?)
GB wholesale electricity market driven by gas – connected to France and in future Netherlands, Belgium/France/Norway?

But what about structural remedies given market shares?

Conclusions and outlook

- To create effective, competitive wholesale energy markets requires action on
  - Market structure
  - Market rules, governance and role of system operators
  - Effective market surveillance by regulation
- Huge challenges across EU on all fronts
  - Commission action a huge step forward ***but***
  - Can structural remedies be pursued ?
- Even if we get there – is competition law an effective tool given special features of wholesale energy markets?

Technology to the rescue? Real time metering – more active customer participation
Emergence of global gas markets through LNG: import competition from the US gas market?
Will emergence of European power market reduce concerns about structure within Member States?

Huge task ahead for Commission and national regulators to create competitive European markets and to police them…

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