



University of Ioannina

Konstantinos **Charistos**



ATHENS UNIVERSITY
OF ECONOMICS
AND BUSINESS

Ioannis **Pinopoulos**



UNIVERSITY
OF CRETE

Panagiotis **Skartados**

Right to Inspect *Revised*



HELLENIC
COMPETITION
COMMISSION

Workshop on Overlapping Ownership

Athens, July 21st, 2023

The Right to Inspect

§ 220 (b) Delaware General Corporation Law:

*“Any stockholder, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have **the right** during the usual hours for business **to inspect** for any **proper purpose**, and to make copies and extracts from:*

(1) The corporation’s stock ledger, a list of its stockholders, and its other books and records; and

(2) A subsidiary’s books and records, [...].” –This includes Board minutes, emails, list of telephone calls, etc.-

- In the European Union there are similar inspection rights, like the ones set by:

- EU Directive on Non-Financial Reporting (2014/95/EU)

- EU Directive on the Encouragement of Shareholder Engagement (2014/95/EU) (amending Directive 2007/36/EC).

The Right to Inspect

- However, this Right is not inherent.
- The firm may plausibly object to such an Inspection on the ground of competition and confidentiality.
- After all, what is a **proper purpose**?

§ 220 (c) Delaware General Corporation Law:

“If the corporation, or an officer or agent thereof, refuses to permit an inspection sought by a stockholder or attorney, or other agent acting for the stockholder pursuant to subsection (b) of this section or does not reply to the demand within 5 business days after the demand has been made, the stockholder may apply to the Court of Chancery for an order to compel such inspection. The Court of Chancery is hereby vested with exclusive jurisdiction to determine whether or not the person seeking inspection is entitled to the inspection sought.”

The Right to Inspect

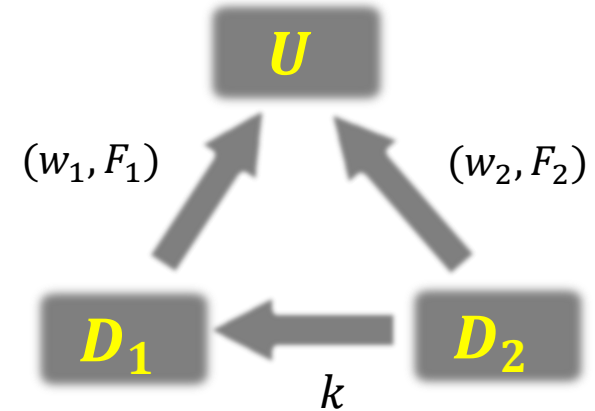
- Proper purpose could be for example (Palmer, 2015):
 - The firm is mismanaged, which can be shown by a divergence between projections and actual results.
 - A sworn testimony from an “expert” identifying “red flags” in the firm’s financial statements.
 - Socially irresponsible business actions.
 - Merge and acquisition that might benefit or harm some stockholders.
- Thomas, R. S., Giudici, P., & Varotttil, U. (2023). *Research Handbook on Shareholder Inspection Rights: A Comparative Perspective*. Edward Elgar Publishing.
- Examples of firms in the same industry engaging in a section 220 case in Delaware.
- High River Ltd. Partnership versus Occidental Petroleum Corporation (2019). The Court denied the plaintiff’s inspection demand.
- NVIDIA Corporation versus Westmoreland County Employees’ Retirement Fund (2022). NVIDIA argued that the Fund also had stocks in its rival AMD, acting as an agent of AMD and not as a bona fide stockholder of NVIDIA. The Court granted the plaintiff’s inspection demand.

Our Argument

- We argue that when Court decides on a “*Right to Inspect*” case, it should consider the economic impact on competition and welfare.
- When both the plaintiff and the defendant are:
 - competing in the same horizontal market,
 - goods are strategic substitutes (Cournot),
 - products are (horizontally) differentiated, and
 - there exists a common supplier with relatively medium-to-low bargaining power
- Then, the “*Right to Inspect*” may increase welfare and competition in a way we will explain later on.

Market Structure

- To defend our argument, consider the following model.
- One common upstream firm U supplies a crucial input to two downstream firms D_1 and D_2 .
- D -firms use this crucial input in a “1 – 1” technology to produce their final (horizontally differentiated) product, which they sell to a continuum of consumers.
- U has a constant marginal cost $c > 0$.
- D -firms’ only cost is the one induced by the vertical two-part tariff contract with U .
- They pay a supply-independent fixed fee F_i plus a wholesale price w_i per unit purchased.
- D_1 is a minority shareholder of D_2 , $0 < k < 0.5$.
- Consumers prefer “more to less” and they “love variety”.



Demand

$$p_i = a - q_i - \gamma \cdot q_j$$

Gross Profits

$$\pi_U = (w_i - c) \cdot q_i + (w_j - c)q_j$$

$$\pi_{D2} = (1 - k) \cdot (p_2 - w_2) \cdot q_2$$

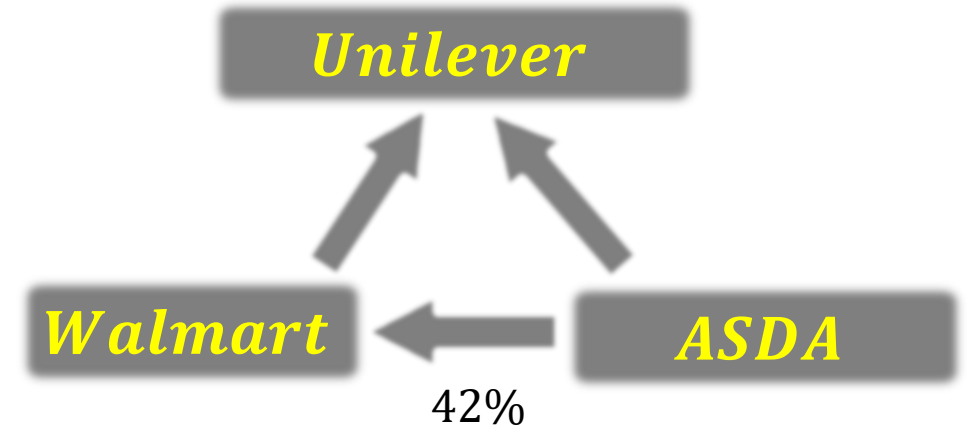
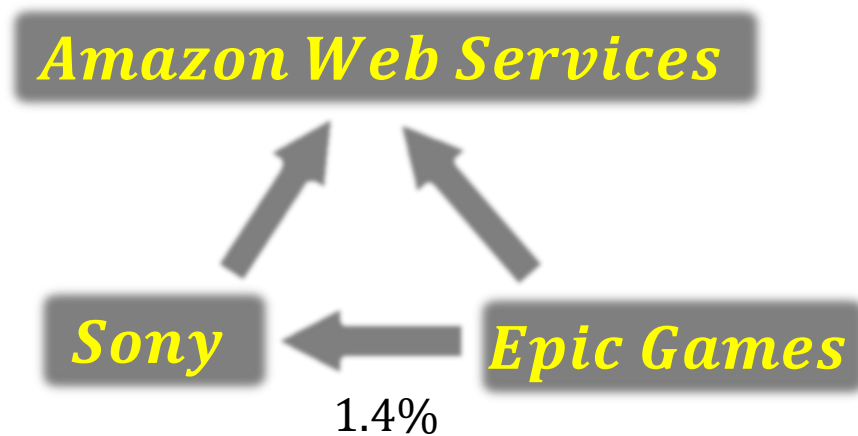
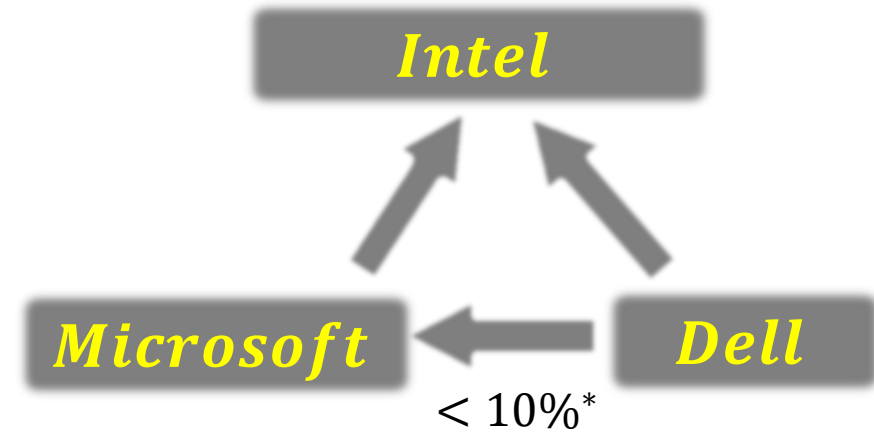
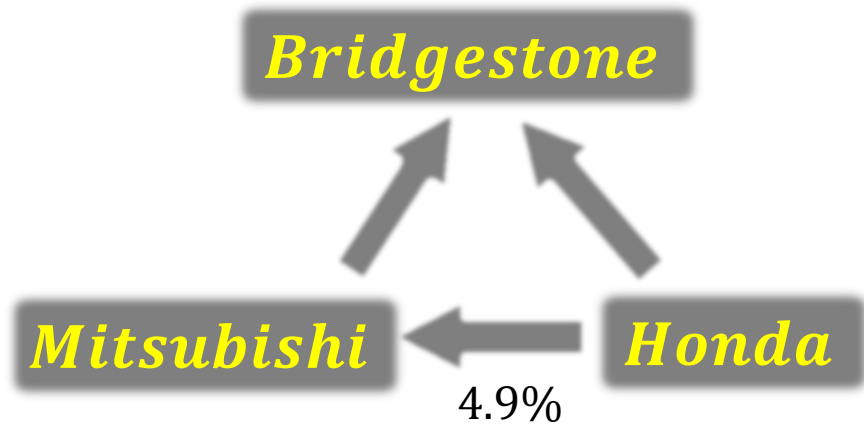
$$\pi_{D1} = (p_1 - w_1) \cdot q_1 + k \cdot (p_2 - w_2) \cdot q_2$$

Net Profits

$$\pi_U + F_i + F_j$$

$$\pi_{Di} - F_i$$

Real World Examples of our Model Structure



Timing

- **Stage 1:** Agents representing the upstream supplier U make secret, separate, and simultaneous negotiations with each downstream firm $D_i, i = 1, 2$.
- *The left hand doesn't know what the right hand is doing (Smith and Thanassoulis, 2012).*
- Ideal for *fast-moving consumer goods*.
- **Stage 2:** D_1 exerts its “*Right to Inspect*” to disclose D_2 's vertical contract terms, which may trigger a re-negotiation with U .
- Renegotiation occurs only if it is in the mutual interest of both U and D_1 , keeping D_2 's contract terms constant
- **Stage 3:** D-firms make their output decision.

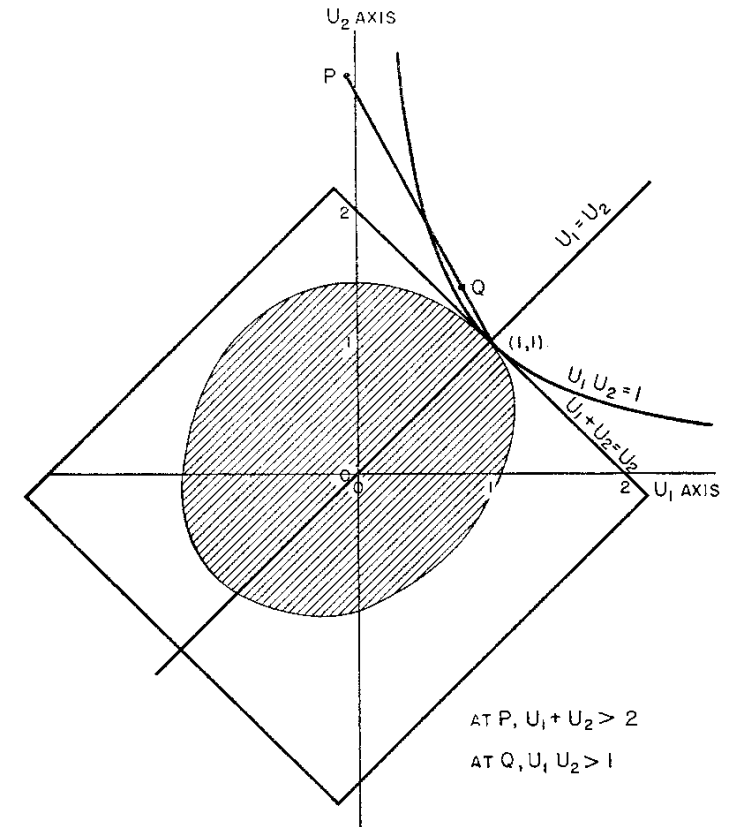
$$\left(\pi_U(w_i, w_j, \tilde{q}_j) + F_i + F_j - d_i(w_j, \tilde{q}_j) \right)^\beta \cdot \left(\pi_{Di}(w_i, \tilde{q}_j; k) - F_i \right)^{1-\beta}$$

$$\left(\pi_U(w_i^d, w_j^*) + F_i^d + F_j^* - d_i(w_i^d, w_j^*) \right)^\beta \cdot \left(\pi_{Di}(w_i^d, w_j^*; k) - F_i^* \right)^{1-\beta}$$

$$\max_{q_i} \pi_{Di}(q_i, q_j^*; k)$$

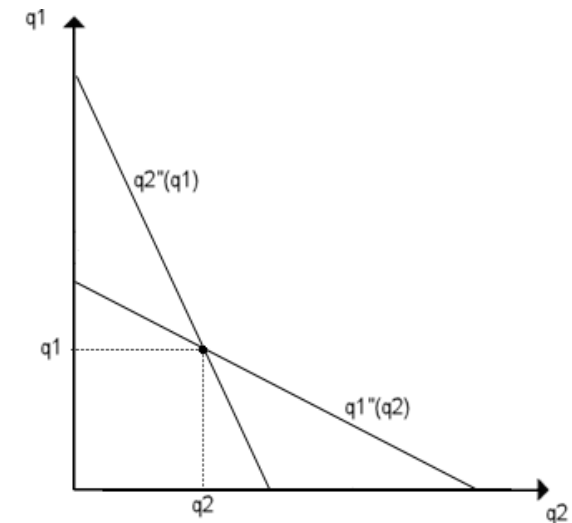
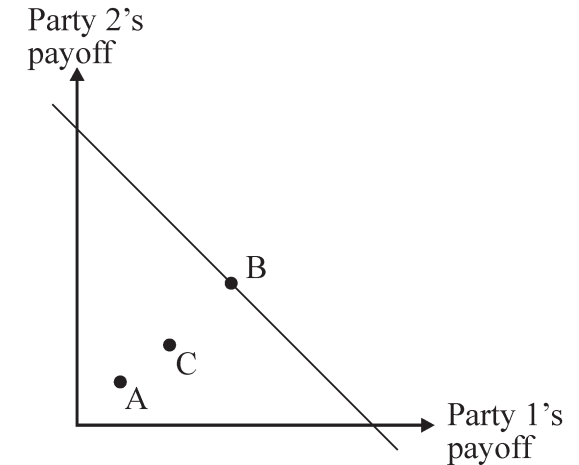
Solution Concept

- To solve this dynamic game, we use the *subgame perfect Nash equilibrium over pure strategies*.
- In particular, to solve **Stage 1** we employ the “*Nash-in-Nash*” solution concept (Collard-Wexler et al., 2019).
- “Nash-in-Nash”: Nash equilibrium in Nash bargains.
- Our bargaining outcome is the best response to the outcome of the rival bargains.



Solution Concept

- To solve **Stage 2**, we employ the “*renegotiation-proofness*” concept (Fudenberg & Tirole, 1988).
- The renegotiation is triggered due to changed circumstances (disclosure).
- Both players should agree to replace Stage 1’s contract with a Pareto optimal (given the rival contract).
- Renegotiation is considered costless.
- To solve **Stage 3**, we employ the standard Cournot-Nash equilibrium.



Equilibrium Results; Rejecting the Right

- Say that D_2 rejects D_1 's "Right to Inspect".
- Stage 1's equilibrium results sustain in equilibrium.
- We follow O'Brien & Shaffer's (1992) two-step maximization procedure.
- Secret two-part tariffs lead to marginal cost pricing (Hart & Tirole, 1988).
- U uses F_i to expropriate part of D_i 's profits according to its bargaining power $0 < \beta < 1$.
- An increase in minority shareholding k harms welfare and softens competition.

$$\left(\pi_U(w_i, w_j, \tilde{q}_j) + F_i + F_j - d_i(w_j, \tilde{q}_j) \right)^\beta \cdot \left(\pi_{Di}(w_i, \tilde{q}_j; k) - F_i \right)^{1-\beta}$$

$$w_1^* = w_2^* = c$$

$$F_1^* = \beta \cdot \pi_{D1}, \quad F_2^* = \frac{\beta}{1-k} \cdot \pi_{D2}$$

$$\frac{\partial Q}{\partial k} < 0, \quad \frac{\partial CS}{\partial k} < 0, \quad \frac{\partial PS}{\partial k} > 0, \quad \frac{\partial TW}{\partial k} < 0$$

Equilibrium Results; Accepting the Right

- Now, say that D_2 accepts D_1 's "Right to Inspect".
- D_2 's contract is disclosed $w_2^* = c, F_2^* = \frac{\beta}{1-k} \cdot \pi_{D2}$.
- D_1 and U secretly investigate a mutually profitable re-negotiation of the initial contract, given D_2 's contract.
- The same negative effect on competition and welfare holds.

$$w_1^d > c$$

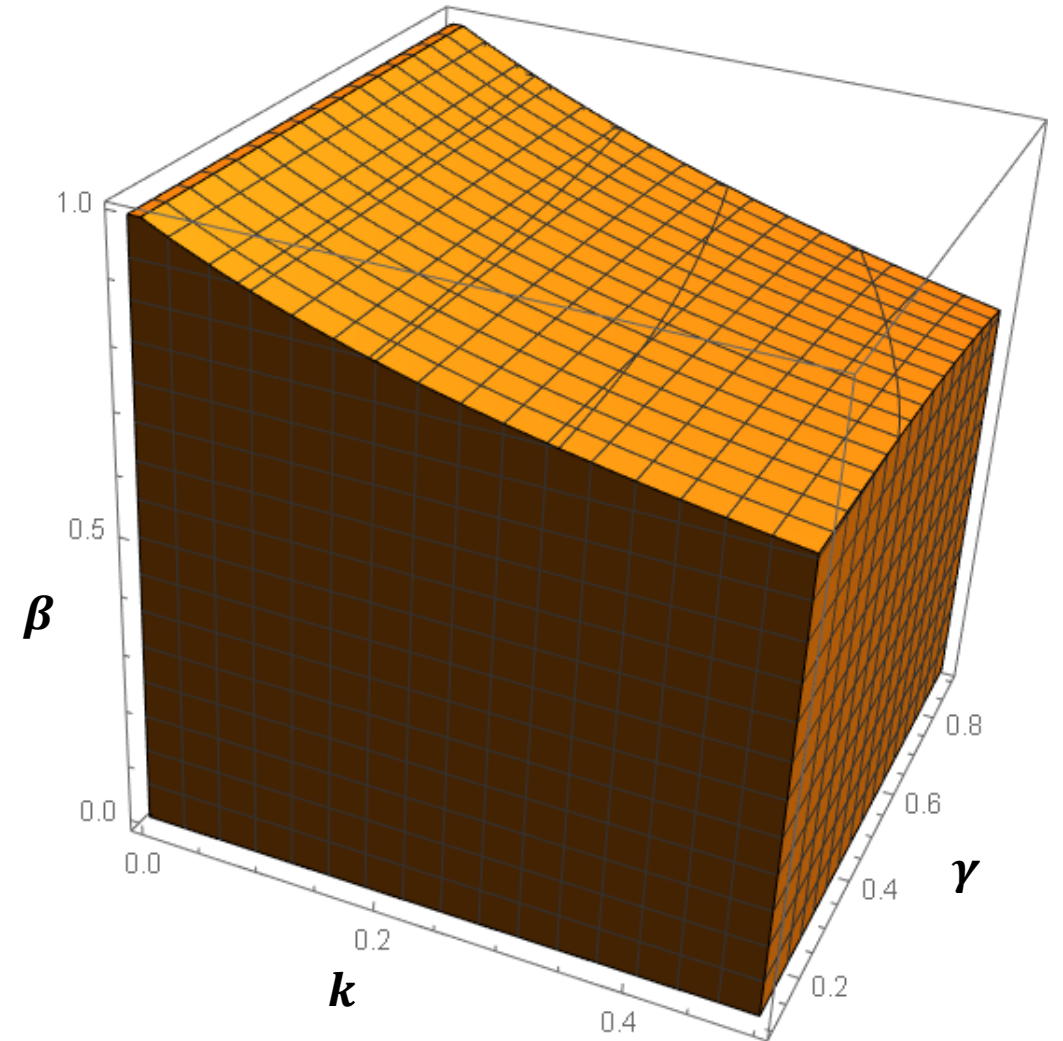
$$F_1^d > \beta \cdot \pi_{D1}$$

$$\frac{\partial Q^d}{\partial k} < 0, \frac{\partial CS^d}{\partial k} < 0, \frac{\partial PS^d}{\partial k} > 0, \frac{\partial TW^d}{\partial k} < 0$$

Equilibrium Results; To Renegotiate or Not?

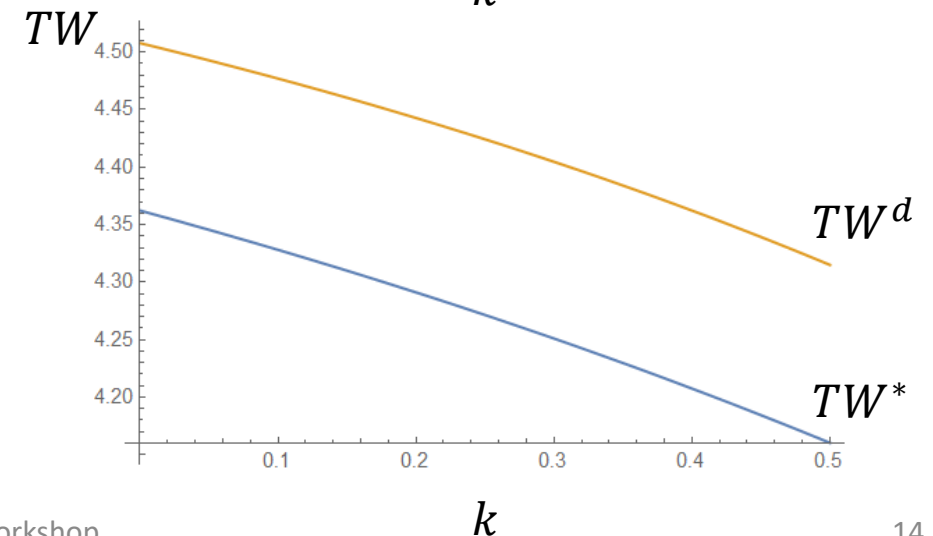
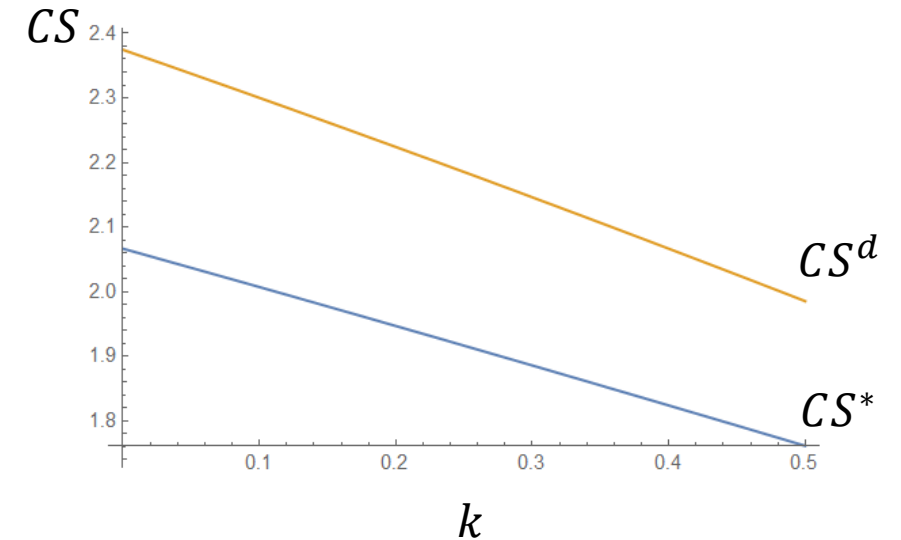
- U is *always* better off renegotiating $(w_1, F_1) \uparrow$.
- D_1 wishes to renegotiate only when U is not too strong and products are not very differentiated, $\beta < \beta_{crit}(\gamma, k)$.
- The 3D Plot resembles the area where the net profits of both D_1 and U are higher under renegotiation.

$$\frac{\pi_{D_1}^d - F_1^d}{\pi_{D_1}^* - F_1^*} > 1 \quad \text{AND} \quad \frac{\pi_U^d + F_1^d + F_2^*}{\pi_U^* + F_1^* + F_2^*} > 1$$



Equilibrium Results; Effects on Welfare

- But...
- Contract renegotiation leads to lower retail prices and higher aggregate output, consumer surplus, and total welfare.
- How can this be possible?



Intuition

- D_1 originally used its minority shareholdings in D_2 to reach the monopoly outcome, having $q_1^* < q_2^*$.
- Note that for $k > 0.5$ we do get the monopoly outcome (joint profit maximization).
- The Right to Inspect offers D_1 a *better mechanism* to increase its profits.
- Since D_2 's contract is carved in stone (w_2^*, F_2^*) , D_1 could become a monopolist *over the residual demand*.
- D_1 's scope is now different: instead of reducing its output to increase its profits, D_1 chooses to increase its output (even above q_2) to expand the residual market in which it is a monopolist.

Extensions; Price Competition Downstream

- To check the robustness of our results, we consider the case of price competition downstream (a la Bertrand).
- It turns out that D_1 never has incentives to re-negotiate.
- An increase in w triggers an increase in both p 's, shrinking the market.
- Therefore, the “*Right to Inspect*” is not much effective as a collusive device as minority holdings.
- We argue that strategic substitutability or str. Complementarity (in the sense of Bulow et al., 1985) plays a crucial role in the effects of the Right to Inspect in welfare and competition.

Future steps

- Consider how and why market expansion could affect the result (Shubik-Levitan demand system?).
- Consider how and why the curvature of the demand affects the pass-through rate of wholesale prices (Fabinger and Weyl, 2013; Lopez and Vives, 2019).
- Add a third downstream competitor to increase product market competition and decrease the collusive horizontal effect of overlapping ownership.
- Consider other vertical contract types (linear tariffs?) and upstream market structures (cvc's?).