Contracting and Vertical Control by a Dominant Platform

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Motivation

- Antitrust authorities are increasingly concerned by emergence of **dominant platforms** that operate in **both upstream and downstream markets**
- Consider the example of Amazon:
  - **Upstream.** Amazon sells access to its platform, essentially supplying producers with productive inputs
  - **Downstream.** Amazon competes with these producers on its own platform through sale of private label products

US House Majority Report (2020) "Amazon's dual role as an operator of its marketplace that hosts third-party sellers, and a seller in that same marketplace, creates an **inherent conflict of interest**."

Motivating questions

#1. How can platforms optimally leverage their upstream market interactions to control who they compete with downstream?

#2. What are the implications for downstream consumers?

This paper …

#1. …introduces a tractable mechanism design framework for studying dominant platforms
- Platform sells productive input **upstream** *and* competes with producers **downstream**
- Platform faces tradeoff between **upstream** and **downstream** profits

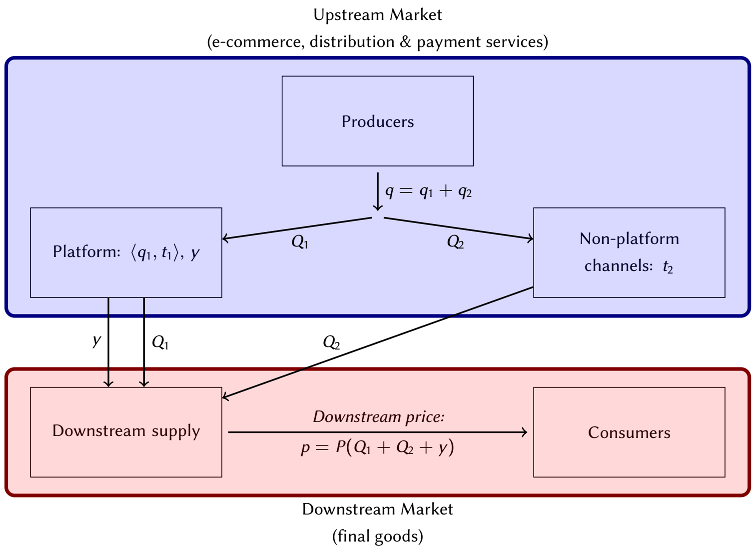
#2. …characterizes the optimal menu of contracts offered by the platform in the upstream market

Key results

#1. Platform's tradeoff generally resolves **in consumers' favor** and harms producers

#2. However, when platform faces competition in upstream market, it may have an incentive to engage in harmful practices such as horizontal mergers and exclusive dealing

Illustration of model



Summary of results

- Producers have **private information** concerning their convex production costs; platform's optimal menu of upstream contracts $\langle q_1^*, t_1^* \rangle$ exhibits **non-linear pricing** involving **quantity discounts**
- Consumers benefit and producers are harmed as platform becomes more efficient at producing in-house
  - A **double marginalization** effect arises due to incomplete information, not restrictions on contracting space
  - Bans on downstream platform production and platform divestiture generally harm consumers
- Platform can profitably expand its upstream market power by engaging in **exclusive dealing**
  - In an incomplete information environment, platform can profitably lower information rents paid to producers by restricting their access to non-platform distribution channels
- Platform can also profitably expand its market power by engaging in "killer" **horizontal acquisitions** in the upstream market
- Exclusive dealing and horizontal acquisitions harm both consumers and producers