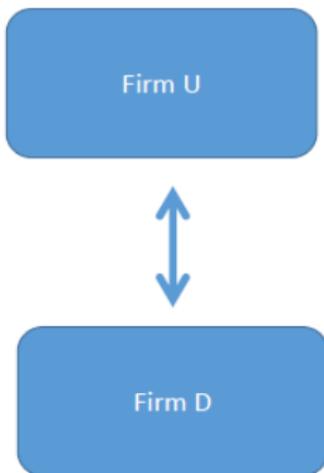# Vertical Relations (1)

6 octobre 2025

- Vertical relations : relations between firms that belong to the same vertical chain
- Many vertical externalities : promotional effort, input qualities...
- Critical issue : ensure vertical coordination
- For that purpose : vertical contract includes many provisions on :
  - revenue sharing between parties
  - constraints of firms' behaviour

# Introduction : vertical restraints

- Revenue sharing : Non linear tariff
- Firms' behaviour :
  - Resale Price Maintenance
  - Exclusive territories
  - Exclusive dealings
  - Quantity fixing
- Economic issues : are these provisions pro/anti-competitive ?

- Competition authorities' view of vertical restraints :
  - Agreements between non competitors : more lenient than for horizontal agreements
  - Agreements on prices are prohibited (RPM) except in the US
  - Other provisions are allowed except exclusionary provisions imposed by dominant firms : case by case examination
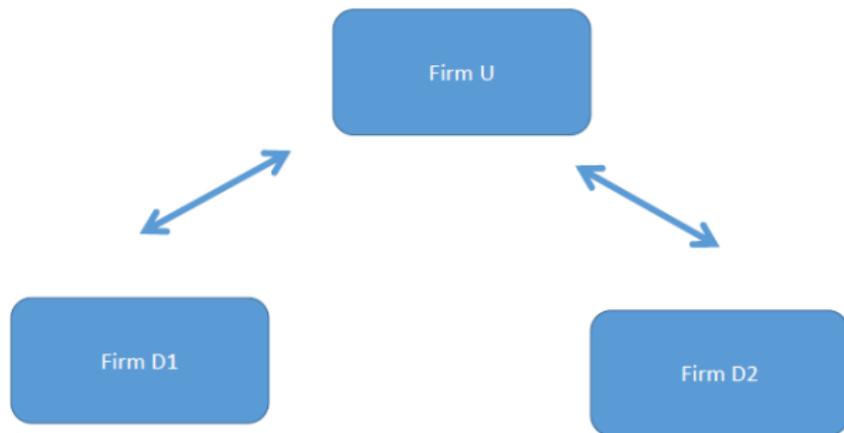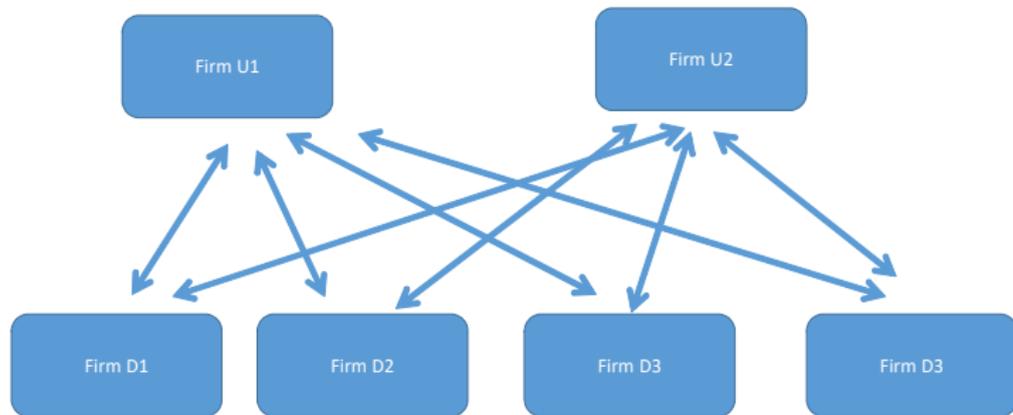
Vertical coordination

Vertical coordination with intra-brand competition

- Do Vertical restraints (exclusive dealing) exclude one retailer ?
- Do Vertical restraints (exclusive territories) restrain competition dowstream ? (distribution of drugs, Pay-TV with geoblocking...)
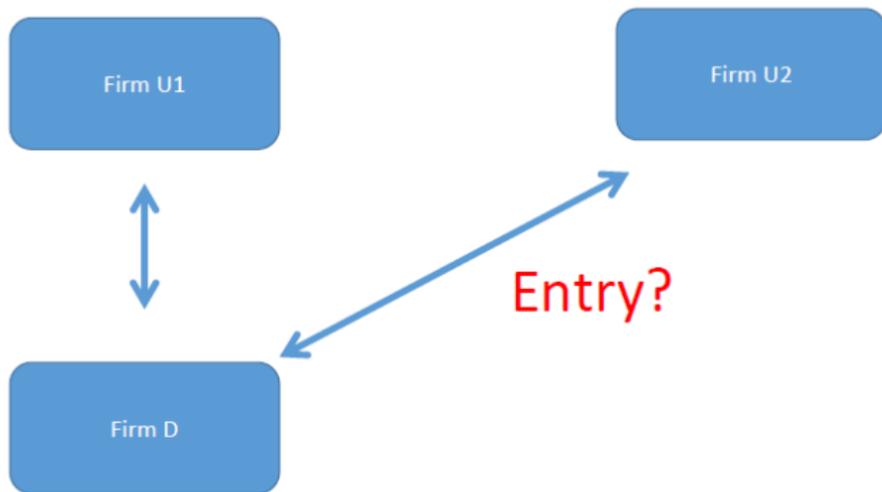
# Introduction : main configurations

- Vertical coordination with inter-brand competition.
- Do Vertical restraints dampen competition ?
  - exclusive dealing to exclude some distributors
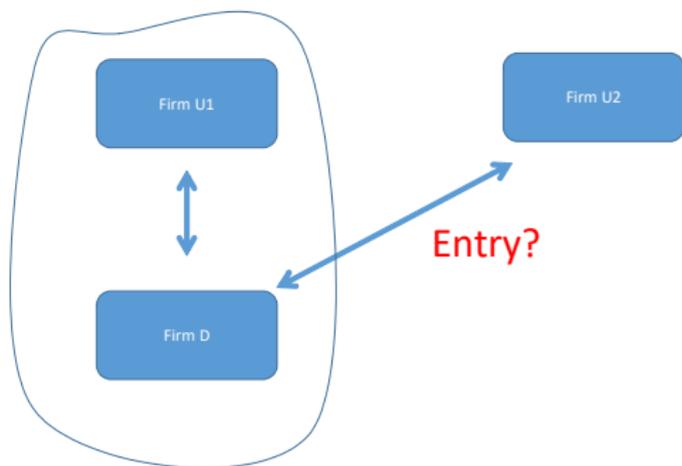  - exclusive territorries

# Introduction : main configurations

- Vertical coordination with interbrand competition
- Do Vertical Restraints deter entry (exclusive dealing contract between Apple and Qualcomm for chipsets)

- Vertical coordination with interbrand competition and with vertical integration
- Do Vertical Restraints deter entry (Google Shopping)

1. Intra-brand competition
2. Interbrand competition
   1. Short run (no entry)
   2. Long-run (entry)

- BP chapter 17
- *"Economics of vertical restraints", Handbook of Antitrust, Rey and Vergé, 2006, (RV)
- *Competition Policy*, Motta (chapter 6), (M)
- *"Exclusive dealing" (sections I to III), Bernheim and Whinston, 1998, *JPE, (*BW)

- Four main provisions studied : two-part tariff, RPM, exclusive territories and exclusive contracts

- Two monopolies :
    - Producer $(M)$ : unit cost $c$
    - Distributor $(D)$ : demand $D(p)$. No cost
- Vertical contract : wholesale price $w$
- Firm $D$ : $p^* = p^m(\underset{+}{w}) > w$
- Firm $M$ : $Max \ (w - c)D(p^m(w))$. $w^* > c$
- Double marginalization : $w^* > c$ and $p^m > w^*$

- Vertical integration : $Max(p - c)D(p)$
- Solution : $p^m(c) < p^m(w)$
  - Higher profit for the vertical structure
  - Lower price for consumers
- Vertical externality :
  - higher $w$ has a negative externality on $D$
  - higher $p$ has a negative externality on $M$

- Vertical contract : $F, w$
- Firm $M$ sets $w = c$ to maximize the vertical structure profit
- The fixed fee is set to share the maximized profit.
- The contract is better for all parties : both firms and consumers
- Other possible contract : $RPM$ with $p = p^m(c)$ and $w$ to share the profit

Idea : retailer services have a public good dimension. Risk of under provision

# Intra-brand competition : promotional effort
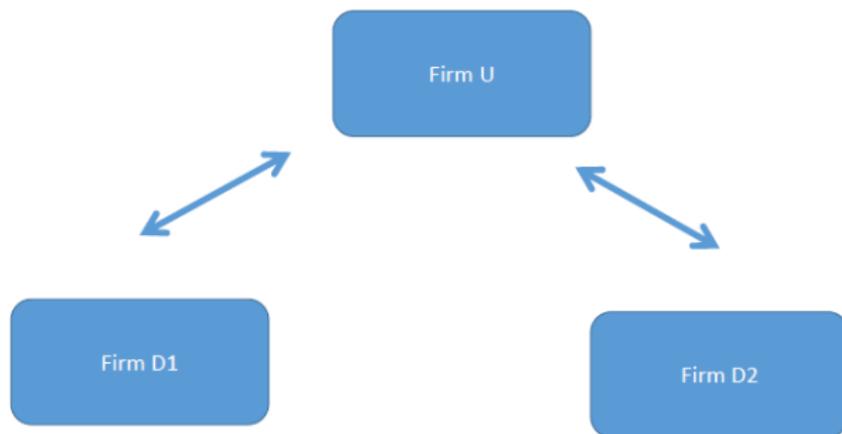
- First work : Mathewson and Winter, 1994, *AER*
- The vertical structure :
    - Monopoly upstream (cost $c$)
    - Duopoly downstream : total demand : $D(p, e) = v + e - p$
- Promotional effort (retail services) :
    - public good : $e = e_1 + e_2$
    - cost $c(e) = e^2$
- Effort $e_i$ non contractible

- Benchmark : vertical integration (no externality).
- Determine : $e^{VI}$ and $p^{VI}$
- Vertical separation with linear contract : $e^{VS}$ and $p^{VS}$?
- The Game :
    1. $U$ proposes contracts $(w_i; F_i)$ to each $D_i$ (public)
    2. $D_i$ chooses $e_i$
    3. Bertrand competition between $D_i$

- Which VR are required to reproduce VI ?
- Exclusive territories with Non linear tariff ?
- RPM with Non linear tariff ?

- Vertical restraints improve vertical coordination
- Provisions may be substitutes
- Does competition between vertical chains dampened by vertical restraints ?

## Inter-brand competition

- Contractual provisions may soften competition between vertical chains (brands)
  - in the sort run : make competition softer
  - in the long run : exclusion of more efficient competitors
- We consider here : are exclusive contracts anticompetitive ?

Does one producer impose ED to avoid competition ?
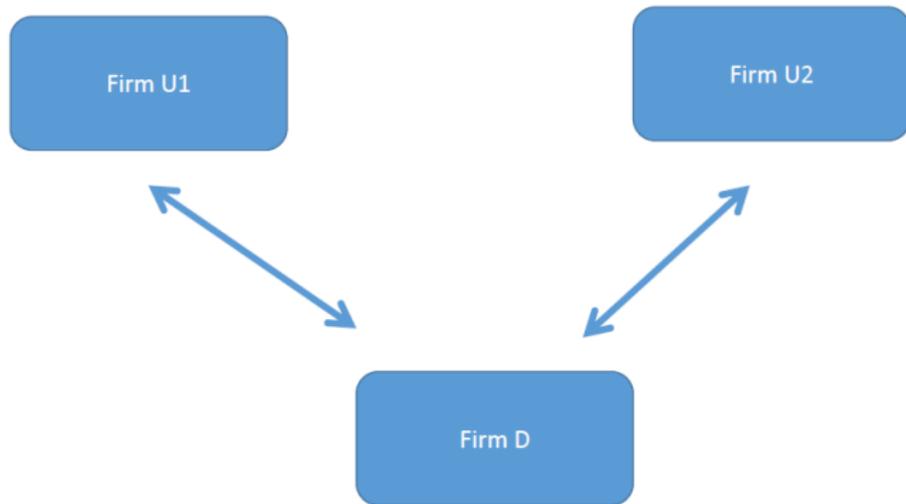
# Inter-brand competition : exclusive dealing

- Argument developped by Bernheim and Whinston, 1998
- Two producers 1 and 2 and one retailer (common agency, $D$)
- Retailer : utility : $u(q_1, q_1)$
- Producer $i$ : production cost $c$ and tariff : $T(q_i) = p_i q_i + F_i$
- Public contracts

- Full integration : $Max\ u(q_1, q_2) - cq_1 - cq_2$
- We assume that $q_i^{**} > 0$
- Full profit : $\Pi^{**}$
- Can producers share $\Pi^{**}$?

The game :

1. Upstream firms propose contracts
2. Firm $D$ accepts a contract
3. Firm $D$ sells the products

We consider exclusive contracts and non exclusive contracts