



Market Structure and operational model development in energy supply chain

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General regulatory attitude in most national markets

- Belief of Regulators; the functioning, competitive wholesale and retail markets (efficient competition) could „control“;
 - energy component of end-user prices,
 - quality of supply
- Problems identified:
 - ERRA market structure analysis
 - ERRA wholesale market monitoring system
 - European Commission „Report on progress in creating the internal gas and electricity market“ SEC(2010)251-Brussels, 11.3.2010

Market Structure and Market Condition problems hindering efficient market operation:

Key Problems on EU and non-EU ERRA markets
(but to different extent and with different focus):

- Concentrated markets
- Lack of investment
- Security of Supply
- Supporting legislative framework
- Market integration
- Price trends, price regulation regulated end-user prices [in 2008 16 EU member states – out of 27 – had end-user price control for households/(13 member states for non-households)]
- Independence of network operators
- Regulatory power
- Customer protection

Problems in EU: Concentrated Market

Concentrated (national) markets

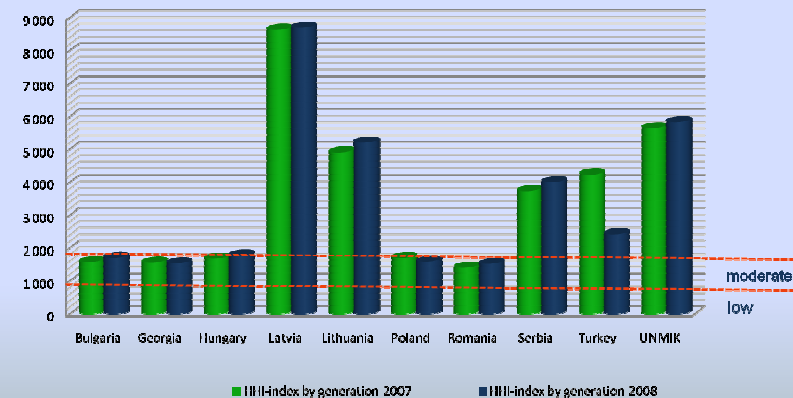
→ less chance for effective wholesale and retail competition

→ solution: creation of regional markets (mitigation of market power), CEE + some ERRA market integration efforts, EU internal market

Degree of concentration

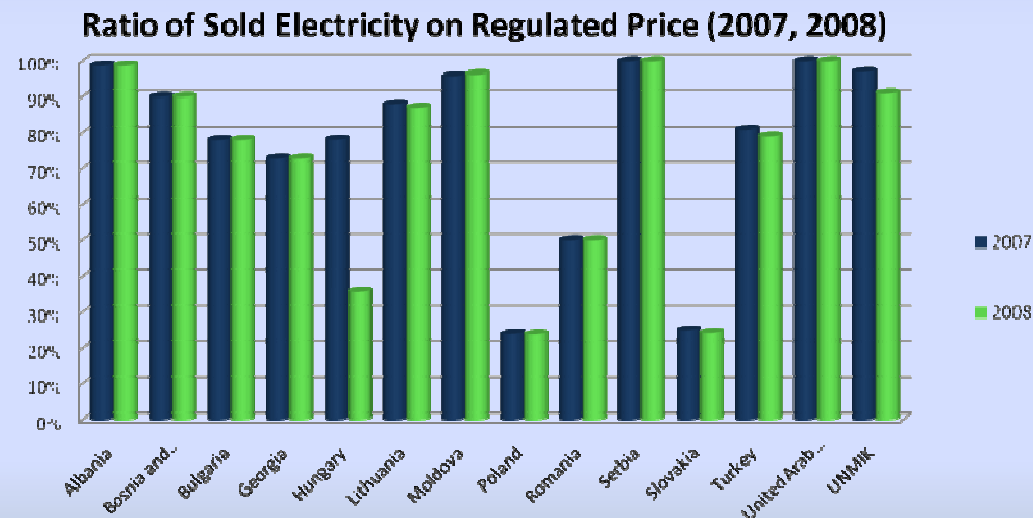
	Electricity (generation)
Very highly concentrated [HHI above 5000]	BE, FR, EL, LV, LU, SK, CY
Highly concentrated [HHI 1800-5000]	CZ, DE, LT, PT, SI, RO, HU, DK, NO
Moderately concentrated [HHI 750-1800]	FI, PL, UK, ES, IT, NL, AT

Concentration of Electricity markets – HHI Index by Generation 2007-2008



Problems in EU: Price Trends

- EU: The EC sector inquiry (2007) report highlights the phenomena of regulated end-user prices acting as a market distortion, especially for industrial users
- Most ERRA members: Hybrid model and regulated USP (regulated end-user price in part of retail market → indirect cap for the free market as well)



Some additional circumstances can hinder efficient wholesale competition in the future:

- renewables with increasing ratio could be exempted from wholesale competition (feed-in tariff system)
 - CHP generators (under the new energy efficiency regulation) could be preferred (must run)
 - new nuclear units (if any) foreseen to be invested under long term PPAs
 - part of flexible gas fired units taking part in system regulation (compensating weather dependent renewable generation) contracted by system operators
 - possible new capacity market/payment
- **Shall we think about new target models, new roadmaps in longer term?**

Other circumstances influencing market conditions and end-user prices

- Unpredictable incidents and (political) interference (like Japan nuclear accident, German nuclear moratorium)
- Hard to predict CO₂ regulation
- During economic and financial crisis the medium and large end-users are very sensitive to energy prices (some of them are close to bankruptcy) → end-user prices (energy + system use) could strongly influence the national economy
- During these years of cutting (reducing) social safety-net the households are also very sensitive to end-user energy prices → social welfare

Among these circumstances **how could some ERRA Regulators convince** politicians not to interfere (distort) network price regulation and allow market based energy prices;

- In countries, where the belief in the market has less tradition?
- Where the wholesale and retail markets are not functioning well?
- Where the end-users (industry) are not competitive with higher energy prices?
- In countries, where the social welfare is already on very low level with present energy prices?
- The non-economic (non-price) support schemes for vulnerable customers should be enough?
- The political interaction into price regulation has medium/long term effects which could be in contradiction with other political goals (climate change measures)!

Public service obligation of EU Directives → different approaches of countries;

• In countries with long tradition in market economy and with functioning markets → public service means;

- identifying vulnerable customers (disabled or chronically sick, pensionable age, low income, end-users in rural areas),
- advising customers,
- assisting customers threatened with disconnection and/or disconnected
- assisting eliminate fuel/power poverty,
- assisting gas network connection (to fuel poor households)
- measuring customer expectation/satisfaction
- monitoring and analysing consumers' behaviour on energy use and payment methods → possibility to give advice on bill reduction

- advising (requiring) suppliers how to handle vulnerable consumers with debt
- creating system of supplier of last resort
- social tariff for vulnerable consumers
- Countries where energy (end-user) price regulation has long tradition and/or competition on retail market cannot function well (cannot „regulate/control” prices)+ the national economy is not in good shape + the social welfare needs substantial development; the **affordability** issue is very serious → public service obligation has regulated price element in addition to (or instead of) the above mentioned support possibilities;
 - regulated end-user tariff for households (not for vulnerable consumers „only”)
 - Universal Service Supply (regulated tariff) for households + different institutions (schools, hospitals, ministries,) + small enterprises

Potential Consequences of the disturbances in regulation

- Price cap on end-user prices (not market based);
 - Expenditures on operation, maintenance and development of networks fail (reduced)
 - Poor service quality
 - Re-scheduled introduction of climate change measures (smart grid, smart meter rollout, energy efficiency assistance)
 - Lack of adequate renewable support schemes → slowed down investment
- Financial support for end-users (outside of vulnerable consumer circle);
 - Lack of energy saving incentives
 - Cross subsidy
 - Hindered competitiveness of the industry (large end-users)
- Reduced competences of regulators;
 - Political/regulatory risk premium
 - Slowed down new investments (generation, network)

What Regulators could do?

- Force efficient competition (ex ante)
- Require transparency
- Monitor and assist switching process (and force simplification)
- Measure continuity of supply (quality of service) parameters and enforce requirements
- Create incentives for more efficient network and system operation
- Create incentives for new development
- Force efficient congestion management rules and practice (support regional market building)
- Work on potential new targeted market model
- Consult with all of the stakeholders!

Challenges in market reform process (Market structure)

Market structure issues during the transient period (from the state owned vertically integrated supply chain with regulated end-user prices to the restructured, unbundled industry under TPA rules with market-based energy prices):

- Regulators would like to dismantle or renegotiate (reduce the volume and time-period) the PPA structure signed by former state owned incumbent :
 - creating liquid multiplayer wholesale market (condition of competition)
 - mitigating market power
- Private investors and banks are reducing their risk, they argue strongly for long-term contracts (preferably with state owned company) or for feed in tariff comfort, saying:
 - no liquid wholesale markets
 - no indicative price signals
 - continuously changing rules

Challenge: Finding the balance between the contradictory arguments! How to find the good balance? How to avoid rebuilding the monopoly structure without postponing new generation investment?

Security of Supply (SoS) issues during the transient period:

Net export position of certain national markets of the CEE and SEE region is diminishing and is turning into net import position:

- If there is a threat of capacity shortage politicians may become concerned and the following arguments can become rather appealing:
 - the state-owned wholesaler (former Single Buyer) should enter into contracts with potential new capacities offering the comfort they need
 - the government should issue a tender for “guaranteed” new capacities
 - the state (through the state-owned incumbent) should build new capacity, securing the supply.
- If the SoS is seriously threatened, politicians could accept those proposals, which create temporary administrative barriers against new entries into the market and against cross-border trade, such as:
 - priority of AAC at borders,
 - export fee, and
 - zero capacity on annual and monthly cross-border capacity auction

Challenge: How to avoid maintaining or creating isolated, relatively small national markets instead of establishing regional market conditions? How to save the adequate level of SoS on national markets until the new generation investments come on line (2-3 years), knowing that the lack of regional market and the potential, discriminative, administrative measures discourage new private investments.

**Thank you for your kind
attention!**

Let us discuss!

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