

European Energy Market 10

Cross border trade

Studia niestacjonarne II stopnia
Rok akademicki 2012/2013

Władysław Mielczarski

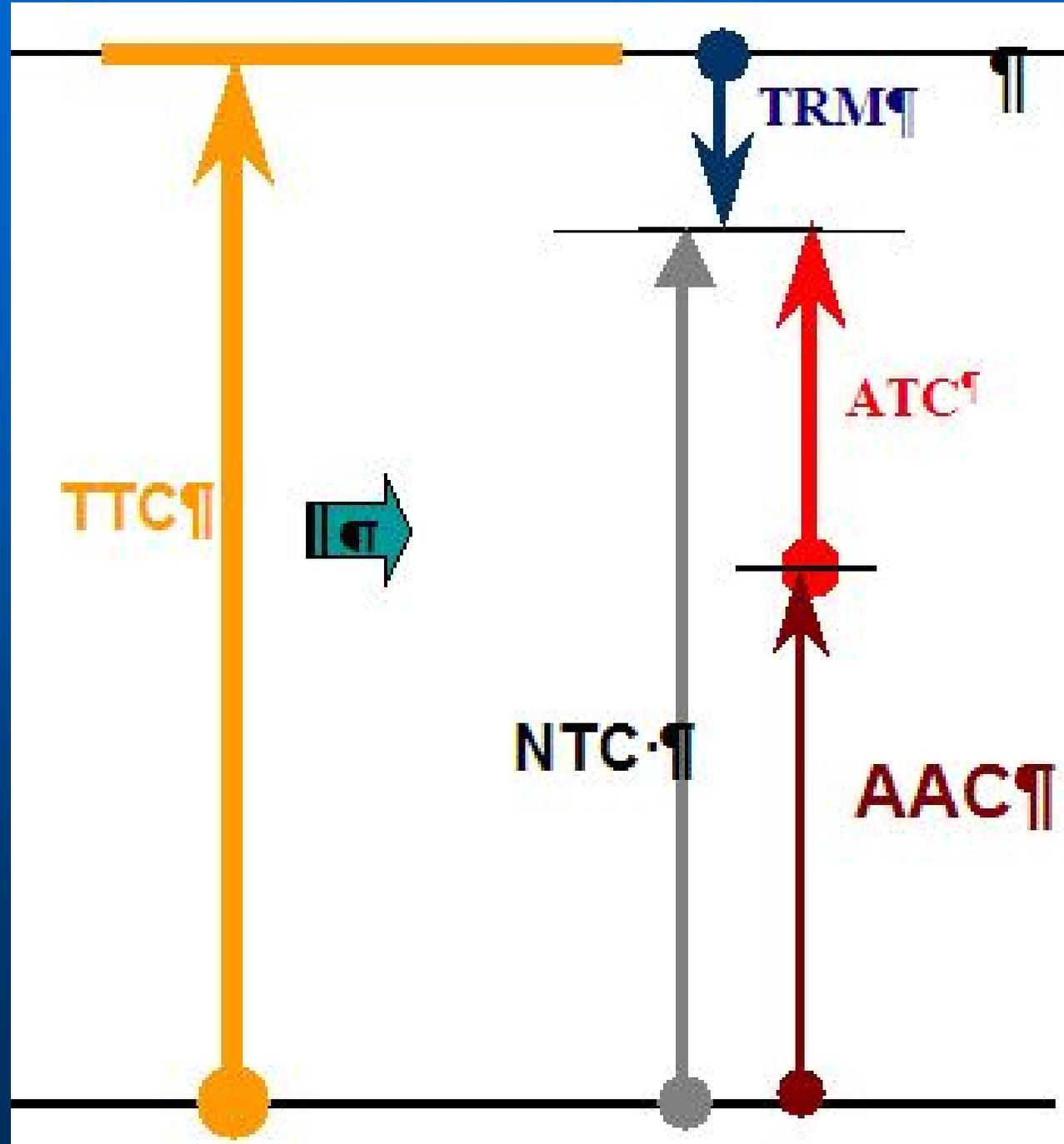
Instytut Elektroenergetyki, Politechnika Łódzka

www.i15.p.lodz.pl/~mielczarski/

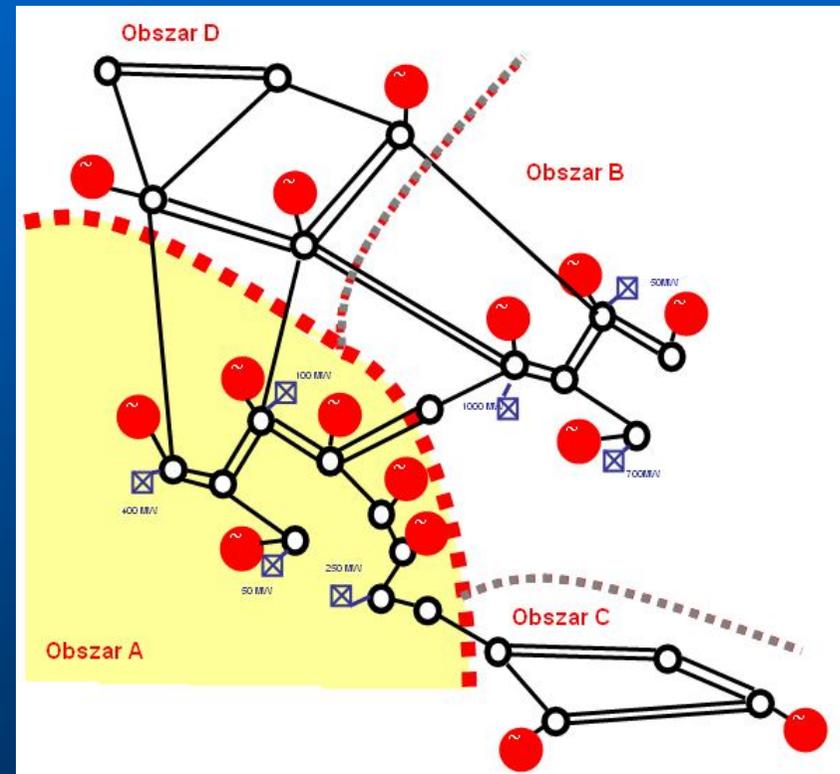
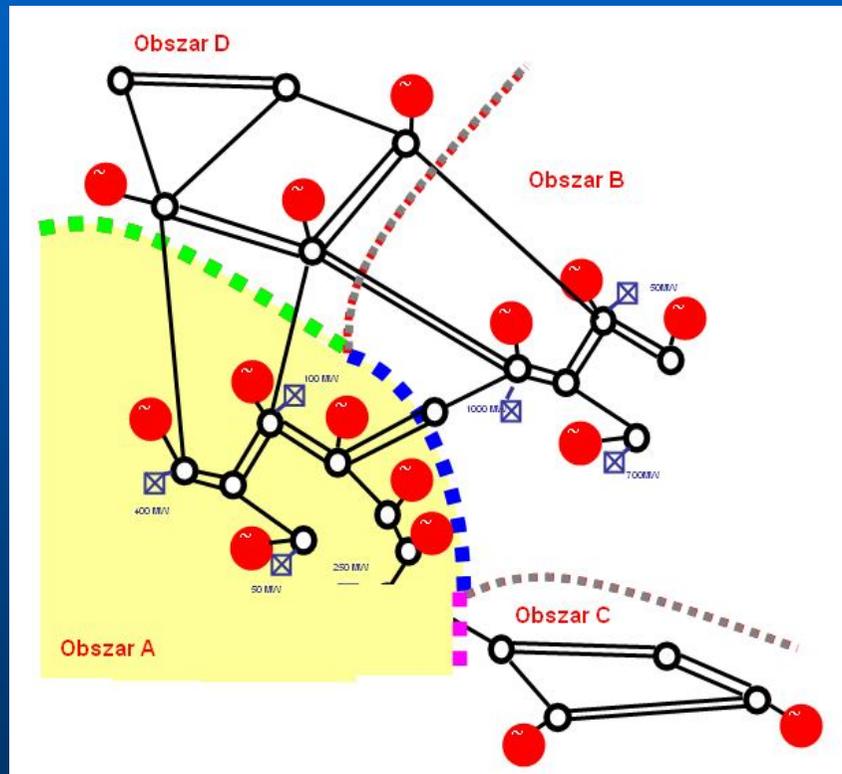
Lp	List of lectures
1	European Energy Markets
2	Polish Power System
3	Main Market Rules - Balancing
4	Electricity Trade - Power Exchange
5	Customers - TPA
6	Subsidized Markets
7	Cost of Electricity
8	Energy Mix
9	EU Emission Trade System
10	Cross border trading

Main definition

- Transfer Capacity – general term
- Total Transfer Capacity (**TTC**) – maximum value of capacity
- Transmission Reliability Margin (**TRM**) – capacity reserve
- Net Transfer Capacity (**NTC**) – capacity available for trade: **$NTC = TTC - TRM$**
- Already Allocated Capacity (**AAC**)
- Available Transfer Capacity: **$ATC = NTC - AAC$**



ATC in bilateral exchange and technical profile



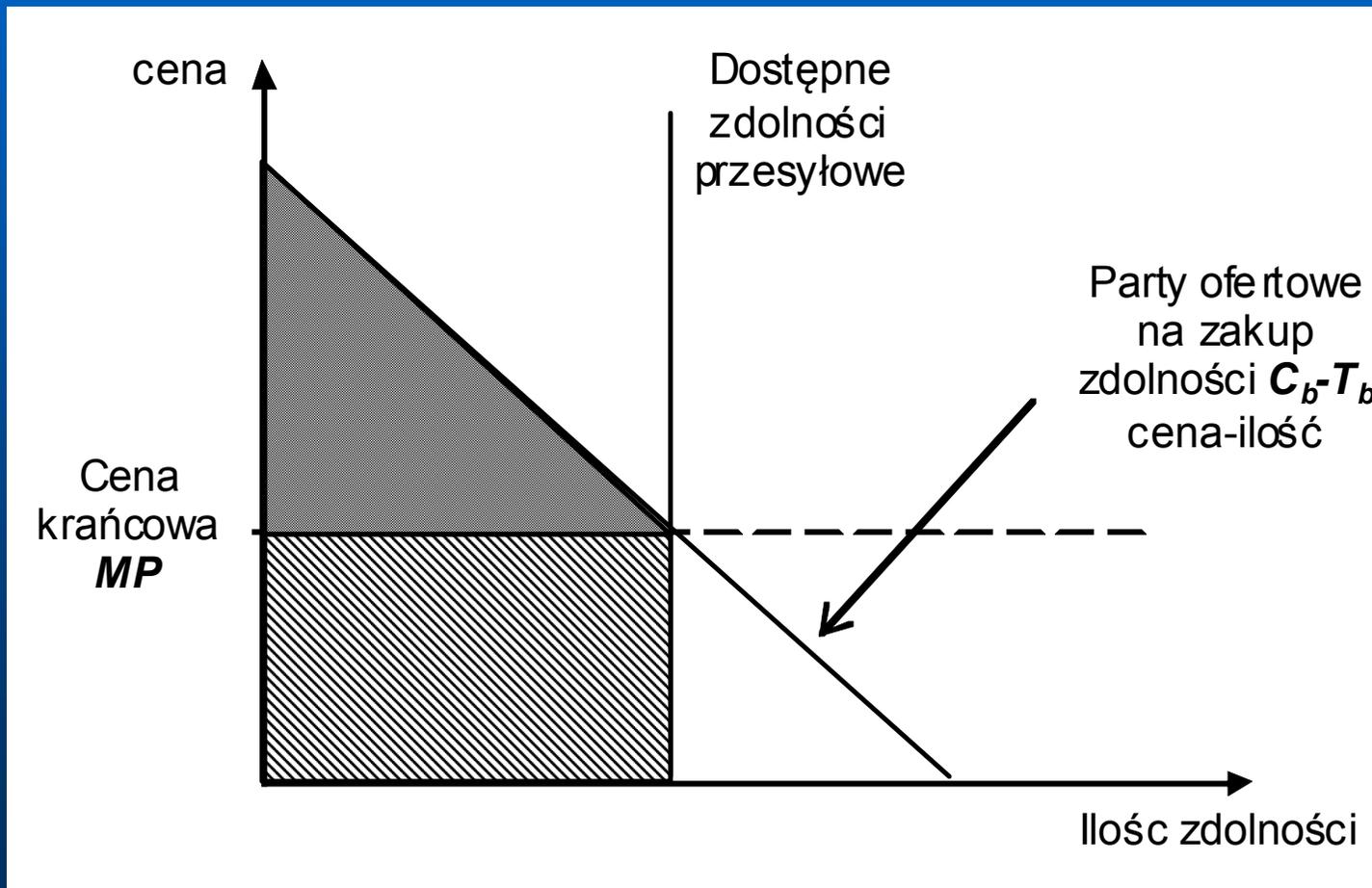


Technical profiles in Europe

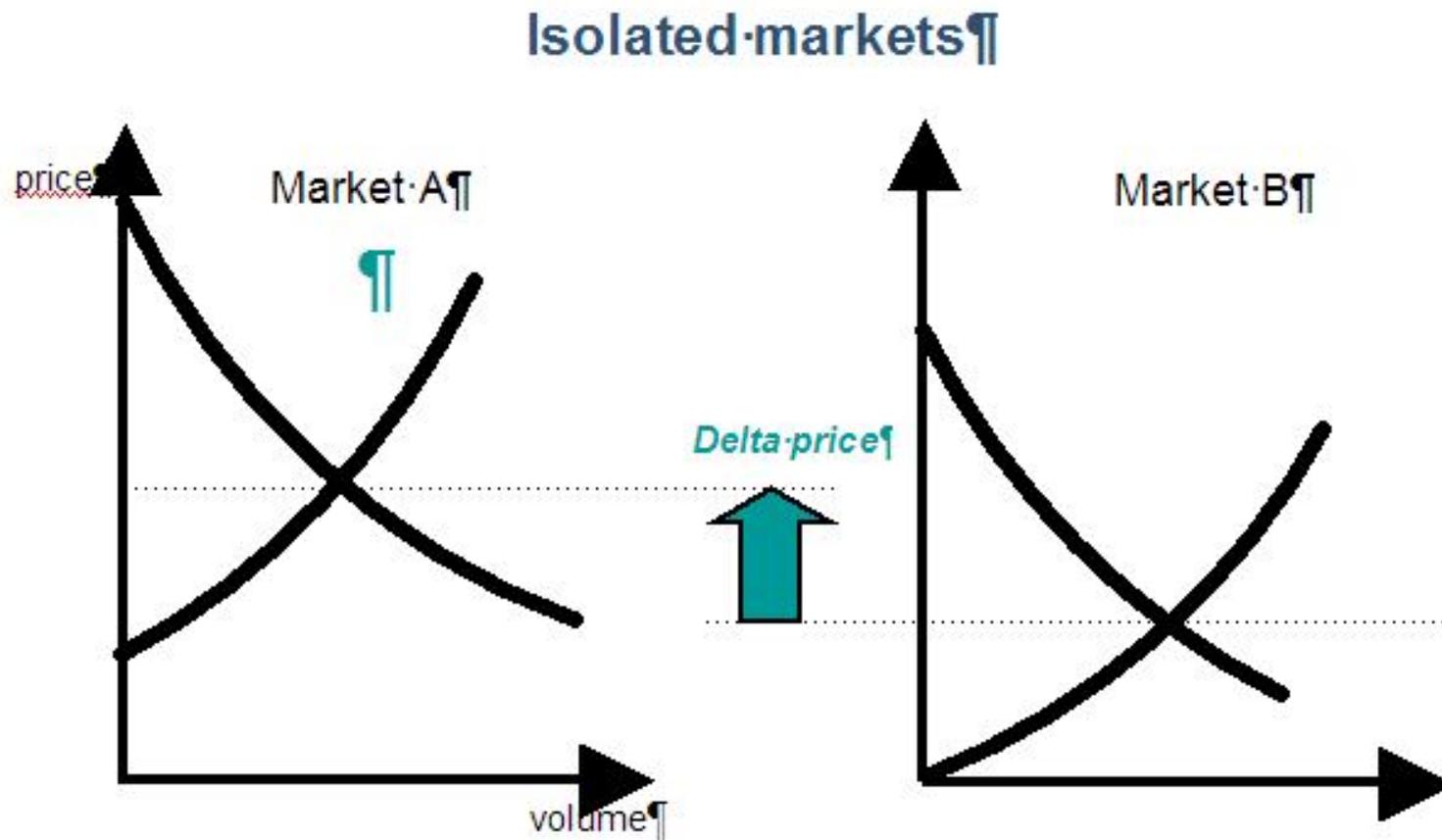
Categories of auctions

- **Explicit** – separate trading and purchasing of transfer capacity
- **Implicit** – only energy trade; transfer capacities assigned automatically
- **Market splitting, Market coupling and Volume Coupling**

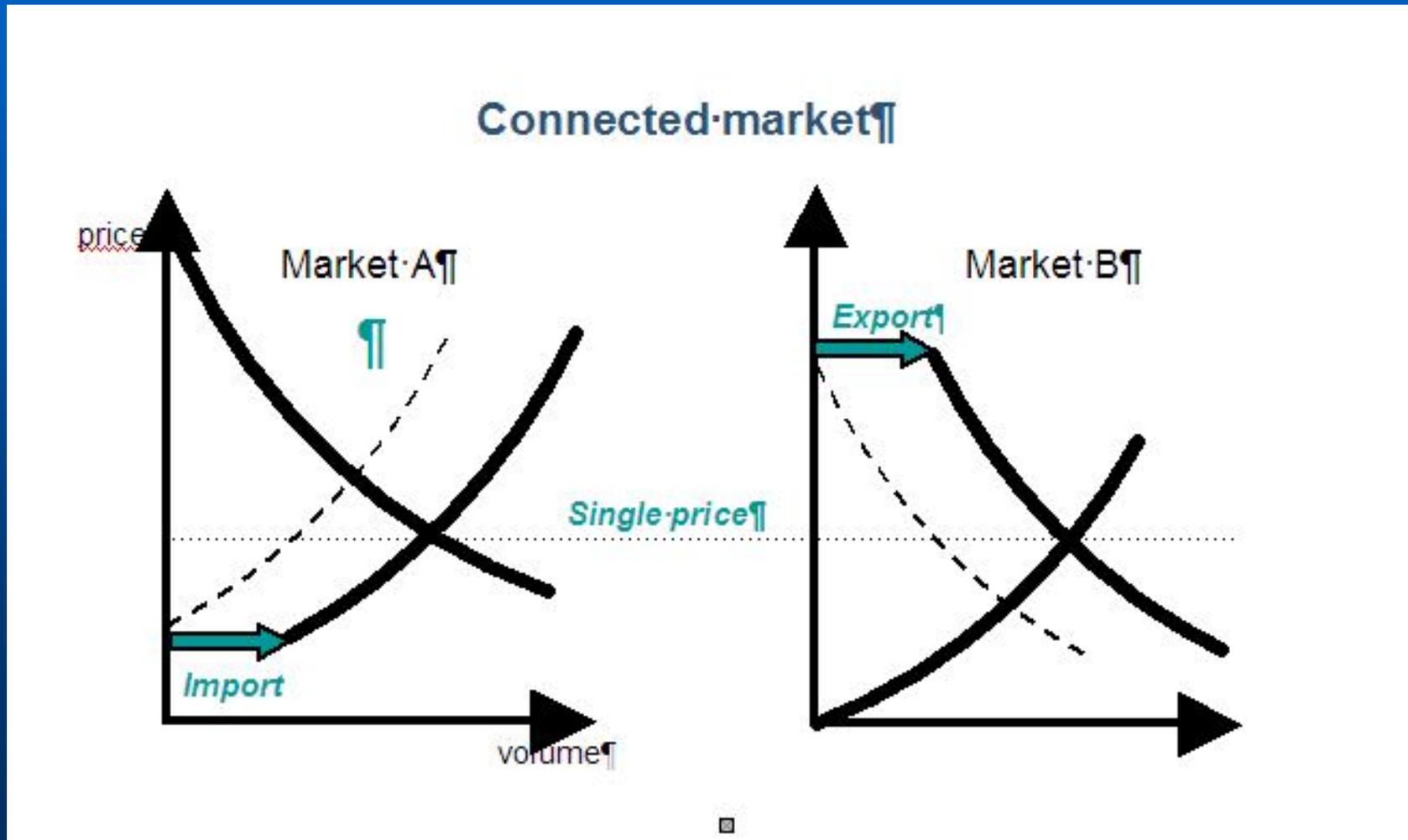
Setting marginal price



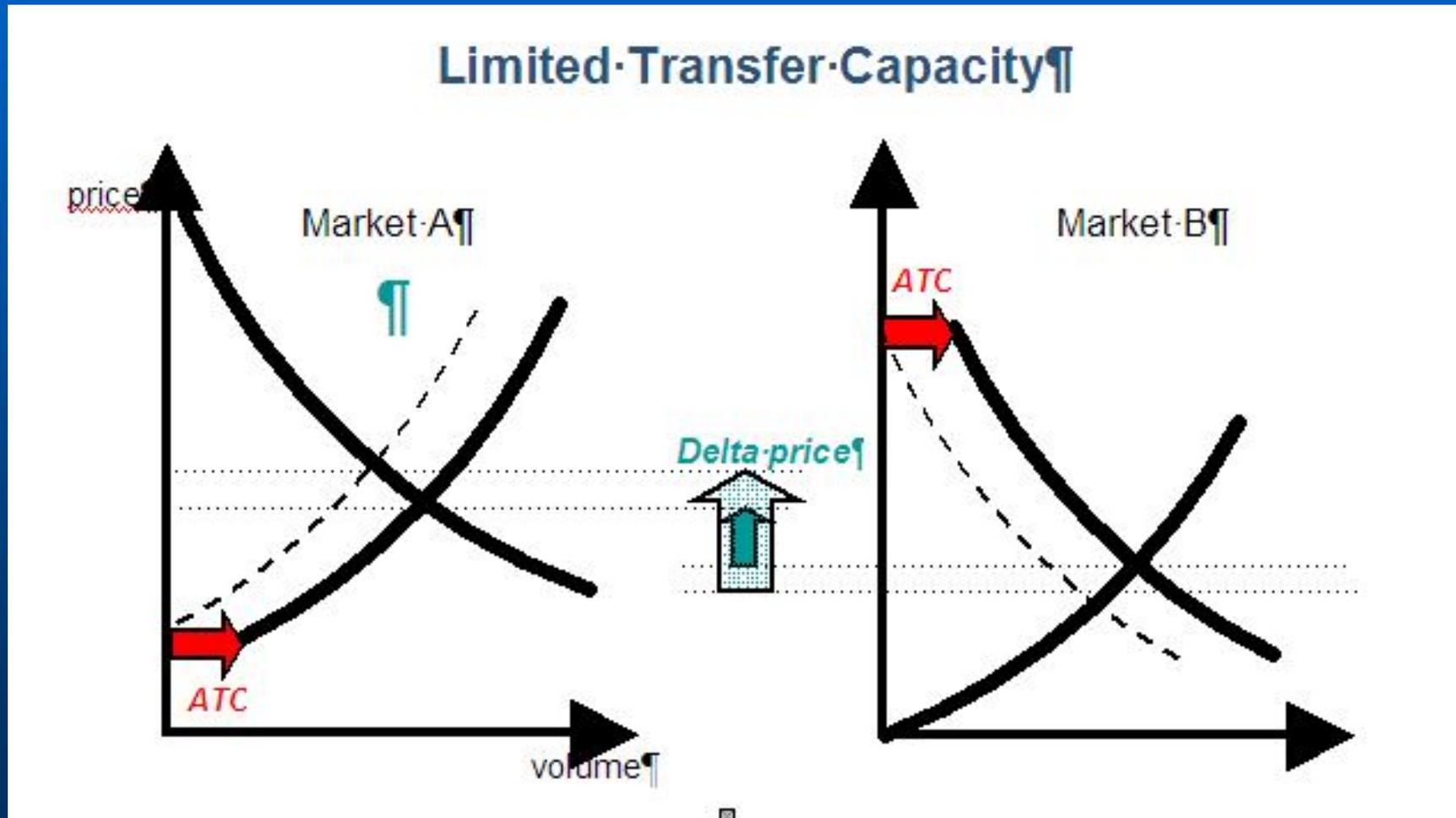
Prices in isolated markets



Price in connected markets



Prices with limited transfer capacity



Target Model (under construction)

- **Day Ahead Market**
- **Intra-day Market**
- **Cross border capacity calculation**
- **Balancing Market**