

# Assessing Competition in Energy Markets



20° World Energy Congress - Special Session on  
“Competition in the European Energy Market”

Francesco Lo Passo

Director

Rome

13 November 2007

# Drivers of Competition



- § Pricing (pricing at the marginal price is a competitive measure)
- § Participation to the power exchange (mandatory participation enhances competition)
- § Bidding rules (day-ahead and infra-day bidding enhance competition)
- § Reserve margins (high reserve margins reduce for operators the possibility to be pivotal)
- § Allocation of interconnection capacity (competition increases when capacity is allocated using market mechanisms)
- § Unbundling of activities (unbundling of “natural monopolies” – i.e. transmission and distribution – from competitive activities – generation and sale – increase competition)
- § Third party access (regulated third party access increases competition)

**Market structure and regulation have an impact on the degree of competition**

# Results of EC Inquiry on Competition in Energy Markets



The EC published at the beginning of 2007 the results of the inquiry on energy markets:

- § Energy market generally highly concentrated
- § Vertical integration in supply
- § Difficulties in accessing infrastructures (no equal terms and conditions)
- § Lack of investments in infrastructures
- § Possible collusion among incumbents to share the market

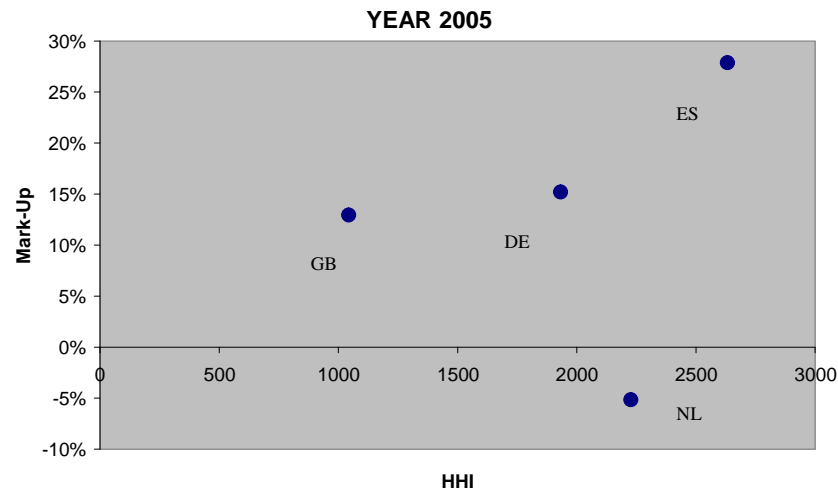
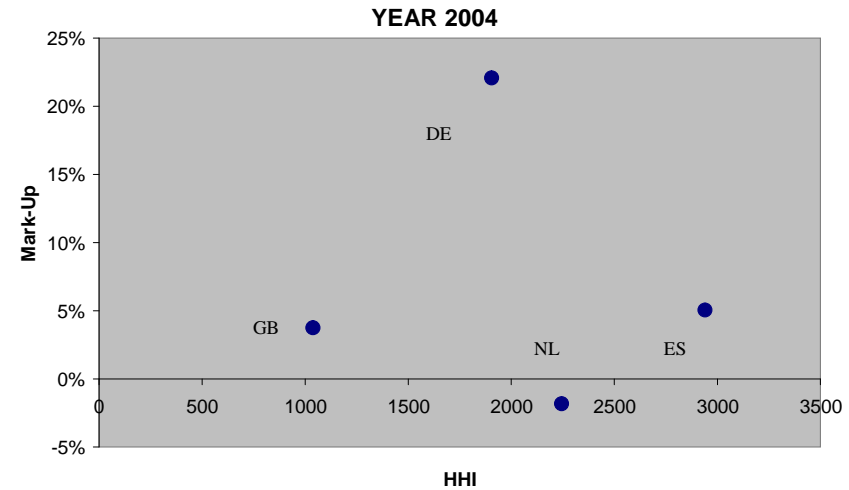
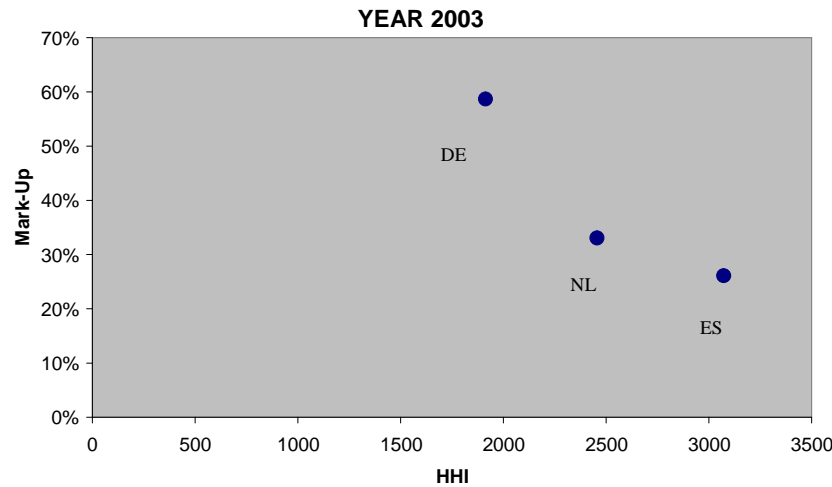
**Ex-ante regulation and ex-post control to monitor compliance with competition laws required**

# Measuring Concentration and Its Effects On Prices



- § **A report commissioned by the DG Comp show that high concentration in generation causes an increase in electricity prices**
- § **This conclusion is based on the results of a regression of the Price-Cost Mark-Ups (PCMU), i.e. the difference between observed price and (estimated) system marginal generation cost on a hourly market concentration index (the Residual Supply Index - RSI), which measures the indispensability of large generators**
- § **However, this conclusion is not supported by evidence and might be misleading as**
  - **Estimation of PCMU is often based on the assumption of perfect information, which is actually never the case in real world**
  - **The RSI proved to be a transformation of the demand level that generated multi-collinearity with other variables in the regression and the overall model is not robust to changes in specification**

# Measuring Concentration and Its Effects On Prices



Concentration is not an issue if agents have no incentive to abuse their pivotal role

**NERA**

Economic Consulting

# Contact Us



**Francesco Lo Passo**

Director

Rome

+39 06 48 88 101

[francesco.lopasso@nera.com](mailto:francesco.lopasso@nera.com)

© Copyright 2007  
NERA Srl

All rights reserved.