Market Definition and Incentives for Foreclosure

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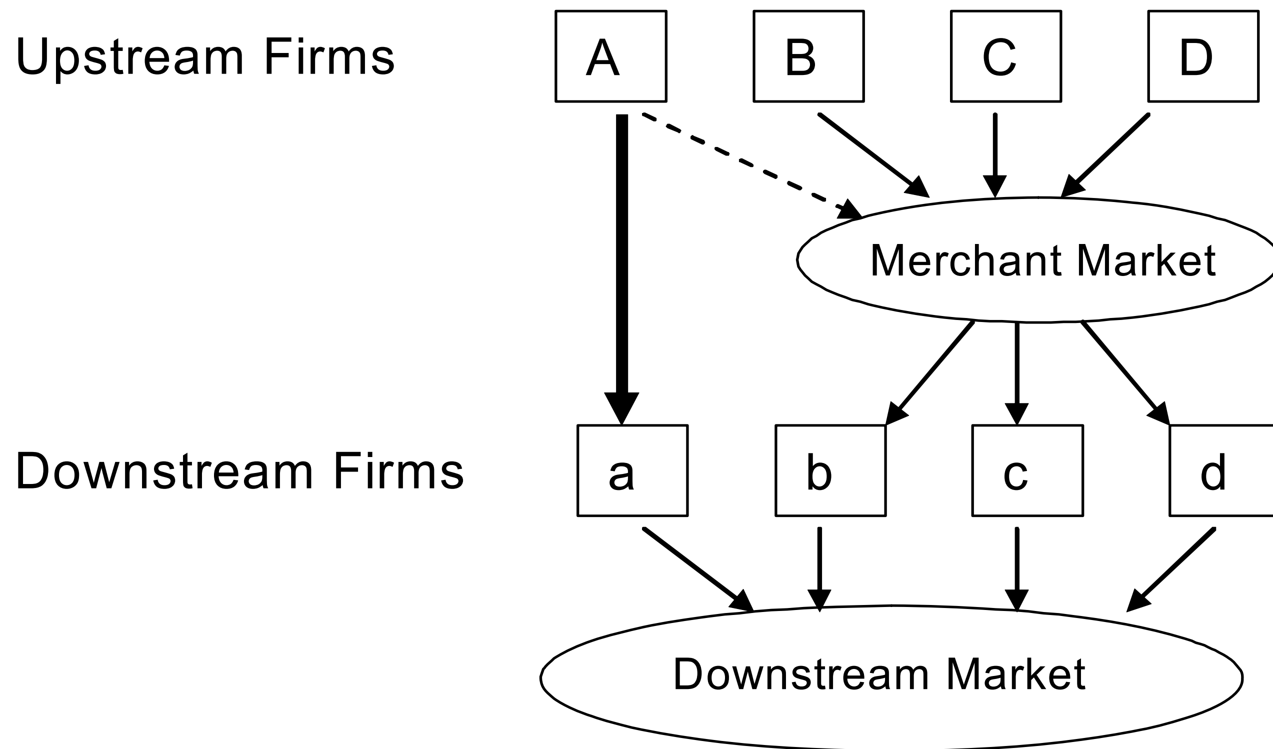
Roadmap

- Conceptual framework: Inderst/Valletti 2006/07
  - Two-stage market (Cournot plus conjectural variations)
  - Presence of vertically integrated firm
- Steps:
  - Application of framework
  - Other case-related issues

Framework



Steps in Formal Analysis

- Key: Derived demand
  - Retail competition → Aggregate to obtain derived demand
  - VI firm‘s price/quantity is part of retail equilibrium

- Upstream-/Merchant Market
  → “Direct vs. Indirect Constraints”

$$L = \frac{1}{M}\frac{1}{\varepsilon}(1+\lambda)$$

Elasticity of Derived Demand

- Affected by:
  - Elasticity of retail demand (+)
  - Intensity of downstream competition (+) (N, “conduct”)
  - Downstream product homogeneity (+)

Market Definition ("Captive Sales")

- Legal side?
- Caveat 1: High market share of VI firm could mean
  - strong indirect constraints;
  - but also weak direct constraints.
- Caveat 2: Risk of "double counting"

The Use of Readily Available Information

- Decomposition of upstream elasticity: $\varepsilon^u = \varepsilon^d \delta \tau \kappa \upsilon$
  - Dilution factor, $\delta = p^u/p^d$
  - Price pass-through rate, $\tau = dp^d/dp^u$
  - κ is ratio of total quantity with captive sales and total quantity without captive sales
  - Quantity (inverse) pass-through $\upsilon = dq^u/dq^d$
- With no VI firm, simplifies to $\varepsilon^u = \varepsilon^d \delta \tau$

Caveats

- Caution: All “ingredients” of this formula are endogenous.
  - Implied correlation may go into “opposite” direction than formula would (naively) suggest!
  - Depends (again) on whether variation affects retail or wholesale market.
- Example:
  - Small dilution -> small elasticity -> high mark-up (and SMP)?
    → No: Small dilution may be precisely due to lack of SMP!

„Participation“ of VI Firm: Analysis

- (Structural) Analysis
  - Forward integrated firm faces opportunity costs from selling on the merchant market

$$d = (1+\lambda^u)(p^d - c^u - c^d)$$

  - Inadequate to treat as constant (akin to higher constant marginal costs)

Incentives to Participate?

- Again caveat on the use of "readily available" information on *endogenous* parameters
  → DS/US market share, margins etc.

- Take change of "primitives"
  → In upstream competition. Incentives higher if
  1. Fewer competitors
     (provided pass-through is not above one)
  2. More "competitive conduct" (= own sales replace rivals' sales, without much affecting downstream market)

  → How informative is, e.g., upstream margin?

Side Remarks

- Newly gained “financial stability”:
  - makes it more likely that firm “exploits the degree of market power it enjoyed”
    → Conglomerate merger doctrine?
- Countervailing Power
  - Seems to only consider buyers’ outside options.
  - Already taken into account through elasticity of demand? What about suppliers’ outside option?
  - Note: In Inderst/Valletti more downstream competition increases indirect constraints (cf. opposite argument based on countervailing power in Schneider/Legrand)

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