

# Antitrust in Orbit

## Some Dynamics of High-Tech Merger Analysis in General and with Respect to XM-Sirius

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# XM-Sirius Merger

- Sidak 5
  - Not counting reports, op-eds, ex parte filings
- Hazlett 2
- Numerical count not quality-adjusted
- Public Service
  - NO ARGUMENT left unturned
  - No need to wait for Prof. Sidak's "Fifth Supplemental" to arrive in our In Boxes

# Comparative Statics

- SSNIP test
- Will post merger firm profitably raise price?
- Lerner Index
- Finds demand elasticity max'ing profits →
  - gross margin
- A lot to lay off on FC/VC ratio
  - Jonathan Baker's critique
- Simple, tractable... and assumption-intensive.
  - And how is post-merger elasticity change estimated?

# How DARS merger opps did it

- One bit of “direct evidence”
- Spring 2005
- XM raises price from \$9.95 to \$12.95
- XM growth alleged to have remained constant
- As presented, places XM, Sirius, in separate markets, suggesting
  - markets defined too narrowly
  - lack of evidence on post-merger elasticity

# Static Interference

- Lerner Index: an equilibrium condition
- Wrong when dynamics present
  - “penetration pricing”
- May undercount dynamic rivalry
- Difficult empirics
  - post-merger data?
- Valuable data incorporates dynamics
  - may be the best information

# What not to ssnip?

- Financial valuation data
- Share price reactions (event studies)
- Merger support/opposition from interested parties

# 1. Financial Valuations

- Market definition by whatever means
- Testable implication: a monopoly within the contour realizes “monopoly profits”

# Capitalization of Expected Profit

- Indicates pricing power
- Used by regulatory agencies
- Example: FCC (1994)
  - Conclusion: q ratios suggest rival products (e.g., broadcast TV, video cassettes) not constraining rates to competitive levels

# SDARS “duopoly”

## Cumulative Deficits and Enterprise Values for XM and Sirius, as of 2007 (\$mil.)

	<i>Cumulative Cash Flows</i>			<i>Value of Deficit, CFs invested at:</i>		<i>Enterprise Value</i>
	<i>Sales</i>	<i>Capital, Op., &amp; Interest Expense</i>	<i>Deficit</i>	<i>T Bill rate</i>	<i>12% rate</i>	
<b>Sirius</b>	1,910.0	7,620.3	-5,710.3	6,488.6	9,132.5	4,800.0
<b>XM</b>	2,994.6	7,660.5	-4,665.9	5,147.4	7,158.9	4,420.0

# Positive Capital Value

- Market equilibrium condition
  - Forward looking, reflects expectations
- Negative valuation → pricing constraint supplied from beyond the 'market'

## 2. Financial Events

- Objective measure of expected effects of merger (or merger blocking)
- Target reveals event timing
- Customers, complements, rivals reveal competitive effects
- ‘issues’ -- pure plays, mixed interests, event contamination, takeover effects, etc.

# *U.S. v. Microsoft*

- Bittlingmayer-Hazlett, *DOS Kapital* (JFE 3.00)
- If DOJ is expected to lower price of OS software, Compaq shares should gain
- Negative correlation in returns [computer sector, MSFT]
- 1991-1997
- Out of sample: 1998-2002

# Testing Market Expectations

Predicted Abnormal Shareholder Returns Implied by Rival Antitrust Theories				
	Pro-enforcement Event Windows		Anti-enforcement Event Windows	
	Antitrust Efficient	Antitrust Inefficient	Antitrust Efficient	Antitrust Inefficient
MICROSOFT	-	-	+	+
COMPUTER SECTOR	+	-	-	+

# Results

## A Priori Signing of 36 Enforcement Events (3 Day Windows)

	Pro-Enforcement (28 events)	Anti-Enforcement (8 events)
MSFT	-1.2% (-2.06)	2.4% (2.19)
Computer Industry	-0.6% (-2.04)	1.2% (2.19)

# Out of Sample

<i>Date</i>	<i>Event</i>	<i>MSFT</i>	<i>Sector</i>
<b>5.98</b>	Appeals Court over-rules Jackson consent decree order	<b>+</b>	<b>+</b>
<b>11.99</b>	Findings of Fact	<b>-</b>	<b>-</b>
<b>4.00</b>	Findings of Law	<b>-</b>	<b>-</b>
<b>5.00</b>	Divestiture Order	<b>-</b>	<b>-</b>
<b>7.01</b>	Appeals court over-rules	<b>+</b>	<b>+</b>
<b>11.02</b>	Settlement approved	<b>+</b>	<b>+</b>

# Predators?



Microsoft Corporation, 1978

# Gates overheard



I will crush  
Java like a  
bug

Microsoft Corporation, 1978

# Event Study in XM-Sirius

- Not useful
- Insufficient 'sector'
- Pure play problems, mixed interests
- No results obtained

# 3. Interested Party Positions

- Same logic as for Financial Event Studies
- Must be read carefully
- Complex stories possible
  - at high hourly rates
- Accepted methodology in practice
  - Interviews with executives
  - Comments filed by firms

# Rivals Views of Keen Interest

[I]f the joint venture really is likely to introduce economies or improve product quality, it is sure to make life harder for the domestic rivals of the participants who will then have to run correspondingly faster in order to stand still. Paradoxically, then and only then, when the venture is really beneficial, can those rivals be relied on to denounce the undertaking as “anticompetitive.”

William J. Baumol and Janusz A. Ordover  
*Use of Antitrust to Subvert Competition*

28 *Journal of Law & Economics* 2 (May 1985).

# Regulatory Filings in XM-Sirius

	Parties filing	Favor, Oppose	Implies Merger Efficiency?
Rivals	NAB, NPR	Oppose	Yes
Distributors	auto makers	Favor	Yes
Retail Radio Sales	Circuit City, RS	Favor	Yes

# Value of Information

- Accounts for market dynamics
- May be subject to more interpretation
- But may not...
  - the illusion of ssnip specificity
- Common sense to include such info
- Take it from a former regulator

# A Regulator's Education

- As chairman of the Federal Communications Commission in 1981, I was visited by a lobbyist for the broadcast industry. Over-the-air broadcasters vehemently opposed the FCC's authorization of Direct Broadcast Satellite television services, and the lobbyist quickly launched into his preamble: "We are all for competition, Mr. Chairman, but... "
- Meaning, "forget what I said up to the word 'but,' and now listen carefully..."

# Mark Fowler's Model

- In observing the broadcasters' intense negative reaction to the proposed merger of the two satellite radio companies, XM and SIRIUS, it struck me that little has changed in 26 years. Each year, the skies over Washington darken as the Lear jets bring industry lobbyists to the latest battlefield against competition and its offshoot -- mergers that enhance competition.
- Mark Fowler, *Competitive Electronics*, New York Sun (Sept. 5, 2007); <http://www.nysun.com/article/61892> (Footnotes omitted)

# Thank You.

# Regulatory Protectionism

The broadcasters challenged the FCC's deregulatory decision in court, claiming that space-based stations with national footprints violated the 1934 Act's requirement of local licensing, robbed free local television service of advertising revenue, and undercut programming directed at local interests. The United States Court of Appeals for the D.C. Circuit rejected these arguments... The court agreed that DBS promised many advances and expressly commended the Commission for "assuring that regulation... not impede new technologies that offer substantial public benefits." The court rejected the petitioners' localism arguments as "luddite" ...

Howard A. Shelanski, *The Bending Line Between Conventional "Broadcast" and Wireless "Carriage,"* 97 Columbia Law Review 1048 (May 1997), p. 1056 (footnotes omitted).

# Up the Ante

“DBS is particularly vulnerable to attack or take-over by foreign nations, insurgents, or others, as well as interruption during heavy rainfall and the spring and fall equinoxes.”

Ibid., p. 1064