Outline

- Introduction – Research project and methodology
- Observations – How innovation comes into competition law
- Integration of innovation into competition law analysis
  - Relationship between competition and innovation
  - Innovation as more than a production function
  - Innovation paths as explanatory device
- Broader context
  - Sustaining and disruptive innovation
  - ‘Public’ models
- Conclusions – Implications for sector-specific regulation
Introduction

- GRASP – modified Schumpeterian approach (Aghion) with multiple layers:
  - R&D layer
  - Structural economic reform layer
  - Legal, institutional and organizational reforms layer
  - Global commitments layer
  - Fiscal layer
- TILEC workpackage: Law, economics and growth
  - Innovation and EU economic law
  - TILEC: lawyers and economists, using their respective methods

Research question and methodology

- Intuition: Major EU-level policy statements on innovation and growth (Lisbon Agenda, Agenda 2020) not reflected in
  - Competition policy
  - Sector-specific regulation
  - Intellectual property law
  - Standardization policy
- Why these areas?
- Focus on EU competition policy at first
  - There is more to EU competition policy than competition policy
Research question and methodology

- **Research question:**
  - What innovation policy (if any) underpins EU competition policy?
    - How is innovation factored into EU competition policy?
  - How is innovation factored into EU competition policy?

- **Methodology:**
  - Based on classical legal methodology, with improvements
  - Mostly descriptive, yet normative at times
  - Steps:
    - Prepare analytical grid
    - Identify materials to be examined
    - Analyse materials

---

Choice of materials: use sectoral classification on DG COMP’s website: NACE code J

- All 101-102 TFEU Commission decisions since 1990
- MCR : all 1st phase decisions (Art. 6(1)(b)) with commitments
  - All 2nd phase decisions
- General Court/ECJ
  - Appeals from any Commission decision above
  - Preliminary references involving Art. 101 or 102 TFEU, in the relevant area
- General instruments / soft-law instruments

- Use of NVivo as qualitative research software
How innovation comes into EU competition law

- A first look
  - ‘Innovation’ not very present in sample until mid-2000s
  - Now increasingly referred to in analysis, and with increased sophistication

- Two observations
  - Exogeneity: no evidence of deliberate DG COMP policy on innovation
    - General instruments do not go into much detail
    - Innovation introduced via parties to cases → great diversity

EU COMPETITION LAW

Market definition:
- Innovation market
- Innovation affecting market definition (demand- or supply-side)

Market assessment:
- Innovation and lower barriers to entry
- Innovation and competition for the market

Assessment of conduct:
- Innovative firms (mavericks)
- Innovation as justification / efficiency defense
- Innovation in the effects analysis (incentives, innovativeness of market)

Remedies:
- Restoring innovativeness
- Impact of remedy on innovation incentives
General observations

- No observable signs of autonomous thinking on part of DG COMP on innovation: essentially following submissions made by parties
  - Commission does not necessarily have a representative sample of innovation
    - Essentially product innovation
    - Innovation seen as firm-driven
    - Incremental innovation well represented

- Innovation analysis constrained by institutional framework of competition law
  - Adversarial procedure (yet no trade-offs), limited scope in time
  - How competition law can end up looking different from one sector to the other
Integration of innovation into competition law analysis

- The million-euro question: Link between competition and innovation
  - Schumpeter
  - Arrow
  - Aghion et al.
- Commission seems firmly in Arrow camp
  - More competition → more innovation
  - Is it so?

Integration of innovation into competition law analysis

![Graph showing the relationship between innovation and competition](image)
Integration of innovation into competition law analysis

- In the literature: special competition law analysis for ‘innovative markets’
  - Especially as regards market assessment
  - Rejected by Commission
  - Special analysis would be a mistake in any event
- Yet, Commission understands innovation arguments
  - Sensitive to ex ante perspective in assessment and remedy stages
  - NO linear view of innovation: Innov = a Invest + e
    ✓ More to innovation than ensuring rewards and incentives for innovator

Integration of innovation into competition law analysis

- Substantive approach: ‘innovation path’ as explanatory device for the purposes of this paper
- Possible roles of public authorities
  - Expand innovation paths
  - Maintain innovation paths / Keep paths open
  - Narrow innovation paths
  - Keep firms nervous
- Self-perception of Commission in competition cases
  - Maintain innovation paths / Keep paths open
    ✓ Borne out in practice? See conflictual cases
Integration of innovation into competition law analysis

- Low-intensity clash: keep paths open for newcomers / market players, with limited effect on the incentives of others
  - Intel
    - Rebates
  - Microsoft / Yahoo
    - Keeping a credible competitor to Google

- Medium-intensity clash: keeping paths open, but affecting perspectives of one market player
  - Microsoft (tying)
  - Intel/McAfee (tying)
  - Vertical convergence cases: AOL/TimeWarner, Vivendi/Seagram
  - Maybe also Google (from search to information engine), pending
  - Defendant not allowed to engage into tying or pure/technical bundling (stopping to offer products separately)
  - Reasoning: control of innovation paths should not be in the hands of dominant firm
Integration of innovation into competition law analysis

- High-intensity clash: Incentives of market parties in direct conflict, intervention will affect the defendant noticeably
  - Microsoft (interoperability)
  - New product condition for EFD (but not for price squeeze)
  - Can competition law avoid picking winners, even unintentionally?
    - Mission impossible
      - Intel
      - Microsoft
    - Alternative: presumption against defendant?

Broader context – Sustaining and disruptive innovation

- The model (Christensen): not breakthrough vs. incremental
Broader context – Sustaining and disruptive innovation

- Commission generally works within existing value networks, i.e. sustaining innovation
  - Microsoft, Intel, now Google
  - Concern remedied by competition law intervention or through disruptive innovation?
- What can competition policy do about disruptive innovation?
  - Merger control: mavericks
  - Interplay with Intellectual Property
- What is the added value of competition law then?

Broader context – ‘public’ models

- Commission tends to push parties in the direction of ‘public’ models
  - ‘Public’ models: standardization, open source, etc.
  - Open source software: Oracle/Sun, Intel/McAfee
  - Standardization, even if proprietary technology
    - Digital TV cases from the 1990s, early 2000s
    - Google/Motorola, Cisco/Tandberg
    - Guidelines on horizontal agreements
    - Exception: video games
  - Consistent with protection of incremental innovation
  - Connection with European industrial structure?
  - Too static?
Conclusions – Implications for regulation

- Commission analysis by and large justifiable, as long as one agrees with the assumptions
  - More competition brings more innovation
  - Innovation more than just a linear phenomenon
  - Incremental innovation worthy of protection
  - Competition policy must continue to apply within value network
  - Private parties should be steered towards ‘open’ models

- Assumptions are not unassailable

Conclusions – Implications for regulation

- These principles also filter into sector-specific regulation
  - Regulation of next-generation networks
  - Standardization policy

- Integration of innovation in regulation
  - Distinction between Arrow and Aghion might be more material
  - Difficult to stay at ‘keeping innovation paths open’
    - Tendency to incorporate technology into regulation
      - Energy
      - Electronic communications: see technology neutrality
    - Vulnerability to disruptive innovation
    - Can regulation avoid to pick winners?
Conclusions – Implications for regulation

- Competition policy and regulation are limited by institutional framework
  - Disruptive innovation
  - Open / user-driven / non firm-centred innovation models
- Should there be a deliberate, articulated policy instead of the case-by-case approach?
  - Loss of flexibility
  - More accountability (and litigation)
- Does competition policy fit within the broader EU policy goals or is it too conservative as regards innovation? What about sector-specific regulation?