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# The Effectiveness of Competition Policy: in Theory and Practice

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# Competition policy: A growing activity

#### Some facts

## Latest news from DG Competition



- 23.01.2008: State aid: Commission adopts new guidelines on State aid for environmental protection
- 23.01.2008: Antitrust: Commission fines synthetic rubber producers € 34.2 million for price fixing cartel
- 16.01.2008: Antitrust: Commission launches sector inquiry into pharmaceuticals with unannounced inspections
- 14.01.2008: Antitrust: Commission initiates formal investigations against Microsoft in two cases of suspected abuse of dominant market position

## Latest news from DG Competition

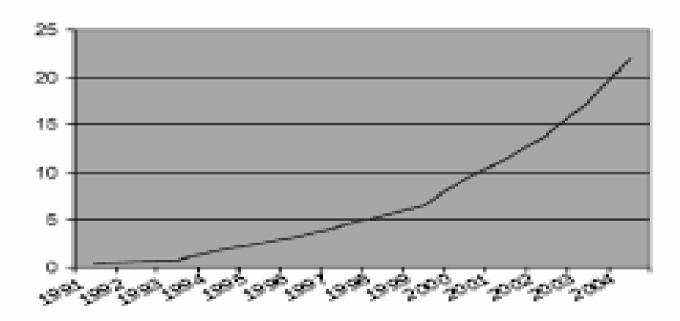


- 10.01.2008: State aid: Commission launches public consultation on the future framework for State funding of public service broadcasting
- 09.01.2008: Antitrust: European Commission welcomes Apple's announcement to equalise prices for music downloads from iTunes in Europe
- 21.12.2007: Antitrust: Commission confirms sending Statement of Objections to alleged participants in a air freight cartel
- 19.12.2007: Antitrust: Commission prohibits
  MasterCard's intra-EEA Multilateral Interchange Fees

## Market for economic advice in Europe



Figure 1. Turnover of economic consultancy firms (current £ million)



## Market for economic advice in Europe



- Economic advice = 15% of the total amount fees
  - Like the US market
  - Bigger but less numerous cases than legal advice
  - Number of consulting firms has grown
- How to explain this growth ?
  - Are economists and lawyers kind of vultures or parasites?





	High income	Upper middle	Lower middle	Low income
2004-2001		3	2	2
2000-1991	4	14	26	15
1990-1981	3	2	1	3
Until 1980	19	3	2	2

# States adopting a competition law



	High income	Upper middle	Lower middle	Low income
By 2004	31	22	28	20

• Why or when do countries decide to adopt a competition law?

## Decision to enact a competition law



## Hypotheses / results

- Economic development (+)
- Size of the economy (+)
- Reliance on market forces (+)
- Trade liberalization (+)
- Foreign direct investment (+)
- Role of international organization
- Regional trade agreements

- Industrialisation (-)
- State influence (-)
- Social policies (-)
- Subsidies and state aids
- Corruption (-)
- Export-import restrictions (-)

## Two questions



- What is the impact of competition?
- How to make competition policy effective ?



# Welfare effects of competition policy

#### Some results

# Competition enhances productivity



- Haskel (1991)
  - high levels of market concentration = lower TFP
- Nickell (1996)
  - +10% in price mark-ups = -1.5% in TFP growth
- Olley Pakes (1996)
  - Deregulation in US telecoms = productivity gains

# Competition enhances productivity



- Nicoletti Scarpetta (2005)
  - Reduced levels of regulation accelerate productivity growth
- Bloom Van Reenen (2006)
  - Low presence of poor management
- Aghion Bloom Blundell Griffith Howitt (2002)
  - Threat of entry has a positive effect on incumbent innovation incentives in industries close to the technological frontier

# Competition enhances productivity



- Competition places pressure on managers
  - Competition reduces X-inefficiency
- Competition drives the selection process of firms
- Competition fosters innovation (in general)
- BUT: Competition is good when productivity gains are passed to the consumers



# The effectiveness of competition policy

#### Risk and sources of errors

# Statistics on mergers in Europe



	PHASE 1	PHASE 2	Total
YES	2296	30	88.6%
YES IF	121	72	7.3%
WITHDRAW	63	25	3.4%
NO		19	0.7%
# Cases	2480	146	2626

#### **Errors**



## Type 1

- To prohibit procompetitive mergers
- Appeals before the tribunal
  - Rare (4 merger cases)
  - Important political impact

## Type 2

- To approve anticompetitive mergers
- Numerous cases???

# Deterence effects of merger policy



- Seldeslachts, Clougherty and Barros (2007)
  - Prohibitions deter mergers
  - Remedies have **not** a significant deterrence effect

#### Conclusion

Competition policy must be grounded on correct roots

#### Source of errors



#### Political economics

- Investigation capacity
- One body: investigation and decision
- Role of third parties (member states, ...)

#### Economics

- Priority to the measure of dominance
  - A tropism refuted by economic theory
- Weak account of efficiency gains
  - Measurement: remarkably absent

## Empirical evidence



- Determinants of merger decisions
  - Bergman, Jakobsson and Razo (2004)
    - Prohibition increases with parties' market shares
  - Others
    - Same conclusion

# Empirical evidence



- Effectiveness of competition policy
  - Crandall Winston (2003)
    - Impact of decisions on price-cost margins
    - Ineffectiveness
  - Duso, Gugler, Yurtoglu (2005)
    - Event studies on cases with remedies
    - Commission increases Type 1 & 2 errors

#### Simulation exercice



- Foncel, Ivaldi, Motis (2008)
- Simulate a true economy
- Merger in true economy
  - Ex-ante post-merger HHI
  - Ex-post post-merger HHI
  - Ex-post post-merger change in prices
- Estimation using an approximated model
  - Ex-post post-merger change in prices

#### Results of simulation



- The computations of post merger HHI and change in HHI are biased upward, which increase the risk of type 1 error, that is to say, the risk to prohibit a merger although there is no serious competition concerns
- When the market is large enough, the change in prices and the changes in HHI due to a merger are independent, i.e., a decision based on the change in HHI would have nothing to do with a decision based on the change in prices



# How to make competition policy effective?

# Reducing the risk



- How to reduce Type 1 and 2 errors
  - Reducing type 1 errors
    - In-depth analysis
      - Econometric estimation
      - Detailed data set
      - Etc ...
  - Reducing type 2 errors
    - Ready-to-go analysis
      - Calibration
      - Limited information
  - More economic analysis

# Example: Agenda of the European competition policy



- Moving to more effects-based assessment rather than just using per se rules
  - Guidelines of non horizontal mergers
    - Raising the cost of downstream rivals
    - Gains from double marginalization
  - New substantive test for mergers
    - Significant impediment of effective competition
  - Guidelines on Article 82

# Economics of merger



- Williamson (1968)
  - Welfare tradeoff of mergers
    - Increase in market power
    - Increase in efficiency
- Davidson & Deneckere (1985)
  - In differentiated-products Bertrand models mergers yields price rises
  - The higher the diversion ratio, the higher the price increases
    - Importance of the structure of preferences

# Measuring the effect of a merger



- Example: merger in the truck manufacturing industry in Europe
  - Volvo / Scania
    - 2 firms in Northern Europe
    - Substitutes
    - Prohibition
  - Volvo / Renault
    - 1 firm in the North, 1 firm in the South
    - Complements and efficiencies
    - Case cleared



# The next challenge: Internationalisation

# Trade and competition



- Trade enhances growth
- Trade has a pro-competitive effect on market structure
  - Trade as a substitute to competition policy
- Conflicts between trade and competition policy
  - Antitrust policy goal: consumer surplus
    - Vertical arrangements could be welfare improving
    - Price discrimination can be beneficial to consumers
  - Trade policy goal: market access and firm profits
    - European antidumping policy

## Internationalisation of competition policy



- Differences among authorities in terms of economic interpretation
  - GE-Honeywell case
    - EU: Application of the portfolio effect theory
    - US: Efficient mergers benefit to customers
  - Microsoft



- Interdependence of competition authorities (maximizing welfare)
  - Mechanisms
    - Negative spill-over effects
      - Action in country A lowers welfare in B
    - Distortion effects
      - In addition, decrease in worldwide welfare
  - Results
    - Non-internalisation of externalities
      - Type 1 and 2 errors



- Interdependence of competition authorities
- Application of the territoriality principle
  - Apply domestic laws only to your domestic firms
    - Net importing industries: same as with no trade
      - No impact of foreign firms exporting at home
    - Net exporting industries
      - No impact on foreign customers



- Interdependence of competition authorities
- Application of the territoriality principle
  - Apply domestic laws only to your domestic firms
  - Results
    - Increase type 2 errors in net exporting industry
    - Increase type 1 errors in net importing industry
  - Too lax a regime



- Interdependence of competition authorities
- Application of the territoriality principle
- Application of the extraterritoriality principle
  - Apply national laws to companies located elsewhere
  - Too tough a regime
    - Tend to over-regulate to defend national consumers
    - Example: Net importing countries
  - Increase Type 1 errors
    - Prohibit efficient practices



- Interdependence of competition authorities
- The (extra)territoriality principle
  - Too (restrictive)lax a regime
  - Practical difficulties to enforce the principle
    - International public laws prevent states from exercising their power of coercition on a foreign territory
    - The power of a competition authority to get information and documents abroad is low
    - International political tensions and retaliation
      - Boeing / Mc Donell Douglas case



- Interdependence of competition authorities
- The (extra)territoriality principle
- Bilateral or multilateral agreements
  - Internalization of negative externalities
    - Need a compensation system
    - Enforcement problem (information asym.)
  - Drawbacks
    - Multiple competences and jurisdictions
      - Levels and number of fines



- Interdependence of competition authorities
- The (extra)territoriality principle
- Agreements
- Centralized authority (international tribunal ???)
  - Literature on federalism
  - Pros and Cons
    - Subsidiarity principle
    - Centralisation
      - Bureaucracy costs, accountability problem, less competition among authorities