Unbundling, price transparency and «competition between networks» in the light of other markets’ experience

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Some relevant features

- Infrastructure
- Network industry
- Economies of scale
- [National] monopolies/[international] oligopolies
- Combination of «core» and «non-core» activities
Electricity Gas Telecommunications

- Some of the described features are also present in the energy and telecom sectors,
- although we must use the utmost care in making any valuable comparison
- Existing regulations on these sectors focus on:
  - Access barriers: discrimination, refusal to supply
  - Bundling: incumbent’s dominance, cross-subsidization, discrimination, foreclosure, high prices
  - Lack of transparency: high prices, predatory pricing, cross-subsidization
A premise: network industries

- Electricity, gas, telecoms, rail, postal and payment services are all network industries:
  - Dependence on a network as a conduit of the services produced in the industry
  - High fixed costs to build up the network and low marginal costs [investment costs and risk of innovation]
  - Network externalities: private and social gains from using a network grow with the increase of customers
  - Limited number of networks, in some cases a single (monopoly) network

Competition between networks versus competition within networks
Vertical integration and competition between networks

• **Welfare effects of vertical integration?**
  - Mixed evidence for a positive or negative net effect of vertical integration

• **A relevant factor: different legal and tax regimes in the member states**
  - Vertical integration might perpetuate the status quo, where characterized by monopolies or oligopolies

• **This could also be due to the fact that fee structures are not transparent (and difficult to compare among markets)**
Mitigation tools: reducing barriers to access

• In the energy market context: Third-party Access («TPA») right
  ✓ In certain circumstances economically independent undertakings operating in the sector should have a legally enforceable right to access and use various energy network facilities owned by other companies

• TPA right corresponds with an obligation to contract and a duty to perform

• TPA right is not an autonomous right: underlying supply contract (and only to «eligible customers»)
Essential facilities doctrine

• Emergence of this doctrine to conceptualize principles in network based industries

• Commission’s Telecommunication Access Notice [1998]
  ✓ «the expression essential facility is used to describe a facility or infrastructure which is essential for reaching customers and/or enabling competitors to carry on their business, and which cannot be replicated by any reasonable means»
Essential facilities doctrine (cont.)

- Replication criterion - In *IMS* case [ECJ 2004], to be «indispensable» for a facility or an infrastructure does not mean that it cannot be physically «replicated»:
  - The facility is indispensable when an undertaking «would have to make exceptional organizational and financial efforts» to acquire an alternative facility, and
  - It would be «obliged to offer terms which are such as to rule out any economic viability of business on a scale comparable to that of the undertaking which controls the protected structure»

- Yet, doctrine not tested in Court yet in any of the indicated sectors
Unbundling of electricity and gas transmission

• Directives 2003/54 and 2003/55 on common rules for the internal market in electricity and natural gas require legal and functional unbundling:

  ✓ «Legal unbundling»: companies providing transmission and distribution must have autonomous legal personality
  ✓ «Functional unbundling»: Transmission and distribution must be independent also in terms of organization and decision-making from other activities not related to the network

Tlc: current proposal, strongly criticized by the market
Energy: proposal for «ownership unbundling» also strongly debated
Unbundling policy in the US for tlc

- In the 1980s: Open Network Architecture governing access to essential network functions
- 1996 Telecommunications Act: incumbent local exchange carriers in narrowband markets must provide requesting telecom carriers:
  - "nondiscriminatory access to network elements on an unbundled basis at any technically feasible point of rates, terms, and conditions that are just, reasonable, and nondiscriminatory", and
  - unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide the telecom service they plan
- Such network elements must be made available at cost-based rate [use of price caps?]
Unbundling policy in the US for tlc (cont.)

• The FCC is instructed to use an «impairment» standard in determining which network elements have to be unbundled

• 1996 Telecommunications Act qualifies such standard:
  ✓ Access to such element must be necessary, and
  ✓ Failure would impair the ability of the carrier to provide the services it seeks to offer

• Rules variously challenged in court
New unbundling rules (FCC Order Feb 2005)

- «impairment»: influenced by a pragmatic dynamic notion of competition
- Regard to the capabilities of a «reasonably efficient» competitor
- FCC now explicitly considers the existence of substitutes to unbundled network elements, which include forms of access with tariffs (such as special access)
- FCC also weights the potential costs of unbundling (such as reduced investment and innovation incentives)
Price transparency in energy sectors

• Council Directive 90/377 [amended by Dir. 93/87] on a Community procedure to improve the transparency of gas and electricity prices charged to industrial end-users:

✓ Member States must ensure that gas and electricity undertakings communicate to the SOEC their prices, details of the price systems in use and the breakdown of consumers

✓ The SOEC must keep the data confidential and may publish it only in an aggregate form which makes it impossible to identify individual commercial transactions
Price transparency in US tlc

- TELRIC (Total Element Long Run Incremental Cost) standard: forward-looking methodology to generate a benchmark based not on the legacy network, but on a potential efficient, modern network
- Costing guidelines
- Price benchmarks
As a general rule, increased price transparency will benefit buyers unless it results in considerably increased risks of collusion among sellers.

Under certain conditions, increased price transparency can significantly increase the probabilities of conscious parallelism and anticompetitive coordination.

Increased price transparency is unlikely to significantly increase the risk of anticompetitive coordination unless the affected markets are already particularly susceptible of coordination.
• In markets conducive to anti-competitive coordination, direct exchanges of price information among suppliers deserves close scrutiny.
• Gasoline markets as a primary example of such kind of market.
• The ambiguous effects of various means of enhancing price transparency make them natural candidates for application of a case by case, rule of reason approach.
Any lesson from competition between payment networks?

• Chakravorti and Roson [2004] study competing payment networks where they offer differentiated products in terms of costs and benefits to consumers and merchants

• Market equilibria differing according to market structure

• Results to be compared with the most of theoretical models considering a single platform with varying level of competition among network participants and with those considering competing payment platforms
Thus:
- Vertical integration versus horizontal integration?
- Competition within networks versus competition between networks?
- Contestable markets versus non-contestable markets?
- Local providers as «point of access» to the network versus remote access?

Bauer [2005] on new unbundling policy in US: «at the heart of the FCC’s approach continues to be trust in facilities-based competition with light-handed regulation only applied to cases where competitors would be impaired without access to unbundled network elements»
Towards a regulatory environment that encourages investment and sustainable competition?

- Elimination of Giovannini barriers as a precondition
- A composed structure combining «competition within networks» and «competition between networks» [local versus international?]
- Consideration of trade-offs of transparency
- Competition, market integration and risk control: an holistic understanding
- Ex ante regulation or unbundling with regulatory (although light) oversight?