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# TYING IN DIGITAL MARKETS

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# Structure of the Presentation

- Economics of tying
- The test under EU competition law
- A comparison between *Microsoft I* and *II* and *Android*

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# The Economics of Tying: Theoretical Background

- The Chicago Critique of Tying
- Post-Chicago Theories of Harm
  - Classic leveraging revisited
  - Protection of monopoly profits in the tying market
  - Pre-emption of emerging markets
  - Tying and incentives to innovate

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# The Economics of Tying: Operational Implications

- Focus on pro-competitive reasons for tying
- Market power on the tying market
- Characteristics of the tied market
- Asymmetry between the dominant undertaking and its competitors
- Exclusion of (equally efficient) competitors from the tied market
- Incentive to tie and competitive harm
- Difficulty in predicting welfare effects
- Potentially more severe effects of technological tying

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# The Test under EU Competition Law

- Dominance on the tying market
- Coercion
- Anti-competitive effect
  - Foreclosure of as efficient competitors in the tying market
  - Consumer harm as acquisition, maintenance or strengthening of market power on an affected market
    - tying market
    - tied market
    - emerging market
- Defences

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# *Microsoft I and II vs. Android: Dominance on Tying Market*

- Difference between PC operating systems in the late 1990s and mobile operating systems
- Role of market share data: limited in mobile economy if product is provided for free, e.g. *Microsoft/Skype* # 121
- Costs of entry
- Relevance of direct network effects
- Relevance of indirect network effects

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# *Microsoft I and II vs. Android: Coercion*

- Technical tying
- Contractual tying
- Pre-installation of software
  - *Microsoft I*: Media Player pre-installed on Windows PCs
  - *Microsoft II*: Internet Explorer pre-installed on Windows PCs
- Questions
  - is there coercion in pre-installing Google Search if OEMs wish to pre-install Play Store?
  - is there coercion in pre-installing Google Chrome if OEMs wish to pre-install Play Store or Google Search?
  - is there coercion in pre-installing Play Store if OEMs use Android?



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# *Microsoft I and II vs. Android: Exclusion of (Equally Efficient) Competitors*

- Exclusion as a necessary requirement: *Microsoft I, Hilti, Tetra Pak II*
- *Microsoft I*
  - Indirect network effects. Content providers and software developers had incentives to write content and applications for media player with largest (predictable) presence on the market. Increased costs to make content and applications compatible with other media players
  - Tying ensured that Windows Media Player was as “ubiquitous” as Windows
  - OEMs had no incentive to pre-install second media player
  - Downloading not an efficient distributional practice because of consumers’ reluctance to download
  - Downloading could not guarantee a given market share
  - Evidence that RealNetworks had lost revenues (and market share) after the tying (structural break) notwithstanding no evidence that Windows Media Player was of superior quality
- Key differences with Android
  - Network effects (direct or indirect)?
  - No automatic pre-installation of Play Store on Android devices – but is Play Store a must stock?
  - Downloading apps on mobile devices (arguably) an effective distributional practice (more than 10 years after *Microsoft I*)

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# *Microsoft I and II vs. Android: Consumer Harm*

- *Microsoft I*
  - Market tipping – monopolisation of Media Player market
  - Protection of market power on client PC operating system market
  - “Significant advantage” in other markets such as content encoding software, format licensing, wireless information device software, DRM solutions and online music delivery
- *Microsoft II*
  - Monopolisation of web browser market as a means to protect market power on client PC operating system market
- *Android*
  - Acquiring/strengthening market power in general search on mobile devices?
  - Acquiring/strengthening market power in web browsers on mobile devices?

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## *Microsoft I and II vs. Android: Defences*

- EU law allows a dominant undertaking to raise a defence of objective justification on which the dominant undertaking bears the burden of production of evidence (but not, in principle, the burden of proof)
- *Microsoft I*
  - Superior technical performance – rejected for lack of evidence but an admissible defence in law
  - Consumer demand for integrated system (PC operating system + media player) – rejected as OEMs could have pre-installed other media players
  - Standardisation of media player technology allowing software developers and content providers to write software and applications for a single platform, thereby saving costs – rejected because: (1) it did not offset anti-competitive effects and (2) standardisation cannot be imposed unilaterally by a dominant undertaking
- *Android*
  - Consumer demand for integrated system – OEMs have a choice as to whether to pre-install Google apps, third party's apps or no apps at all – so tying may be proportionate to the objective
  - Avoiding fragmentation of Android – incentive to OEMs to take steps to avoid fragmentation?
  - Multi-sided markets and free-riding – option to pre-install GMS as a proportionate means to generating revenues from Android through monetised apps?



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