Retail competition – Experiences from Scandinavia

Harvard Electricity Policy Group
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Agenda

- Retail competition in Scandinavia
  - Entire market opened for competition
- New entrants
  - Barriers to entry
- Switching behavior
  - Customers have switched or renegotiated
  - Volumes and types of customers
- Switching costs
  - Abandonment of metering requirement
The Nordic electricity market

- Well established market after regulatory reform
  - Norway 1991
  - Sweden 1996
  - Finland 1997
  - Denmark 2002

- Separation of competitive and monopolistic activities
  - Vertical separation

- Establishment of independent TSOs
  - Regulated third party access

- Allowing all consumers to choose supplier
  - No regulation of electricity price to end users

- Nord Pool – jointly owned power exchange
Transition of market over the years

Before regulatory reform

- Market: Monopoly
- Drivers: Cost synergies in vertically integrated companies
- Actors: Power utilities, Municipal distributors, Alliances, Mixed ownership and mixed sizes
At first market shares in focus

After reform – 1999

- Market: Deregulated, prices dropping
- Drivers: Battle for market shares, Economies of scale, Distribution of risk, Regulated access to third parties
- Actors: Power utilities, Municipal distributors, Oil and gas companies, Expansive municipal distributors, Foreign actors
Then new entrants came to the market

2000 – 2001

- Market: Profiling reform in Sweden, Lower switching costs
- Drivers: Continued struggle to increase market shares, New actors entering, New products to attract new customers
- Actors: Power utilities, Municipal distributors, Alliances, Oil and gas companies, Expansive municipal distributors, Other entrants, Foreign actors
After some market volatility profitability is in focus

2002 – 2005

- Market: Dry year leads to high prices and price turbulence on Nord Pool market place
- Drivers: Focus on profitability, Increased awareness of need for risk management, Many of the new entrants leave market
- Actors: Power utilities, Municipal distributors, alliances, Oil and gas companies, Expansive municipal distributors, Other entrants, Foreign actors
Consumers are switching to new suppliers

* Must be an expected profit in the switching exercise
* In Sweden a requirement for new metering equipment implied a substantial switching cost on household level
* After November 1999 a system based on a general load profile has replaced the requirement to change meter in Sweden
Switching of suppliers in Sweden

- Renegotiated with existing supplier
- Changed supplier
Number of switchers and estimated annual volumes

- Estimated volume, households
- Estimated volume, other
- Number of switchers, households
- Number of switchers, other

April 2004: 0 switchers, 0 estimated annual volume
May 2004: 0 switchers, 0 estimated annual volume
June 2004: 0 switchers, 0 estimated annual volume
July 2004: 0 switchers, 0 estimated annual volume
August 2004: 0 switchers, 0 estimated annual volume
September 2004: 0 switchers, 0 estimated annual volume
October 2004: 0 switchers, 0 estimated annual volume
November 2004: 0 switchers, 0 estimated annual volume
December 2004: 0 switchers, 0 estimated annual volume
January 2005: 0 switchers, 0 estimated annual volume
February 2005: 0 switchers, 0 estimated annual volume
March 2005: 0 switchers, 0 estimated annual volume
Who has been most eager to switch?

- Industrial users
- Households with a relatively large electricity bill
  - 60 % of households in single-family houses have switched supplier
  - Price judged to be the important factor
  - A typical Nordic household with a house heated by electricity has an annual electricity consumption amounting to around 20,000 kWh, compared to around 3,600 kWh in the UK.
Other switching costs may also matter

Information vital

- Household must collect and compare different alternatives of varying complexity
  - Standardized price comparisons can now be found on the internet where households easily can compare prices

- Clear electricity bills where it is spelled out which parts are subject to competition and which parts are monopoly network services and taxes
  - The distributors on the Nordic market have been subject to much criticism from customers regarding the complexity of the bills
  - Important that electricity bills clearly state amount of electricity used and price of delivered energy
Regulation of electricity price

- Vertically integrated electricity bills may distort competitive energy part of bill
- Regulated end user prices may limit expected profit from switch to new supplier
Fewer but larger distributors

Electricity distributors in Sweden

- In 1996 they were 221
- In 2004 the number was down to 97
- Nationwide suppliers went from around 10 in 1996 to almost 50 in 2000, before dropping back down to around 20 in 2004

"Big three" serving 70 % of the Swedish market (Vattenfall, Sydkraft & Fortum)

- Together they make up 90 % of total production

Norwegian retail market less concentrated

- Largest producer 30 % (Statkraft) and mostly industrial customers
## Development of retail prices

### Different price paths in Norway and Sweden

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(Prices in öre/kWh, 100 öre = 0,15 USD)

Source: Statistics Norway & Statistics Sweden
To conclude: Switching costs matter

- Dropped metering requirements made switch rate increase in Sweden
  - Increased profitability in searching for alternative supplier
  - Put pressure on suppliers to cut back on margins
  - Opened the door wider for new entrants
- Information concerning relevant alternatives must be accessible and understandable
- Vertical separation brings competitive part out in the open
- Regulated access opens for new entrants
- Share of electricity bill that is subject to competition should not be distorted by regulation
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