Abuse of Dominance Economics of Exclusive Dealing Chapter

I. Introduction

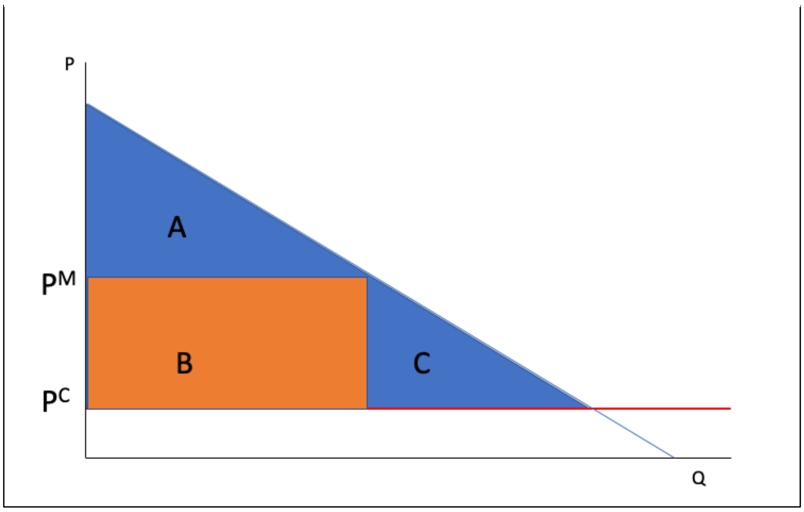
Exclusive Dealing is a commercial arrangement whereby the upstream seller's goods are sold to a distributor or retailer under the condition that the distributor or retailer does not sell a rival's products. We present the economic theory behind Exclusive Dealing, and the refinements to overcome the Chicago Critique that argued anti-competitive exclusive dealing is unlikely.

We then discuss major cases that formed the jurisprudence in the EU and US jurisdictions, assessing their similarities and differences in dealing with the conduct. We conclude with an assessment of either jurisprudence and a recommendation of how to investigate this conduct for the Philippines.

II. Economics of Exclusive Dealing

We first present the basic model that features the anti-competitive effects of exclusive dealing. The basic argument can be presented with a monopolist, and a single buyer. The buyer agrees to purchase exclusively from the monopolist. An exclusivity contract would exclude a more efficient potential competitor because that potential competitor would not be able to sell to the exclusive buyer. The potential competitor would not enter. This simple view was criticized by Posner (1976), and Bork (1978) would present a counter argument in that the manufacturer would have to compensate the buyer for exclusivity and this would not be profitable.

Figure 1: Chicago Critique



We illustrate this analysis in **Figure 1.**[1] Consider a monopolist manufacturer selling to one customer, and that manufacturer offers her an exclusive purchasing contract. There is a possible entrant, and when he enters, the price will fall from P_m to P_C. The monopolist must compensate the customer for accepting an exclusivity contract, of the area of B+C, the lost consumer surplus from preventing entry for the buyer. The monopolist is only able to pay B, which is the entirety of the monopolist profits, which is not enough to fully compensate the buyer. Thus, a pure exclusionary motive for exclusivity cannot be true. There must also be an efficiency rationale for both parties to accept this contract.

A. Common Pro-Competitive Theories

There are many theories that would offer efficiency arguments as the primary reason why exclusive dealing agreements occur. A leading case highlighted in the literature is how exclusive dealing would help maintain or incentivize relationship specific investments across the supply chain. (Besanko & Perry, 1993; Tirole, 1988) The EU DG Competition's Working Paper (2005) argues similarly, in par 138:

> *A supplier may use single branding obligations and rebate systems for efficiency enhancing reasons and for anti-competitive reasons and they may have efficiency enhancing effects and anti-competitive effects. An efficiency may for instance be obtained in case the supplier, in order to supply a particular customer, makes a relationship specific investment. In order to be able to earn back the investment, the supplier may require that the buyer purchases a certain minimum amount of the product, which may be ensured by a single branding obligation or a rebate system.*

Consider a case where a manufacturer can invest in the relationship with a retailer to increase the quality of the product and the retail service. There are many examples of such

[1] From (Fumagalli, Motta, & Calcagno, 2018)

investments: sales training, financing, technical training, information about potential customers, and so on. These investments are also vulnerable to opportunistic behavior and have external effects to other retailers or suppliers. Generally, external effects will lead to either under-provision or over-provision of these services. If the external effect is to raise the value of retail services for other suppliers, the manufacturer would want to institute an exclusive dealing arrangement to limit this investment from leaking out. If the external effect is to decrease the value of retail services for other suppliers from a retailer, the the supplier would want to have an exclusivity agreement so as to encourage the retailer to invest.

There are two factors which are important to assure pro-competitive effects from exclusivity contracts. The first is it must be *relationship specific*, and the second is that the service is *non-contractible*. (Fumagalli, Motta, & Calcagno, 2018) Both factors are necessary to ensure the necessity of exclusive dealing[2]. The sign of the external effect is also important to rationalize the pro-competitive argument.

B. Anti-Competitive Exclusion

The Chicago critique featured in **Figure 1** relies on a few assumptions. First, it requires strong upstream competition, where upon entry, prices are driven to marginal cost. Since the entrant is assumed to be more efficient, then only the entrant would have a positive markup. Notice that **Figure 1's** area C gets smaller as the post-entry price gets larger. That is, if we have weak upstream competition, as upstream competition gets weaker, sharing monopoly profits with the buyer in the form of a non-linear tariff in an exclusive dealing arrangement would be become more profitable.

Other important assumptions are a single buyer and scale economies. These two assumption underpin the modern theories of exclusion via exclusivity.[3] The typical case is that there are many buyers (relative to sellers). Due to scale economies, an entrant would require enough buyers to survive or to be cost competitive. Other buyers would find that the entrant is not a viable candidate, and would then sign an exclusivity agreement with the incumbent ((Rassmusen, Ramseyer, & Wiley, 1991) and (Segal & Whinston, 2000)). The key assumption is that it requires more than one buyer to guarantee the entrant will have the scale to enter.[4]

If the incumbent has other advantages, the likelihood of exclusion will only grow. For example, is natural to assume that there are coordination externalities among the buyers. The implication is that the incumbent would take advantage of this miscommunication and scale economies. Suppose some buyers would choose to sign up for exclusivity for a small payment, the incentive to sign for the remaining buyers rises when the entrant's costs would fall **if all** of them signed the exclusivity contract. But this is an externality which is not

[2] The necessity of a vertical restraint is a key part in justifying the practice despite any anti-competitive effects. Generally, see (EU Commission, 2010).
[3] See (Fumagalli, Motta, & Calcagno, 2018) for a modern survey.
[4] Same arguments for expansion.

perceived at the individual consumer level. From her perspective, her own demand is not sufficient to inspire entry. The equilibrium is that all would sign an exclusivity agreement.[5]

This situation is aggravated when the incumbent is a first mover, and is able to sequentially contract with the buyers, and can offer different contract terms to different buyers where it would give more surplus to first exclusive buyer. It is also possible for buyers to be asymmetric in size and capacity. In this case, asymmetry will lead the incumbent to focus its conduct on larger buyers, and these would be enough to foreclose costlessly.[6]

From the perspective of an individual buyer, there is an externality where each buyer doesn't fully incorporate into the compensation it requires from the incumbent. The size of this externality depends on whether many buyers sign an exclusivity agreement. If all sign, then the remaining free demand for entrant is too small, and it is not enough for the entrant to successfully enter. If few sign, entry will occur and some of its demand will be met by entrant with a lower price.

In certain industries, demand externalities – such as a network externality – might be relevant. Such an externality would also allow exclusion to occur if multi-homing between networks is not possible, or generally, if purchasing products from multiple sources is *not* possible.

Ex-Ante Commitment

Buyer *ex-ante* commitment is crucial for exclusive dealing. Ex-ante commitment means that buyers must commit to exclusivity prior to entry, which stops the entrants from negotiating with buyers at the same level as the incumbent. This would include situations where the buyers have not signed a formal agreement and would face costs when changing their decisions upon the rival's entry. In contrast, quantity discounts, where the buyer can abandon for better terms, would be an example of exclusivity without ex-ante commitment. Without ex-ante commitment, exclusion is less likely if the entrant is as or more efficient as the incumbent. The implication is that naked, contractual exclusion is more hurtful to competition than exclusivity discounts (which as-efficient entrants can potentially match).

A *minimum share requirement (MSR)* for buyers is a partial exclusive purchasing agreement. Generally, these are considered weaker forms of the kinds of exclusivity agreements discussed so far. There would be an exclusionary effect if we further assume that the incumbent and buyers agree on a contractual price together with the minimum share. For the signers, the entry of the rival will not affect the price for the exclusive dealing buyer. Normally, this would be a factor that would get buyers to not sign, because they are losing surplus from foreclosed entry, and the incumbent cannot fully compensate them (recall the Chicago critique). With MSR, there will be a part of the buyers demand that would benefit from lower prices, and therefore the incumbent would have to compensate them for signing an MSR. Specifically, the compensation is for accepting the contractual price on the required share (relative to the expected lower price enjoyed by the free demand). This benefit from

[5] There is another equilibrium, which is no one signs the
[6] These factors would stem from the dominance of the incumbent.

entry depends on whether the entrant would have enough scale to enter. If enough buyers sign, it may deter entry. This is an externality that each individual buyer cannot control. The externality allows the incumbent to earn more by compensating buyers less due to a higher chance that the entrant proceeds with more signers of the MSR.

Downstream Competition

The typical case featuring exclusive dealing is when the buyers are intermediate firms who would purchase the input from a manufacturer upstream, and sell it downstream to final consumers. An example here would be a distribution network. In this case, the role of competition at the downstream would matter greatly. If downstream competition is *weak*, and there are scale economies for the upstream sector, then anti-competitive exclusion is a concern. To see this, consider a case where downstream competition is so weak that each downstream firm monopolist. In this case, it reverts to the model in the preceding section, namely, given scale economies and no single buyer is enough for profitable entry or expansion, then anti-competitive exclusion is possible.

If downstream competition is very strong, small cost advantages allow one downstream firm to capture the market. If there are any free buyers, the entrant knows that any cost advantage it has would be passed along in the form of lower downstream prices, which will allow that free buyer to capture the market. Entry by an efficient upstream entrant would not be deterred. Since even one free buyer is enough to accommodate entry, the upstream dominant firm must compensate all downstream firms and enter into exclusive agreements with all of them. In situations of imperfect competition, the effect is weaker, but the point remains – with more competition at the downstream level, more of the downstream must be included in the exclusive dealing scheme.

Downstream competition also affects the compensation for downstream firms for accepting exclusivity. Compensation to buyers to sign an exclusive dealing arrangement depends on the foregone benefits of allowing the entrant to enter. In this case, the effect of downstream competition is less clear. If Downstream competition is strong, downstream profits are close to zero, and compensation to buyers for exclusive dealing is small. Further, preventing entry would limit downstream competition, which downstream buyers would understand that they would benefit from, and anti-competitive exclusion is possible.

Downstream competition affects the needed compensation to downstream firms to accept exclusivity. Factors that can raise profits post entry for a given level of competition would mean compensation should be higher, and exclusive contracts harder to finalize. Examples of such factors are industry capacity constraints which would limit expansion; coupled with the entrant being much more efficient than the incumbent. Recall further that strong downstream competition gives a cheaper input which allows the free downstream buyer to compete successfully against the exclusive downstream buyers. In situations where there are small fixed costs to sell, the exclusive buyer could even be forced to exit. Generally, downstream competition's effects should be judged on a case by case basis, but lower profits post entry would tend to facilitate exclusion.[7]

Role of Penalty Fees and Competition for the Market

Some of these contracts would include damages to be paid when the buyer wanted to breach exclusivity and purchase from the more efficient entrant. According to Aghion and Bolton (1987), the penalty allows the incumbent to extract the gains from entry and thus, strategically setting the size of the penalty fee could be a factor that accommodates entry while at the same time benefiting the incument. Under this model, when would anti-competitive exclusion occur? When the entrants' cost structure is not fully known, then penalty breach will also not perfectly extract the benefits from entry and will be set based on expectations of the average cost of the entrant. However, this would deter some efficient entry, if the expected entry cost is far less than the incumbent costs.

Instead of a penalty, we can assume that each side can renegotiate under certain circumstances, such as entry of a competing upstream business. If the entrant is more efficient, then accommodating entry raises welfare. Parties would recognize this and would prefer to renegotiate. Renegotiation would lead to accommodating entry if the negotiation over the surplus can be distributed in a non-costly manner. Anti-competitive foreclosure would **require** costly renegotiation. Costly renegotiation would exist with fragmented or weak buyers.

Consider the situation where the entrant may compete with the incumbent at the same time, trading offers to buyers with the incumbent. We may expect that the entrant may match the incumbent's offer, and foreclosure may not happen. But here scale economies would still matter, and the preceding arguments remain.

Consider a situation with two sets of buyers, and the incumbent and entrant compete for the first set. The incumbent is able to extract more value, and compensate the buyers, because it need not pay the fixed entry cost. Also, given scale economies (the entrant needs the first buyer to enter profitably), the incumbent also has a higher (monopoly) profit if it wins the first buyer's business. But we note that the incumbent must compensate the first buyer, even as it makes a monopoly profit on the second buyer. The incumbent takes a *profit sacrifice* on the first buyer, to ensure it will purchase from the incumbent. The analysis becomes akin to the predatory pricing.

III. Jurisprudence

A. Significant Cases in EU and US Jurisprudence

[7] (Comanor & Rey, 2000) show that ED is likely to occur if competition on one stage reinforced competition at another stage in the supply chain. Entry in either stage would result in lower prices for the incumbent, and lower profits. Both manufacturer and distributor would then be more incentivized to form an ED.

a. EU Case: C-85/76 - Hoffman-La Roche v Commission (1979)

Hoffman-La Roche was the largest manufacturer of bulk vitamins and it held a dominant position in the manufacturing of several groups of vitamins. In order to establish Roche's dominance in the relevant market, the Commission took into account both Roche's market shares and the barriers to entry in the market for vitamins, in particular, the market structure and the heavy investments and specialization required to enter the market.

Overall, the Commission found Roche to have a dominant position in each of several vitamins because (1) Roche's market shares in the production of several vitamins ranged from 47 percent to 95 percent of the market, (2) Roche manufactures a relatively wide range of vitamins compared to that of its competitors, (3) Roche was the world's largest producer of all vitamins (4) Roche possessed technological and commercial advantages not yet possessed by its competitors, and (5) there were high barriers to entry into the market of vitamins that required large investments over long periods.

The case centered around 26 agreements by Roche with 22 firms that were engaged in the production or sale of vitamins. The 22 undertakings accounted for approximately 26% in Roche's sales in the Common Market and 16% of total sales of all producers and resellers.
The Commission decided that Roche's conduct had constituted an abuse of its dominant position, stating that the conduct of Roche, "...by its nature it hampers the freedom of choice and equality of treatment of purchasers and restricts the competition between bulk vitamin manufacturers in the Common Market and is likely to affect trade between Member States."

b. US Case: United States v. Microsoft Corp. (2001)

Microsoft Corp. had over 95% of the market share in the market for Intel-compatible PC operating systems, a market which was protected by substantial barriers to entry, thereby further establishing Microsoft's dominant position in the market. The barrier concerned in this case was illustrated as follows: (1) most consumers prefer operating systems for which a large number of applications have already been written; and (2) most developers prefer to write for operating systems that already have a substantial consumer base, both of which were true for Microsoft.

Microsoft's agreements with Internet access providers (IAPs) was that they would provide easy access to IAPs' services from the Windows desktop, in return for the IAPs' agreement to promote Internet Explorer exclusively and to keep shipments of internet access software using it's competitor, Navigator, under a specific percentage of around 25%. Microsoft had agreements with 14 of the top 15 IAPs in North America, where IAPs constituted one of the two major channels by which browsers can be distributed.

The District Court condemned these agreements as exclusionary, stating that “all of Microsoft’s agreements, including the non-exclusive ones, severely restricted Netscape’s access to those distribution channels leading most efficiently to the acquisition of browser user share.” Furthermore, the Court stated that “by ensuring that the majority of all IAP subscribers are offered Internet Explorer either as the default browser or as the only browser, Microsoft’s deals with the IAPs clearly had a significant effect in preserving its monopoly.”

Treatment of the dominant undertaking

Although the EU and the US are similar in their methods of determining and establishing dominance, the exclusive dealing jurisprudence suggests that the two jurisdictions diverge in how strictly they treat dominant undertakings that engage in exclusive arrangements.

The EU has been historically known to be stricter towards dominant firms. For example, the approach taken in the Hoffman-La Roche case suggests that a dominant undertaking is never allowed to enter into exclusive contracts with its trading partners, and that in the event that a dominant undertaking does enter into such contracts, it would always be deemed as unlawful.

> “An undertaking which is in a dominant position on a market and ties purchasers – even if it does so at their own request – by an obligation or promise on their part to obtain all or most of their requirements exclusively from the said undertaking abuses its dominant position within the meaning of Article 102.”

Furthermore, the EU has imposed a “special responsibility” upon dominant undertakings that bans them from entering into exclusive arrangements. Thus, certain conduct may be considered lawful when they are engaged in by non-dominant undertakings but become unlawful when they are done by dominant undertakings.

On the other hand, the US is less strict in how it deals with dominant firms and does not believe in imposing a special responsibility upon dominant firms. In Microsoft, the Court explicitly states that such special responsibility would be an unfair burden to impose upon every dominant undertaking that enters into exclusivity agreements, stating:

> “Imposing upon a firm with market power the risk of an antitrust suit every time it enters into such a contract, no matter how small the effect, would create an unacceptable and unjustified burden upon any such firm.”

c. EU Case: Case T-65/98 - Van den Bergh Foods Ltd v Commision (2003)

The dominant firm in this case was HB, the principal manufacturer of ice-cream products in Ireland. HB entered into exclusivity arrangements with retailers, in which HB agreed to supply ice cream retailers with freezer cabinets free of charge, on the condition that they were used to store HB's ice cream products exclusively.

The Commission found that in 40% of all retail outlets in Ireland, the only freezer cabinets for the storage of ice cream were provided by HB, thereby foreclosing other suppliers from access to those retailers. Moreover, the Commission found that HB's exclusivity arrangements had the effect of restricting the ability of retailers to stock and offer ice cream products from competing suppliers.

The Commission declared that the exclusivity arrangements constituted an infringement of the law.

> "HB abuses its dominant position in the relevant market... in that it induces retailers... who do not have a freezer cabinet for the storage of impulse ice cream either procured by themselves or provided by another ice-cream supplier than HB to enter into freezer-cabinet agreements subject to a condition of exclusivity. The inducement takes the form of an offer to supply the freezer cabinets to retailers, and to maintain them, at no direct charge to the retailer."

The General Court upheld the finding that HB was abusing its dominant position.
With regards to the effects analysis, the approach taken here, as opposed to the one taken in Hoffman-La Roche, considered likely foreclosure and foreclosure share as relevant factors in its assessment. The General Court stated that,

> "The fact that an undertaking in a dominant position on a market ties de facto — even at their own request — 40% of outlets in the relevant market by an exclusivity clause which in reality creates outlet exclusivity constitutes an abuse of a dominant position within the meaning of Article 86 of the Treaty."

Although the Court did take into consideration likely foreclosure, the Court did not specify the elements of the legal test that was used to determine whether the exclusive arrangements were abusive. Thus, notwithstanding Hoffman-La Roche, the EU has incorporated economic factors such as likely foreclosure and foreclosure share into its assessment.

d. US Case: Tampa Electric Co. v. Nashville Coal Co. (1961)

Tampa was an electricity generating utility in Florida that had entered into 20-year requirements contract with Nashville Coal for its supply of coal. Before the first coal was to be delivered however, Nashville Coal advised Tampa that the contract was illegal under antitrust laws and so the delivery of coal would not be performed. Consequently, Tampa sued Nashville Coal to enforce the contract.

In a disputed market definition, the Supreme Court held that the geographic market was not just Florida and Georgia, in which the foreclosure share would have been 18%, but was actually the Appalachian Coal area comprised of at least seven states. With this market definition, there were at least 700 producers with total output of 359,289,000 tons of bituminous coal. Therefore, the proportionate volume of the total relevant coal product foreclosed only 1% of the market, which the Court deemed as 'quite insubstantial'.

> [335] In weighing the various factors, we have decided that in the competitive bituminous coal marketing area involved here the contract sued upon does not tend to foreclose a substantial volume of competition.

Although Tampa entered into lengthy contracts that lasted as much as 20 years in duration, the Court considered the efficiencies that arose from the long duration since it was in the context of public utility. Ultimately, the Court decided that the efficiencies redeemed the long contract duration.

> [306-307] The 20-year period of the contract is singled out as the principal vice, but, at least in the case of public utilities, the assurance of a steady and ample supply of fuel is necessary in the public interest. Otherwise, consumers are left unprotected against service failures owing to shutdowns, and increasingly unjustified costs might result in more burdensome rate structures, eventually to be reflected in the consumer's bill.

e. EU Case: Distrigaz (2007)

In the EU, although there have been cases such as Van den Bergh Foods where contract terminability and efficiencies were unable to redeem the conduct, there have also been more recent cases where these other factors were able to be used as justifications. An example is the Distrigaz case which concerned the sale of gas to large customers. Although Distrigaz' contracts lasted for over a year, the Commission acknowledged that the long-term contracts may be justified if they generate efficiencies that outweigh their negative effects.

In the *Distrigaz* case, the company offered commitments which were accepted by the EU commission, which include:[19]

- 65% of the gas supplied to industrial consumers would return to the market annually
- No single contract would exceed a five-year duration

[19] Commitments Decision Case COMP/B-1/37966 *Distrigaz,* published 11.10.2007

- Supply agreements with resellers would not exceeed two year duration nor include resale restrictions
- Exceptions for agreements for the supply of gas for new investment in large electricity generation capacity

f. US Case: United States v. Dentsply Int'l, Inc. (2005)

Dentsply held a dominant position in the manufacture of artificial teeth used in dentures, which were sold to dealers of dental products. Dentsply supplied to a network of 23 dealers. In 1993, Dentsply adopted "Dealer Criterion 6", which stated that authorized dealers were not allowed to add other tooth lines to their product offering. However, Dentsply did not have long term contracts with their dealers and the dealer's relationship with Dentsply was terminable at any time.

The District Court held that there were other dealers available and manufacturers could also sell directly to laboratories. Moreover, the District Court stated that the agreements did not lead to a market with supra competitive pricing and that the dealers were allowed to terminate their relationship with Dentsply at will. Thus, the District Court granted judgment in favor of Dentsply.

However, the Third Circuit reversed the District Court's judgment. It stated that the dealer network was "the crucial point in the distribution chain at which monopoly power over the market for artificial teeth was established." Thus, it was wrong for the District Court to conclude that Dentsply did not engage in market foreclosure.

An important factor that was closely examined in this case were Dentsply's readily terminable contracts. Although the dealer's relationship with Dentsply could be terminated at any time, the dealers had a strong economic incentive to continue carrying Dentsply's teeth. Other dealers tried selling other manufacturers' teeth, but Dentsply threatened to stop supplying its products to them and the dealers could not sacrifice Dentsply's products as it constituted a large volume of their business.

Thus, despite the readily terminable contracts, the Court deemed that it was unable to redeem Dentsply's anticompetitive agreements due to Dentsply's dominance in the relevant market.

B. Comparison between the EU and US Jurisprudences

In order to compare and contrast the EU and the US' exclusive dealing jurisprudence, the common elements between both jurisdictions have been broadly categorized into three groups, namely (1) dominance, (2) effects analysis, and (3) other factors, of which include contract duration, terminability and objective justification. The following sections aims to compare the EU and the US' exclusive dealing practices by looking into their jurisprudence and determining the similarities and differences between the two jurisdictions.

a. Dominance

The EU and the US are similar when it comes to how they establish the dominance of an undertaking. Both jurisdictions consider market shares and barriers to entry as a relevant factor when assessing whether or not an entity is dominant.

In earlier cases in the EU, market power was given much more importance. In Hoffman-La Roche, the court asserts:

> Hoffman-La Roche: *"**An undertaking which is in a dominant position on a market** and ties purchasers – even if it does so at their own request – by an obligation or promise on their part to obtain all or most of their requirements exclusively from the said undertaking **abuses its dominant position** within the meaning of Article [102]."*

In more recent cases, other factors play an important role in the theory of harm. In both the US and EU jurisdictions, potential and actual effects are important parts of the narrative.

b. Effects

Both the EU and the US consider foreclosure shares as part of their analysis, as an indicator of potential and actual effects on the market. However, the EU and the US do not follow any hard and fast thresholds for foreclosure share, a foreclosure share of a certain percentage may be benign in some cases but not for others as each case must turn to its facts. For example, US courts are split on the minimum share required to find exclusive dealing arrangements unlawful. In Microsoft, the District Court stated that the Sherman Act required a foreclosure share of at least 40%, however, some courts have held that 24% suffices, while others hold that 30-40% is necessary.

However, a trend has been observed within the US case law, where a foreclosure share of less than 10% is generally deemed lawful while a foreclosure share of greater than 50% may lead to anticompetitive effects. Foreclosure shares between 10-50% have led to varied results in the US. On the other hand, there are no observable trends for the EU within the case law, but exclusive arrangements where the foreclosure share was 30% have been deemed unlawful.

In the US, while the foreclosure share is relevant, this in itself does not indicate whether the conduct is illegal. The standard requires proof of substantial market foreclosure in addition to a demonstration of possible immediate and future effects of said foreclosure on competition, balanced against any efficiency considerations[24].

c. Other Factors

Overall, the EU and the US are similar in a sense that factors such as terminability and efficiencies are able to redeem the conduct, as seen in both Tampa and the Distrigaz cases, both of which concerned public utilities in the energy sector. Regarding efficiencies, both cases considered the efficiencies brought about by the exclusive dealing arrangements, such as securing an ample supply of fuel, despite the lengthy contract durations.

However, the US is slightly less clear with how it deals with terminability and there has been disagreement across cases regarding whether or not exclusionary agreements can indeed be foreclosing when they are terminable. Some lower courts hold that terminability does not undermine the foreclosing effect of exclusive arrangements, such as in Dentsply, whereas other lower courts hold that contracts that can be terminated in less than a year would unlikely be able to lead to foreclosure.

IV. Summary and Recommendations

Our review of the economics of exclusive dealing identifies the existence of *scale economies*, and *fragmented buyers* as important factors. The *degree of competition downstream* is important; if the entrant is not expected to increase downstream profits, compensation for exclusivity is small. All these would be elements to craft a theory of harm.

Broadly speaking, the review of seminal cases suggests that *dominance*, *foreclosure share*, *terminability*, and *duration* are the key elements across jurisdictions, and are linked to the economic elements highlighted in the literature. The economic elements have influenced the EU Guidance Paper on Exclusionary Abuses. The guidance paper argues that exclusionary policy accompanied by an “all-or-nothing” clause regarding purchasing the incumbent’s products is likely to be detrimental, especially if the entrants cannot contest a significant portion of the markets demand: (European Commission, 2009)

> *The capacity for exclusive purchasing obligations to result in anti-competitive foreclosure arises in particular where, without the obligations, an important competitive constraint is exercised by competitors who either are not yet present in the market at the time the obligations are concluded, or who are not in a position to compete for the full supply of*

[24] To determine substantiality in a given case, it is necessary to weigh the probable effect of the contract on the relevant area of effective competition, taking into account the relative strength of the parties, the proportionate volume of commerce involved in relation to the total volume of commerce in the relevant market area, and the probable immediate and future effects which pre-emption of that share of the market might have on effective competition therein. (Tampa Elec. Co. v. Nashville Coal Co., 365 U.S. 320)

> *the customers. Competitors may not be able to compete for an individual customer's entire demand because the dominant undertaking is an unavoidable trading partner at least for part of the demand on the market, for instance because its brand is a 'must stock item' preferred by many final consumers or because the capacity constraints on the other suppliers are such that a part of demand can only be provided for by the dominant supplier*

The all-or-nothing aspect, or in the phrasing of the EU discussion paper, the exclusion of the those who are not in position "to compete for the full supply", limits the benefits of entry, and makes it easier acquiesce to an exclusive dealing arrangement.

The strong links of the economics and jurisprudence for both the EU and the US communicates, and the many similarities between them, suggest clear elements that PCC would follow in investigating non-price exclusive dealing cases.

Bibliography

Aghion, P., & Bolton, P. (1987). Contracts as a Barrier to Entry. *American Economic Review*, 388-401.

Besanko, D., & Perry, M. (1993). Equilibrium Incentives for Exclusive Dealing in a Differentiated Products Oligopoly. *RAND Journal of Economics*, 646-67.

Bork, R. (1978). *The Antitrust Paradox: A Policy at War with Itself.* New York: Basic Books.

Comanor, W., & Rey, P. (2000). Vertical Restraints and Market Power of Large Distributors. *Review of Industrial Organization*, 135-153.

DG Competition. (2005). *DG Competition Discussion Paper on the Application of Article 82 of the Treaty to Exclusionary Abuses.* Brussels: European Commision.

European Commission. (2009). *Communication from the Commission Guidance on The Commission's Enforcement Priorities in Applying Article 102 TFEU to Abusive Exclusionary Conduct by Dominant Undertakings.* Brussels: OJ.

Fumagalli, C., Motta, M., & Calcagno, C. (2018). *Exclusionary Practices: The Economics of Monopolization and Abuse of Dominance.* Cambridge, New York: Cambridge University Press.

Posner, R. (1976). *Antitrust Law: An Economic Perspective.* Chicago: University of Chicago Press.

Rassmusen, E., Ramseyer, J., & Wiley, J. (1991). Naked Exclusion. *American Economic Review*, 461-79.

Segal, I., & Whinston, M. (2000). Naked Exclusion: Comment. *American Economic Review*, 296-309.

Tirole, J. (1988). *Industrial Organization.* MIT Press.

United States v Microsoft Corp, 253 F.3d 34 (D.C. Cir. 2001)