## Comments on paper Retail competition In Dutch electricity markets

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## Paper objectives and context

- Two main parts:
  - Review of Dutch retail electricity market
  - Empirical study of retailers pricing strategies: focus on pass-on changes in the wholesale energy price to retail consumers
- Noticeable facts about the Dutch retail market:
  - Retail market relatively concentrated. Three largest retailers have about 80% of market (Essent, Nuon, Eneco)
  - Two new entrants (Nem, Greenchoice) with low market shares
  - GDF-Suez & E.ON large firms in production, but small market shares in retail
- Retail products differentiation in the Dutch market:
  - High switching rates compared to other countries (13% / year), but 45% of households has never switched retailer.
  - Strong demand for Green electricity (63% of contracts)& dual fuel contracts
  - Coexistence of fixed-price & variable-price contracts
  - Contracts with fixed (1,2,3 or 5 years) or of undetermined duration

## Methodology and results

- Dataset: anonymized data collected by the Dutch energy regulator over Jan 2007-2011
- Observations from dataset: Forward price is highly correlated with the spot price, but not with the realized spot price
  - Same underlying drivers for the spot and the forward price
  - Retail price follows the forward price with a delay
  - Consistent with previous studies on other electricity & commodity markets
- Three step econometric approach: estimates unit response functions which specify retail price reaction to forward retail price shocks
- 1. Regress current changes of the retail prices on past changes in the forward price and past changes of the retail price
  - work with first differences; number of lags determined with the Schwarz information criterion
- 2. Simulate the step-response function
  - A 1 EUR/ MWh price change in the forward price will, on average, lead to a price change of 32 EUR cents /MWh in the retail price (and 35 EUR cents / MWh in the estimation with 2 lags).
- 3. Test whether prices respond asymmetrically to price increases and price decreases
  - Quicker & stronger response to an increase in the forward price than to a decrease in the forward price

## Discussion & some random suggestions for further research

- Research concentrates on fixed-price, gray contracts for a duration of 1 year
  - Most competitive market, one year product allows use of more liquid forward markets
  - => Extension to other products, such as green tariffs and /or dual price tariffs would be interesting to test impact of competition / product specialization
  - => In practice retailers charge consumers two-part prices: are there different strategies to determine the fixed part /its evolution?
- Papers makes some assumptions that could be relaxed / tested
  - Assumes that retailers buy forward contracts on the wholesale market that exactly offset their retail obligations, and do not buy electricity in the spot market
  - => In reality sourcing strategy => Paper could test impact of different sourcing strategies involving a mix of forward contracting with different time frames, and leaving some exposure to spot market
  - Paper assumes that retail prices are based on current and past forward prices
  - => In reality market players form their own view of wholesale market evolution which may imply a different view on forward price
- Paper does not look at evolution of retail mark-ups over time
  - => interesting issue to investigate: impact of mergers & increase in market concentration in 2010-2011?
  - => frequency of price adjustments differs across firms, can a price leader b e identified? (Edgeworth type competition)