



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

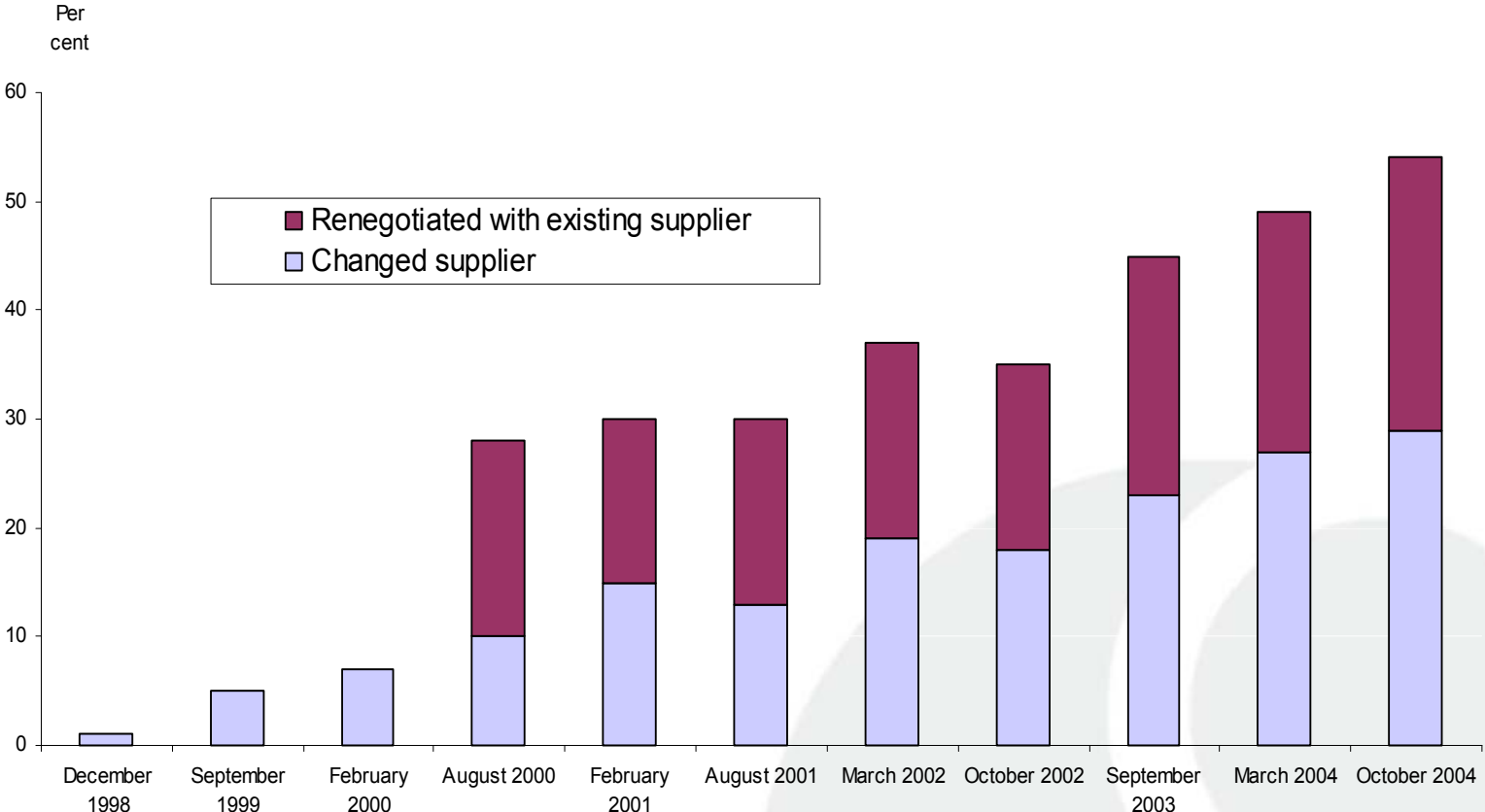
2002 – 2005

- 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

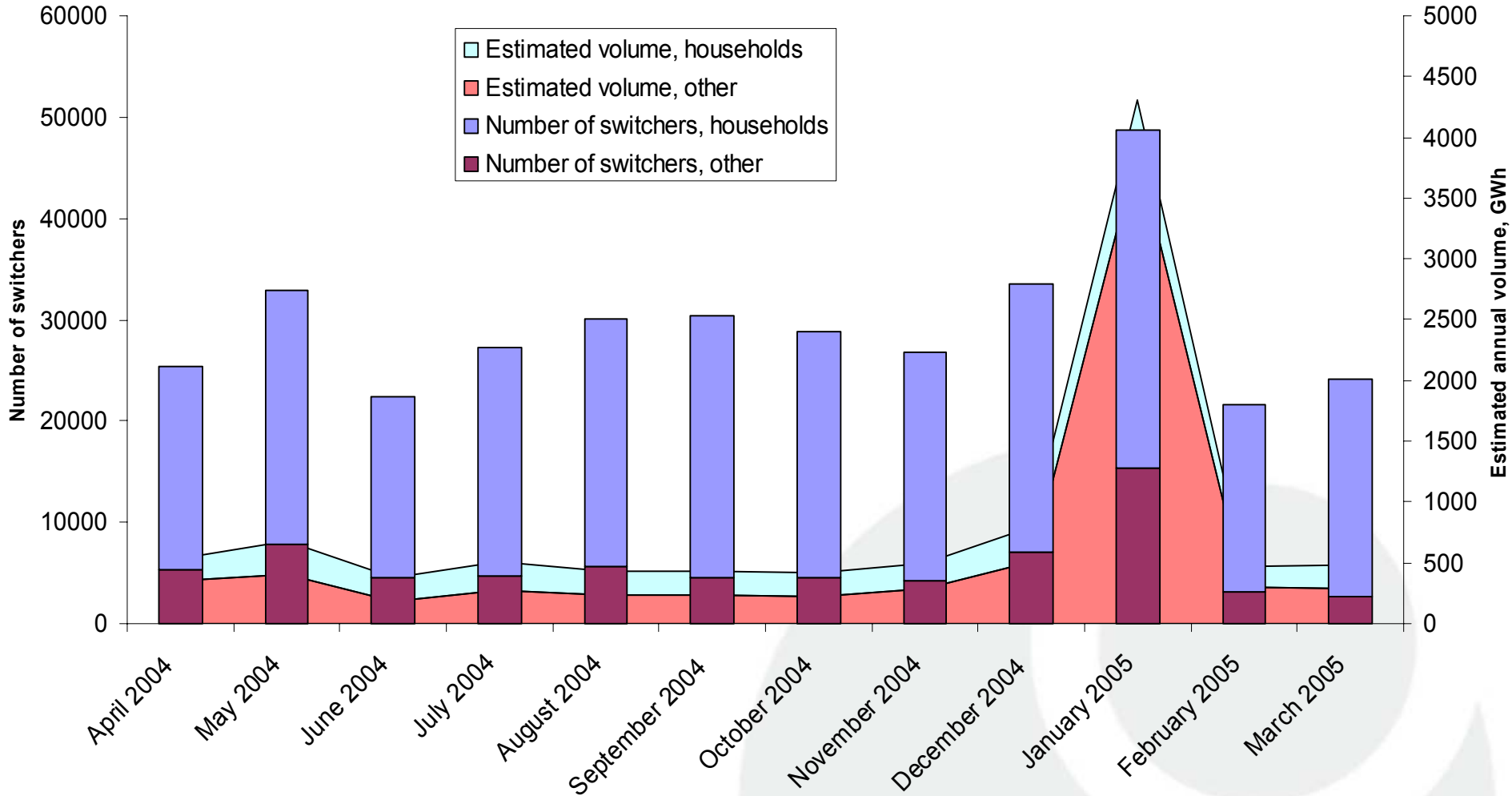
Consumers are switching to new suppliers

- 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



Number of switchers and estimated annual volumes



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

	1999	2000	2001	2002	2003	2004
Norway, Normal	15,1	14,1	21,0	20,5	45,4	30,0
Norway, Spot	13,1	12,3	19,3	19,3	32,3	27,3
Norway, 1-year fixed	15,2	14,4	18,9	19,5	28,7	27,7
Sweden, Normal	24,4	21,8	22,5	29,6	44,7	40,4
Sweden, 1-year fixed	-	17,8	18,1	25,6	39,7	37,5

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

Source: Statistics Norway & Statistics Sweden

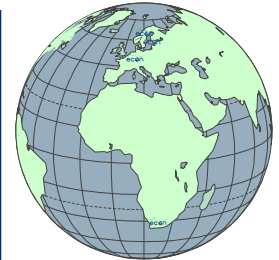
To conclude: Switching costs matter

- 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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