Case Notes
Network Externalities: US v. Microsoft (1995)

I. Materials

Richard J. Gilbert, "Networks, Standards and the Use of Market Dominance: Microsoft", in Kwoka and White, eds., The Antitrust Revolution, 3rd ed. (1999, Oxford University Press, New York).

II. Propositions

When network externalities are important, ``Once a product or standard achieves wide acceptance, it becomes more or less entrenched. Competition in such industries is `for the field' rather than `within the field.'" (Harold Demsetz, ``Why regulate Utilities?", \emph{Journal of Law and Economics} 11 (1968), at p. 57.)

The presence of network externalities may actually encourage innovation by guaranteeing more durable monopolies to innovating winners. (See, e.g., Ronald A. Cass and Keith N. Hylton, ``Preserving Competition: Economic Analysis, Legal Standards and Microsoft", \emph{George Mason Law Review} 8 (1999), at pp. 36-39).

Is a market share of 90\% or so sufficient to enable a software firm to charge prices that are above the competitive level?

III. QUESTIONS:

A. Facts

1. **What is DR-DOS? PC-DOS?**
2. **How big was MS mkt share in OS by 1992?**
    a) Mkt boundary? (Intel-compatible? Apple? Unix?)
    b) Over 90% of Intel compatible (counting PC-DOS as part of MS-DOS)
3. **What were the practices for which DOJ/US sued MS in 1993-95?**
    a) OEM contracts
        (1) long-term
        (2) minimum commitments (with carryover)
        (3) per-processor contracts
    b) Restrictive non-disclosures with ISVs

B. Restrictive OEM contracts

1. **What effects of the OEM contracts on market power?**
    a) Foreclose entry
    b) Why would OEMs sign long-term commitments? Why not refuse and buy competing OS from lower priced competitor?
        (1) Not enough incremental impact to create critical mass (need many OEMs to simultaneously defect)
    c) Why would OEMs sign per-processor contracts?
        (1) Same reason!

2. **What are some social benefits of per-processor contracts?**
    a) Discourages piracy. Why is this a good thing?
3. **Benefits of long-term commitments?**
    a) Reduces uncertainty on both sides, increase risk-taking (e.g., innovation investments)

C. Network externalities

1. **Do strong network externalities mean only one brand can survive?**
    a) Multiple brands of a single standard? (MS-DOS, DR-DOS)
    b) Multiple standards each with critical mass (Windows, MacOS, Linux)
2. **What might offset network externalities enough to permit multiple standards?**
    a) Heterogeneous consumer tastes
    b) Locked-in old customers vs. innovative opportunities for new customers
    c) Congestion effects
3. **Does network effect dominance currently guarantee no alternative can ever overcome?**
    a) MS vs. IBM
4. **Do network externalities encourage innovation by guaranteeing more durable (valuable) monopolies to winners?**

D. Harm?

1. **Are consumers worse off without DR-DOS?**
    a) Duplicative R&D
    b) Wasteful marketing
    c) Multiple standards, incompatibilities
2. **Might Windows market power have continued but consumers still have benefited from successful DR-DOS?**
3. **What might MS have done instead of OEM contract restrictions to destroy DR-DOS?**
    a) Lower prices?
    b) Innovate more rapidly and more to consumer tastes?

E. Market power?

1. **MS claims high market share not dispositive if potential competition strong enough to protect consumers. QUESTION: Why does this matter?**
    a) What's this about "potential competition"? Why should it matter? (Are consumers protected by it?)
2. **What are barriers to entry? Why do they matter?**
    a) <u>Indirect network externalities create "applications barrier to entry"</u>
        (1) Consumers prefer OS with most apps (even if they won't use them all!)
        (2) ISVs prefer to write for OS with most users
    b) Cost of developing / testing / marketing a new OS?

3. **MS claims direct proof shows it doesn't have (exercise?) market power:**
    a) It invests heavily in R&D
    b) It prices low
        (1) It is generally undisputed that MS pioneered low pricing of PC software in the 1980s. MS claims its prices continue to be low; Windows costs less than OS/2 or MacOS, for example. Does this mean it is not exercising market power?
4. **CADC: R&D and low (short-run) prices not inconsistent with market power**
    a) Further, other behavior difficult to explain unless MS has monopoly
        (1) Sets prices independent of rivals' prices
        (2) Exclusionary conduct rational only for firm with monopoly power
5. **Why is there an apps barrier to entry if top 2500 apps run on, say, OS/2 and MacOS, even if 70,000 apps run on Windows?**
6. **Shouldn't MacOS be in the market? They self-evidently compete (marketing, replacements, new purchase comparisons)**

F. MS has legal copyright on its software. Can't it then impose restrictions on OEMs etc. that do not violate antitrust laws?

"Microsoft's primary copyright argument borders upon the frivolous. The company claims an absolute and unfettered right to use its intellectual property as it wishes: "If intellectual property rights have been lawfully acquired," it says, then "their subsequent exercise cannot give rise to antitrust liability. [**59] " Appellant's Opening Br. at 105. That is no more correct than the proposition that use of one's personal property, such as a baseball bat, cannot give rise to tort liability. As the Federal Circuit succinctly stated: "Intellectual property rights do not confer a privilege to violate the antitrust laws." In re Indep. Serv. Orgs. Antitrust Litig., 203 F.3d 1322, 1325 (Fed. Cir. 2000)."

G. Couldn't MS impose the OEM restrictions to protect quality of Windows platform?

1. **CADC: No evidence that quality was degraded. No code modified. If problems increased, OEMs bore cost of support!**