Two-sided Internet Markets and the Need to Assess Both Upstream and Downstream Impacts: Lessons from Legacy Credit Card Platforms

A presentation at the 9th\textsuperscript{th} CAIDA/MIT Workshop on Internet Economics

University of California at San Diego

December 12, 2018

Rob Frieden, Pioneers Chair and Professor of Telecommunications and Law
Penn State University
rmf5@psu.edu

Web site: http://www.personal.psu.edu/faculty/r/m/rmf5/
Blog site: http://telefrieden.blogspot.com/
The Main Points

Failing to consider the impact of Internet platform operators on both sides of their markets generates false positives and negatives.

Digital intermediaries subject to excessive, or insufficient government oversight.

Emphasis on downstream impact, without full forensic investigation of upstream effects, often misses potential for substantial harm to competition and consumers, e.g., greater concerns about Google’s domination of search than online advertising.

Chicago School analysis emphasizes short term, consumer welfare gains without longer term, forensic assessment.

Preoccupation with downstream open access/network neutrality misses more dangerous harm potential by upstream players, e.g., election meddling.

Ohio v. American Express establishes a precedent supporting the need to assess market impacts on both sides of an intermediary’s operations. The Supreme Ct. used an unsophisticated cost/benefit analysis offsetting higher credit card fees to vendors w/ better travel services for consumers.

Smarter empirical examination needed, not necessarily more regulation and expanded jurisdiction.
Growing Dominance of Internet Platform Intermediaries

Internet Service Providers ("ISPs") operate as intermediaries in a double-sided market with retail, broadband subscribers downstream and other ISPs, content distributors and content creators upstream.

The Internet ecosystem supports powerful platform operators able to capture large market share by exploiting scale economies, network externalities and high switching costs/barriers to market entry.

Source: STL Partners, [http://www.stlpartners.com/articles/EB_six-key-telco-2-opportunities_Summary](http://www.stlpartners.com/articles/EB_six-key-telco-2-opportunities_Summary)
Legacy Platform Model—Credit Cards

A $100 CREDIT CARD PURCHASE

CARDHOLDER

$100

F PAYS ISSUER

E BILLS CARDHOLDER $100

MERCHANT

SUBMITS TRANSACTION DATA FOR AUTHORIZATION: $100

B MERCHANT PAID $97.25

D $97.25

VISA TAKES $0.13

ISSUER (CAPITAL ONE) KEEPS $2.20 IN INTERCHANGE FEE

$98.30

C ISSUER APPROVES TRANSACTION AND TRANSFERS MONEY

ACQUIRER (CHASE) KEEPS $0.19 FOR ACQUIRING FEE

Consumer Benefits from Two-Sided Markets

Digital broadband platform operators can quickly accrue scale economies and efficiency gains by attracting large numbers of users and spreading costs over a global base.

Broadband platforms also can generate positive networking externalities, because their overall value to subscribers increases as the number of participants grows.

When intermediaries reach a critical mass of popularity, non-users see the advantages in joining the bandwagon which further enhances the comparative attractiveness of a particular platform operator even when other, “multi-homing” options exist.

Competitive necessity, more efficient operations & willingness to underprice to acquire shelf-space and market share can result in lower priced products and services, because two sided-platform operators can calibrate how much to charge each side.

Downstream consumers often benefit from intermediary conferred subsidies, e.g., rebates on top of no-fee credit cards.

Free-rider opportunities remain plentiful.
Consumer Costs from Two-Sided Markets

Consumers may suffer the loss of competition when bricks and mortar, local vendors shut down as well as the broader harms from increased unemployment, reduced incomes and greater risk and uncertainty in the Gig Economy.

Consumers may have to pay more for goods and services when platform operators can more accurately assess their price sensitivity through data collection and analytics.

Intermediaries can use dynamic pricing to maximize profits; many consumers hate “surge pricing” regardless of its efficiency and offsetting price reductions in off-peak, low demand conditions.

Intermediaries defray the cost of subsidies to end users with expansive data analytics that generate new revenue streams, e.g., auctioning advertisement placements.

Consumers may not fully appreciate the value they permit intermediaries to capture from privacy intrusions through mining consumer behavior, including web site visits and searches, where subscribers use their handsets and the topics of their emails and posts.
Subscriber Data Value and Lock-in Cost Missing in the Cost/Benefit Analysis

The existence of other service options does not guarantee that market leaders face significant competition and the discipline imposed by multi-homing.

Multi-billion dollar unicorn valuations show several “winner take all” global and national industry segments.

Positive network externalities favor additional subscribers joining the bandwagon.

Massive subscriber populations generate big data that help the unicorns capture the lion’s share of advertising revenue making it possible to fine-tune their data analysis internally and by acquiring existing, or potential competitors.

Many subscribers do not read their service agreements, nor do many understand the scope and value of what they permit intermediaries to acquire, process and sell.

AT&T provided a window on such value when it offered reduced surveillance for a monthly $29 payment from wireline broadband subscribers. The company faced significant pushback, but this did not prompt less intrusive data mining, or discounts.
Insights from Ohio v. American Express Co.

Embracing recent academic literature on two-sided markets, the conservative majority of the Supreme Court endorsed assessing both sides to consider whether positive impacts on credit card users, e.g., rebates, face value Broadway tickets and enhanced travel services, offset a lower court’s finding that “anti-steering” contractual terms imposed a vertical restraint on trade.

Amex vendors agree not to steer consumers to use cards with lower “swipe fees.” A single-market analysis would detect harm to credit card competition with higher consumer costs: vendors “gagged” from nudging customers to use cards offering 2+% savings on most transactions.

A two-sided market analysis identifies offsetting consumer benefits (at least to Amex card users).

The Amex case creates a new precedent that can help lower courts avoid false positives, i.e., finding consumer and competitive harms that are offset by countervailing benefits.

The case also should support avoiding false negatives, where a one-side market analysis identifies consumer and competitive benefits, but ignores offsetting harms.

An assessment of both downstream and upstream impact would detect previously ignored harms to competition and consumers, e.g., privacy invasion, lack of transparency, unauthorized data mining and commodification, questionable price discrimination, election meddling, “fake news” reduced consumer surplus and welfare.
Conclusions and Recommendations

Consumers and governments may not fully understand the tradeoffs when digital, broadband intermediaries dominate many market segments including first and last mile content carriage, smartphone and computer operating systems and a variety of content and applications market segments.

Some Chicago School assumptions about how market work have become less certain, e.g., Amazon’s long term willingness to forego profits to acquire market share and more “shelf space.”

It has become increasingly clear that consumers have to contribute more value, than what they might infer from widespread promotion of “free” and subsidized access. If the Amex case provides a way to prevent a false positive, then arguably it also supports prevention of false negatives when upstream adverse impacts are assessed.

To achieve greater clarity on the potential for beneficial and harm impact, courts and government agencies should “follow the money” on both upstream and downstream market sides.
Conclusions and Recommendations (cont.)

Internet-mediated platforms often have impacts on both market sides as well having inter-relationships between actions of upstream ventures and downstream consumers.

Just as platform intermediary operation affects both downstream and upstream users, so too can market success in one market generate unrivaled opportunities to extend market power elsewhere, e.g., Facebook and Google dominate news dissemination without employing any reporters.

A more holistic examination of impacts, without placing a premium on short term consumer benefits, would generate a more accurate assessment of the mixed impacts generated by platform intermediaries.