Some Economics on the Treatment of Buyer Power in Antitrust[1]

Chris Doyle[2]

Roman Inderst[3]

1. The Topicality of Buyer Power

Only on rare occasions do manufacturers sell directly to final consumers, notwithstanding the growth of trade that is conducted via the internet.[4] Instead, goods typically reach final consumers after involving sometimes even several levels of distribution. At each level in the distribution channel, competitive forces are at play, which jointly determine the price as well as the quality and variety of products that are ultimately available to final consumers.

However, economic theory (in particular that presented in most textbooks) often tends to ignore the distribution and retailing activities. There, firms are typically treated either as competing directly for the patronage of final consumers, or as selling through a retailing industry that, possibly due to perfect competition, is no more than a "transparent window" to the marketplace.[5] On the other hand, channel relationships seem to have been particularly important in forming antitrust laws, in particular in the US. As noted in Sexton et al. (2002), the enactment of the Sherman Antitrust Act in 1890 was motivated by concerns over the power exercised by big meat packers, while the Robinson-Patman Act of 1936 was directed at competitive problems amongst retail grocers.[6]

It is tempting to simply apply these models also to the dealings between manufacturers and wholesalers or retailers, thereby framing the whole vertical channel as a sequence of markets. In fact, a sizable strand of the economic literature on vertical relations, often with applications to the analysis of vertically integrated firms and incentives to foreclose, builds on such models.[7] As we argue in more detail below, such an analytical framework

---

[1] Much of his article draws on: Inderst, R. and Mazzarotto, N., Buyer Power in Distribution, 2006, chapter prepared for the ABA Antitrust Section Handbook, Issues in Competition Law and Policy (W.D. Collins, ed., in preparation). We would like to thank Paul Dobson for many useful discussions on this subject and Adrian Majumdar for detailed comments on this paper.

[2] London School of Economics.

[3] University of Frankfurt and London School of Economics.

[4] In fact, many intermediaries have built up a successful presence on the internet next to their brick-and-mortar business, while e-commerce has itself created a new breed of retailers dealing via the internet.

[5] This applies, in particular, to the use of the "workhorse" models of Bertrand (price) and Cournot (quantity) competition.

[6] See: Sexton, R.J., Richards, T.J., and Patterson, P.M., 2002, Retail consolidation and produce buying practices: A summary of the evidence and potential industry and policy responses, Giannini Foundation of Agricultural Economics, Monograph No. 45.

[7] Typically, the setting is one where upstream firms choose quantities to serve a downstream market that is in turn captured by a derived demand function.

is, however, often not suitable when suppliers deal through bilateral contracts with their buyers. In particular, such a framework would tend to mask the real implications that the exercise of buyer power can have both in the short and in the long run.

Instead, more often than not a much more suitable framework in which to couch the relationship between suppliers and buyers is that of bargaining. Section 2 of this paper therefore introduces some simple concepts of bargaining theory. Through the lens of bargaining theory we can then more appropriately analyze the sources and consequences of buyer power. Moreover, once such a framework is formalized, it is then possible to define appropriate metrics to measure buyer power.

This paper is motivated by recent European cases and market inquiries in the retail industry, primarily in the area of fast-moving consumer goods. In fact, though issues of buyer power have also surfaced elsewhere, it is grocery retailing in particular that has received much attention recently. Most notably, the UK has seen several merger and market inquiries in which, at least at the initial stage, the issue of buyer power emerged. Buyer power was a key concern in the Competition Commission's last inquiry into the supermarket industry in 2000 and led to the implementation of a "Code of Best Practice" that governs the relationship between the UK's top-5 grocers and their suppliers.[8] Judged by the referral documents of the OFT, the UK's National Competition Authority, as well as by the topics of the Competition Commission's recently undertaken roundtables, buyer power will again be a core topic in the new and still ongoing inquiry. In between these two inquiries, the Competition Commission had another chance to look into supermarkets in its 2003 inquiry into the potential acquisition of Safeway, which was then one of the top-five chains.[9] Next to the potential for coordinated effects, buyer power was the key reason to block an acquisition by any of the other top-5 chains.

Across the EU, some of the key retail mergers where buyer power played an important role were Rewe/Meinl[10], Kesko/Tuko[11], and Carrefour/Promodes.[12] In Rewe/Meinl, the merger of these two food retailers in Austria was met with concerns from the Commission about the concentration of procurement markets for daily consumer goods. The deal was eventually approved after Rewe agreed to limit the acquisition to 162 Meinl outlets, the Commission arguing that this remedy would reduce the merger's effect on the dependency of suppliers, and that it would leave Meinl active in procurement markets as an alternative customer for suppliers.

In Kesko/Tuko the merger of two of the leading Finnish supermarket chains was blocked; Kesko was deemed to be an essential "gatekeeper", with no supplier able to manage without it. With few alternative retailers to sell to, and given the distance to neighbouring

---

[8] Competition Commission, 2000, Supermarkets: A report on the supply of groceries from multiple stores in the United Kingdom, Cm 4842.

[9] Competition Commission, 2003, Safeway Plc and ASDA Group Limited (owned by Wal-Mart Stores Inc); Wm Morrison Supermarkets Plc; J. Sainsbury Plc; and Tesco Plc: A report on the mergers in contemplation, Cm 5950.

[10] Case no IV/M.1221

[11] Case no IV/M.784

[12] Case no IV/M.1684

markets in other countries, it was viewed that there was a significant risk of suppliers being exploited by retailers following the merger. In Carrefour/Promodes, the merger of these two supermarkets in France raised no issues of single-firm or collective dominance. However, the Commission required them to make undertakings because it was concerned about the buyer power that the merger could create, and that suppliers may be put into a position of economic dependence.

To develop practical applications for the theories of the potential sources of buyer power, it is important to consider whether sensible measures or metrics of buyer power can be established. This is dealt with in Section 3. The potential harm to consumers is dealt with in Section 4, while we briefly discuss some policy measures in the final Section 5.

2. Setting the Stage: The Framework to Analyze the Sources and Consequences of Buyer Power

2.1 Choosing the Appropriate Framework

The term buyer power has been employed in a variety of ways in different contexts. It may also have positive or negative implications depending on the context in which it is used and the practice that may be under consideration [13] We will refer to buyer power in a very broad way as the bargaining strength that a buyer has with respect to the suppliers with whom he trades.

This is not the only possible way to frame buyer power. In fact, the "textbook" view of buyer power (known as "monopsony") is different. There, it is presumed that up- and downstream firms interact through a "market interface".[14] In its simplest manifestation, buyer power then represents the perfect mirror image of seller power. While sellers may exercise market power through withholding supply, buyers may be able to reduce the (uniform) market price for an input by withholding demand.[15] The key assumptions are firstly that as the buyer in question purchases more it pushes up the market price (e.g. because the marginal cost of supplying the input increases) and secondly that there is no scope for a buyer to exert power by obtaining an *individual* discount. As a result, the only way to achieve a lower price, namely by withholding demand, also benefits all other buyers. However, it harms welfare because output is reduced relative to the "competitive"

[13] We should note at this point that we completely abstract here from buyer power as a merger *defence*, both in the sense that merging firms could claim efficiency gains arising from lower purchasing prices and in the sense that their own customers could exert countervailing power against any deterioration of their terms of purchase after the merger. These issues are dealt with in detail in: Inderst, R. and Shaffer, G., 2005, The role of buyer power in merger control, chapter prepared for the ABA Antitrust Section Handbook, Issues in Competition Law and Policy (W.D. Collins, ed., in preparation).

[14] An exposition of the "textbook" view on buyer power can be found in Blair, R.D. and Harrison, J.L., 1993, Monopsony: Antitrust Law and Economics, Princeton University Press.

[15] From an analytical perspective, the most common models only allow one side of the market, either sellers or buyers, to act strategically by either reducing supply or demand to affect the price in their favour. The economists' toolbox contains, however, also more advanced modelling frameworks that allow both sides to act strategically.

level (i.e. that which would arise if all buyers were so small that their purchases had no impact on the market price).

The "textbook" view thus seems to be most appropriate for competitive commodity markets, where the assumption of a uniform trading price may be justified.[16] The alternative scenario is one where relatively few up- and downstream firms, such as large retailers and the producers of branded goods, interact bilaterally. In such an environment, there could be substantial variations in the average prices paid by different buyers. Buyer power may then manifest itself precisely through the size of individually negotiated discounts.[17][18]

Key Point 1: *In many settings, in particular if relatively few suppliers and buyers interact, buyer power should not be seen as the strategic withholding of demand so as to reduce a uniform wholesale price. Instead, the exercise of buyer power should be seen as leading primarily to the realization of individual discounts.*

This setup of bilateral negotiations is the one that we examine further in the rest of this article. Before proceeding it is, however, important to note that the existence of individual discounts in themselves is not sufficient to demonstrate buyer power. A monopoly supplier with the ability to price discriminate could offer its buyers different discounts not because of differences in bargaining strength, but simply because they each have different derived demands (e.g. because they serve (independent) downstream markets of different sizes).[19]

2.2 A Simple Bargaining Setting

Suppose two parties, A and B, can realize a joint profit of z. How should we expect that this will be shared? A key factor in this should be what the two sides could realize outside of their negotiations. For instance, the retailer could delist the supplier's good and start negotiations with another supplier. Likewise, the supplier could start searching for different distribution channels for its good. We denote the profits from these alternatives by v_A and v_B, respectively. Economists refer to (v_A,v_B) as the "breakdown" or "outside-option" payoffs.[20] The net surplus that can be jointly achieved if negotiations are

[16] In addition, buyers and suppliers, as well as intermediaries and arbitrageurs, may in this case interact even anonymously under the trading rules of an exchange.

[17] Though we apply the framework and language of negotiations, most of the derived insights hold more generally, e.g., in settings where buyers run individual auctions.

[18] Although in simple models we restrict firms to just bargaining over the price of the input, in reality firms may negotiate over other terms of supply, such as delivery times and credit facilities. Intuitively, our major arguments still apply, with powerful buyers obtaining preferential terms of supply in a more general sense. See, however, the later policy discussion on restrictions on contractual practices.

[19] For an example of the basic principle of price discrimination, see Maskin, E. and Riley, J., 1984, Monopoly with Incomplete Information, The RAND Journal of Economics 15, 171-196, who examine a monopoly supplier selling to customers with different demand curves.

[20] Bargaining theory distinguishes further between "outside options", which are realized at breakdown, and "inside options" (or the "status quo" payoffs), which the two sides realize during prolonged negotiations.

successful is then $z-v_A-v_B$. While it is in principal possible to weight how this surplus is shared between the parties, here we remain neutral and assume that each side simply obtains one half. This yields a simple formula: party A just obtains the sum of v_A plus one half of $z-v_A-v_B$, while B just obtains the sum of v_B plus one half of $z-v_A-v_B$.[21] In the following Section, we will mainly measure buyer power by its impact on outside options or status-quo payoffs. Clearly, if A represents the buyer in question, then any change in behaviour or market structure that would increase, say, v_A but reduce v_B will allow the buyer to extract a larger share of the jointly realized profits z.

Before we move on, however, we would like to emphasize that this simple framework is not supposed to capture all potential sources of buyer power. In particular, it does not incorporate the role of information, e.g., whether a particular buyer knows more or less about a supplier's cost structure, or extend to (tacit or explicit) coordination among suppliers.[22] Likewise, it does not incorporate the use of particular strategies that more sophisticated buyers could use, such as to strategically choose between multiple or single sourcing. Such factors could well be relevant in particular cases and would then clearly deserve a separate investigation. Again, any analysis would have to be informed by economic theory, which has devoted, in particular, much effort towards studying negotiations under informational asymmetries.

Finally, we should also emphasize one simple insight that relates to the role of a buyer's "pure size". Suppose that, in our more formal example, A would have to negotiate with two parties, B_1 and B_2, over how to share the respective profits z_1 and z_2. Suppose these negotiations were entirely unrelated, for example because they concern completely different product categories. In this context, if A negotiated with a single party B over the profits z_1+z_2, instead of with B_1 and B_2 individually, then ceteris paribus A would still obtain the same share. As we analyze in the next Section, however, it is the ceteris paribus assumption which may, however, not hold in particular settings, given that size may, for instance, make a buyer's outside option more attractive.

Key Point 2: *To capture the distribution of bargaining power, a convenient and typically often already far-reaching starting point is to calculate, next to the joint profits that are at stake, the value of the two sides' "next best options", both during negotiations and at the breakdown of negotiations.*

For instance, during protracted negotiations the retailer may run out of stock but could then sell instead more units of an own-label good.

[21] In the language of bargaining theory, we would here apply the symmetric Nash bargaining solution. (Nash, J.F., 1950, The Bargaining Problem, Econometrica 18, 155-162). Note that the resulting shares of total profits, z, can then be simply calculated to be $s_A=1/2+(v_A-v_B)/(2\cdot z)$ for party A and $s_B=1/2+(v_B-v_A)/(2\cdot z)$ for party B.

[22] If suppliers collude to raise prices to buyers, this can provide another channel through which a large buyer can obtain a lower price than its rivals. With a large order up for grabs, suppliers may be more tempted to undercut the collusive regime and offer the large buyer a discount. Alternatively, the larger buyer may be offered a lower price in the collusive equilibrium to stop such a deviation occurring in the first place.

3. Sources and Measures of Buyer Power: Mapping the Framework into Observable Characteristics

3.1 Measures of Buyer Power

Despite the final comments in the last section, a buyer's raw size can still matter for negotiations. If technological constraints force a buyer to only source from a single supplier, then only sufficient size may make it credible to respond to an increase in purchasing prices by switching elsewhere. Furthermore, even if no adequate alternative source of supply was currently available, the presence of a larger buyer may help to facilitate supply-side substitution for a number of reasons. First, the large buyer can itself take steps to encourage entry. One way to do so would be to directly "sponsor" new entry, e.g., by sharing some of the entrant's set-up costs or by contractually precommitting a fixed share of purchases to the entrant. More indirectly, the presence of large buyers could also make it possible for a new entrant to become economically viable after winning only a few contracts.

A buyer's size could also have an impact on the supplier's outside option. When a supplier loses a large contract, and thus has to search for alternative distribution channels for a large volume, this may severely reduce the price and thus the profit that the seller can realize. What has to be born in mind, however, is that contracts may differ in how difficult they are to replace. In particular this may be due to the degree to which a retailer acts as a "gatekeeper" in a given local market. For instance, if a retailer faces little or no competition in a local market, a supplier has no alternative channels to serve those consumers. Therefore, at least in principle the sales made through a smaller retailer that acts as a monopolist in a local market may be more difficult to replace than the ones made through a larger one that acts in highly competitive markets.

Apart from the absolute size, the fraction of a supplier's business for which a particular buyer accounts for may determine relative bargaining power. In fact, such ratios have been frequently used in recent cases. Across the Atlantic, in Aetna/Prudential it was argued that a physician's prospective loss from having to replace patients may increase more-than-proportionally with the number of patients that must be replaced; the cost to a physician of replacing 30% of his patients is likely to be more than twice that of replacing only 15% of them.[23] In Carrefour/Promodes, the European Commission asserted that a supplier whose business with the two merging chains accounted for more than 22% of revenues was to be considered as "economically dependent" upon them, as survey evidence indicated that this was the most suppliers could afford to lose without a serious danger of them being driven bankrupt.[24]

---

[23] *United States, et al. v. Aetna, Inc., et al.*, No. 3-99CV1398-H. For more details see: Schwartz, M., 1999, Buyer Power Concerns and the Aetna-Prudential Merger, presented at 5th Annual Health Care Antitrust Forum, Northwestern Univ. School of Law.

[24] Apart from the possibility of scaling back operations, suppliers would clearly also have the option to bridge the temporary financial gap by raising additional funds. Ruling this out would require an explicit consideration of the "financial frictions" that are faced by these particular suppliers. (This has some analogy to the consideration of "deep pocket" or "long purse" arguments for (financial) predation or under a conglomerate merger doctrine.)

Importantly, using such percentage measures to account for relative dependency may only be useful when comparing relatively low percentages with figures that lie above some identified threshold. For more gradual changes of power it is much less clear how informative these figures could be. Generally, what constitutes bargaining power is not so much the percentage of current business that a buyer or seller would lose, but whether the respective party can find equally attractive opportunities to buy or sell to replace that which has been lost.

As this seems to be a common source of misconceptions, we will discuss this point in more detail. Here, our starting point is the following influential definition from OECD (1998), which held that *"... a retailer is defined to have buyer power if, in relation to at least one supplier, it can credibly threaten to impose a long term opportunity cost (i.e., harmful or withheld benefit) which, were the threat carried out, would be significantly disproportionate to any resulting long term opportunity cost to itself. By disproportionate, we intend a difference in relative rather than absolute opportunity cost, e.g. Retailer A has buyer power over Supplier B if a decision to delist B's product could cause A's profit to decline by 0.1 per cent and B's to decline by 10 percent."*[25]

In grocery retailing, all but a few multinational brand manufacturers may account for only a very small fraction of a large retailer's business. But this should not indicate that the retailer has more power vis-à-vis these suppliers than vice versa; if a retailer delists a strong brand shoppers may either switch stores or purchase this particular good elsewhere. Whether the retailer stocks only a few or a plethora of different products should then only be important to the extent to which it influences total store traffic, consumers' inclination to switch stores rather than products and the retailer's overall loss in margins if he loses some customers. This illustrates the fundamental problem with using, as in the OECD's definition , percentage measures based on a supplier' or retailer' *overall* business or profits.

In addition, the OECD's definition overlooks that the prospective loss is itself already a *result* of the underlying bargaining power. For instance, if a supplier realizes a high margin with one buyer but a lower margin with another buyer, then it may be wrong to conclude that the supplier has more bargaining power when negotiating with the second buyer given that his loss, both in absolute and in percentage terms, may be lower than when losing the first buyer's business.[26]

Finally, other factors that are not necessarily related to size may create buyer power. For instance, by stocking private labels next to manufacturers' goods in a given category, a retailer may enter into direct competition with its suppliers.[27] For this reason, to the

[25] OECD, 1998, Buyer Power of Large Scale Multiproduct Retailers, Background paper by the Secretariat, Roundtable on Buying Power, paragraph 20.

[26] This is somewhat reminiscent of problems that arise from a too mechanical application of critical loss analysis. There, while high margins make even a small drop in sales expensive, the fact that margins are high should also indicate that demand is relatively inelastic.

[27] Discount brands were introduced in US supermarkets in the late 1970s, typically as cheaper versions of branded goods. Over the decades, many retailers have, however, succeeded in repositioning their house brands, building both on the ability of second-tier suppliers to replicate the quality of successful brands and the increased willingness of top-tier brand manufacturers to also supply private-label goods. Some chains have managed to develop a successful brand image, which allows them to introduce new products on the

extent that a private label good may be a substitute for a given manufacturer, some sales that would be diverted to other goods for lack of agreement in negotiations would be recaptured through higher sales of the private label good. In terms of our bargaining framework, this would enhance both a retailer's "status quo" payoff, i.e., the profits that he still realizes when facing a temporary stock-out of the supplier's product during prolonged re-negotiations, and his "outside option", i.e., the profits that he still realizes when delisting the supplier's product.

Outside of distribution, if a buyer is another manufacturer, then buyer power could to a large extent depend on the know-how of the respective buyer. For instance, some buyers may even possess the patents under which their suppliers produce, while other buyers may themselves manufacture products that involve similar know-how as that which is required to produce the supplier's input.[28]

Key Point 3: *A buyer's size, both in absolute terms and as a fraction of a particular supplier's existing business or his potential market, can (but may not always) provide a good measure of buyer power. However, a simple comparison of the fraction of a party's total business for which the other side accounts for will most likely not adequately reflect bargaining strength. Even if size does provide a good proxy for bargaining power, that would have to be determined by first understanding how size increases the value of the buyer's, and reduces the value of the supplier's, alternative options.*

3.2 The Choice of Appropriate Thresholds

Establishing buyer power may in practice be a step that is isolated from and precedes that of finding potential harm. However, to some extent this procedural separation may mask the fact that ultimately these two steps are and have to be undertaken jointly. For an illustration of this point, which we think is important, take an analysis of standard horizontal effects. There, the use of (market share) thresholds is clearly informed by the potential impact of market power on welfare and consumer surplus, in particular through the short-run impact on prices and quantities. In fact, the use of certain thresholds for the HHI concentration index, at least for defining safe harbours, is informed by the (calculated) impact on prices in standard models of Cournot (for non-differentiated) or Bertrand (for differentiated goods) competition.

More generally, the choice of the right metric and thresholds for an analysis of market or buyer power should be linked to the type and extent of potential harm that can be

---

back of their own reputation. Berges-Sennou, F., Bontems, P., and Requillart, V., 2004, Economics of Private Labels: A Survey of the Literature, Journal of Agricultural & Food Industrial Organization 2, and Steiner, R.L., 2004, The Nature and Benefits of National Brand/Private Label Competition, Review of Industrial Organisation 24, 105-127, provide recent surveys on both the economic literature and industry trends. Dobson, P., 2005, Exploiting Buyer Power: Lessons from the British Grocery Trade, Antitrust Law Journal 2, Table 4 summarizes evidence of the high penetration of own-label grocery products in the UK, which when averaged over the leading multiples far exceeds 50% for many categories such as bakery or dairy products.

[28] Such a notion of buyer power arising from a buyer's sophistication is used in Nordemann, J., 1995, Buying Power and Sophisticated Buyers in Merger Control Law: The Need for a More Sophisticated Approach, European Competition Law Review 5, 270-281, and Steptoe, M., 1993, The Power-Buyer Defense in Merger Cases, Antitrust Law Journal 61, 493-505.

expected. To see the implications of this, suppose that to have "substantial buyer power" in a particular market it is sufficient to have even only a small share, either of the total market or of the supplier's business, depending on which metric one applies. Should antitrust authorities therefore apply automatically, say as a first screen, a very low threshold for buyer power? We would argue that this is not necessarily the best approach. In fact, as the exercise of buyer power may, in sharp contrast to the exercise of seller power vis-à-vis final consumers, even increase consumer surplus, there cannot be a threshold that is applicable under all circumstances. In conclusion, any threshold should be arrived at and interpreted in conjunction with an analysis of the way in which consumer harm might arise from buyer power under the particular circumstances.[29]

Key Point 4: *When determining a critical threshold for buyer power, this should not be done in isolation from the potential theory of harm that would be (subsequently) applied. In contrast to the exercise of (horizontal) market power, there is not even a clear presumption that the exercise of buyer power causes consumer detriment.*

4. Consequences and the Potential Harm of the Exercise of Buyer Power

4.1 (Short-run) Impact on Downstream (Retail) Prices

Our focus here is exclusively on a consumer standard. Hence, we are not considering it as harm in itself if the exercise of buyer power only hurts a supplier or leads to inefficiencies that, say because the final price was determined in a competitive (world) market, would not affect final consumers.[30]

Dating back at least to Galbraith, large and powerful retailers have often been pictured as "agents" of final consumers. More generally, if an industry is characterized by successive mark-ups, then if buyer power reduces the mark-up that can be commanded by the next higher level, this tends to reduce final prices. However, it is important that, at least in the short run, this is a reduction of the *marginal* purchasing price. If, instead, a more powerful retailer ends up simply demanding a larger slotting fee, since this does not affect the marginal wholesale price this would leave the retailer's own pricing policy unchanged in the short run.

If buyers compete downstream, then a discount to one buyer may force all retailers to lower their prices. This makes, however, two presumptions. The first presumption is that this possible virtuous cycle will not turn into a vicious cycle of competing buyers being

---

[29] The term "substantial buyer power" deserves clearly some comments. As noted previously, we abstract here from issues of buyer power as a countervailing force, e.g., as a defence in upstream merger cases. We would suggest, however, it is important to carefully distinguish between such countervailing power and "substantial buyer power" in the present sense, which provides the ability (though not necessarily the incentive) to engage in potentially anti-competitive behaviour. (A similar distinction is made in the OFT's commissioned work on buyer groups, which is soon to be published. We thank Adrian Majumdar for pointing this out to us.)

[30] Schwartz, M., 2004, Should Antitrust Assess Buyer Market Power Differently than Seller Market Power? Presentation at the DOJ/FTC Workshop on Merger Enforcement, Washington D.C., and Inderst, R. and Shaffer, G., 2005, The Role of Buyer Power in Merger Control, Chapter Prepared for the ABA Antitrust Section Handbook, Issues in Competition Law and Policy (W.D. Collins, ed., in preparation) provide some discussion about the choice of the (appropriate) standard where buyers are not final consumers.

squeezed too much and exiting the market, which could result in higher concentration and prices in the long run. Though highly speculative, this argument was key in Rewe/Meinl.[31] The second presumption is that even if all other buyers stay in the market, the discount that is given to the more powerful buyer will not have a "waterbed" effect on the purchasing prices of other, less powerful retailers.[32] The most basic argument that is sometimes used to support the existence of such a "waterbed effect" is that in order to remain in business, suppliers are simply "forced" to recoup elsewhere the margins they lost in their transactions with more powerful retailers. This begs the question, however, of why suppliers would now be able to charge significantly higher prices without rivals undercutting them in the market. Put differently, the argument leaves unanswered the question of why suppliers could not have set higher prices to these retailers before.

Recent economic research has, however, provided some theoretical foundations for a possible "waterbed effect". If the rise of a powerful buyer erodes suppliers' profits, then in the long run some suppliers may be forced to exit or merge with other suppliers in order to survive. This may put upward pressure in particular on the wholesale prices faced by less powerful retailers.

Even if the upstream market structure remains unchanged, smaller and less powerful buyers' bargaining position may deteriorate in the face of more competitive pricing by their larger, more powerful rivals. This may be the case as their weaker competitive position and their smaller volume makes them less attractive for other suppliers or, likewise, makes it less credible and profitable for them to switch suppliers. As the value of their outside option deteriorates, their current suppliers may indeed be able to raise prices.[33] However, it is important to note that even with a waterbed effect final consumers may not suffer. If the effect of the powerful buyer's lower costs is sufficiently strong, rival buyers that compete with it downstream may still be forced to lower their prices.

Key Point 5: *The strength of a presumption that the exercise of buyer power lowers retail prices should depend on both the nature of observed contracts (e.g. whether buyer power secures marginal cost savings) and upon the extent to which one can reasonably rule out simultaneous large increases in the wholesale prices faced by other, competing buyers (e.g. where their fallback options are reduced as a result of the exercise of buyer power).*

---

[31] Of such a virtuous circle the Commission commented "In the short term, final consumers may benefit from the process, as there may be a period of intense (predatory) competition in the distribution market during which the powerful buyer/trader is forced to pass on his savings to consumers. But this will last only until such time as a structure (as in this case, an individual dominant position) is arrived at in the distribution market which leads to a clear reduction in competitive intensity." Commission Decision of 3 February relating to proceedings under Council Regulation (EEC) No 4064/89 (Case No IV/M.1221 – Rewe/Meinl), paragraph 55.

[32] This possibility is explicitly recognized in the European Commission's Guidelines on horizontal agreements, here in the form of buyer groups (European Commission (2001, par. 126 and 135)).

[33] It should be noted that these arguments, as well as the underlying research, only postulate that a waterbed effect is logically consistent. Anecdotal evidence from the retail industry, however, also suggests that sometimes, at least if this applies to equally strong retailers, there may also be an "anti-waterbed effect" in that, after hearing that a close competitor got a discount, another retailer may succeed in pushing through the same discount for himself.

4.2 Implications for the Upstream Industry

It is often suggested that the exercise of buyer power could stifle suppliers' incentives to invest and innovate.[34] However, the presence of a large, powerful buyer may also help to overcome the underlying contractual problems between suppliers and buyers in the first place. While small buyers may try to free ride, a large buyer may have sufficient incentives to co-sponsor the investment. Furthermore, the presence of fewer but larger buyers may reduce transaction costs and co-ordination problems, thereby allowing for more efficient contracting on how to share the costs and profits of new investments. Finally, a supplier may also be more willing to share sensitive information with only a few, large buyers, thereby providing a better overall framework for long-term investment.

More generally, a reduction in a supplier's profits does not necessarily imply that its incentives to invest and innovate are lower. Such incentives should depend less on the overall level of its profits and more on the difference between its profits with and without the investment. To be more precise, note that when negotiating with a large retailer the value of the supplier's outside option depends crucially on how well the supplier can cope with losing that retailer's channel to final consumers (possibly a large fraction of the retail market). With only an inferior product at hand, it may be harder for a supplier to create additional sales elsewhere. Likewise, selling more through other retailers may then only be possible at a substantial reduction in price. To shore up its own bargaining power vis-à-vis a retailer who controls a large fraction of the market, a supplier may thus have even higher incentives to improve its product. Furthermore, by making its own product more attractive or making its production more efficient, a supplier increases the loss that it is able to inflict on a retailer by supplying only rival retailers, thereby undermining the value of the retailer's outside option. With large, powerful buyers, who otherwise have very attractive outside options, this could provide additional incentives to invest and innovate.

Finally, it should always be born in mind that when harming competition among their suppliers (whether in terms of innovation or other dimensions of competition such as price and quality), buyers may ultimately end up harming their own interests. Though theory indicates that in some circumstances a powerful buyer might harm upstream competition where other buyers would feel the adverse impact (e.g. through worse terms of supply) much more than the powerful buyer in question, in other circumstances it would be large and powerful buyers in particular that are most adversely affected if suppliers cut back on investment. This follows as, by definition, powerful buyers are able to extract a larger share of the jointly realized profits and should thus have the highest incentives to ensure that the total "pie" is maximized.

[34] For instance, a report by the FTC, Entering the 21st Century: Competition Policy in the World of B2B Electronic Marketplaces, 2000, Report by the Federal Trade Commission Staff, raises concerns that when facing increasingly powerful buyers, "suppliers respond by under-investing in innovation or production". Likewise, a report on buyer power prepared for the European Commission suggests that when facing powerful buyers, suppliers may "reduce investment in new products or product improvements, advertising and brand building"; EC, 1999, Buyer Power and its Impact on Competition in the Food Retail Distribution Sector of the European Union.

Key Point 6: *Though the exercise of buyer power should reduce suppliers' profits, this need not negatively affect their incentives to invest and innovate. For incremental investment decisions it is not suppliers' absolute level of profits that is important. Moreover, as powerful buyers can also extract a larger share of all future profits, they may have even lower incentives to exercise their power in a way that would compromise suppliers' investments.*

5. Policy Responses

Where substantial buyer power has already been created and if it is likely to hurt consumers, particularly in the long run through its impact on the upstream industry, some antitrust authorities have resorted to directly controlling contracts. The UK's "Code of Practice" represents such a step in the grocery industry.

The respective restrictions are aimed at prohibiting the imposition of abusive or exploitative terms of supply. For instance, such terms and practices include undue delay of payments, retrospective reductions in price, or changing specifications (including quantity) without giving reasonable notice to affected suppliers.[35] More generally, the tendency to leave some of the terms of supply open and incomplete has also been identified as a potential means by which powerful buyers could extract higher profits from their suppliers.

In general, imposing restrictions on the way in which suppliers and (powerful) buyers conduct their business could provide a means to shift bargaining power. For instance, preventing powerful retailers from delisting suppliers without giving them a sufficiently long period of notice could both increase the supplier's and reduce the retailer's outside option in negotiations, thus potentially allowing the supplier to extract a larger share of the jointly realized profits. Other restrictions that have been suggested more directly affect the form of bilateral contracts. If these measures leave, however, the distribution of bargaining power unchanged, i.e., if they do not affect the two sides' outside options, then a powerful buyer could simply use different contractual instruments, e.g., additional discounts instead of longer terms of payment. Moreover, if outright prohibitions of particular contractual practices severely restrict contractual freedom, then these restrictions may well result in a loss of efficiency. In particular, a powerful buyer may have no incentive to impose inefficient contractual terms as, after all, it is the buyer that extracts the lion's share of the realized surplus.

We want to illustrate these observations with a particular example, namely the alleged practice of leaving open some terms of the contract or imposing unilateral changes. As has long been recognized in the literature on law and economics, it may sometimes indeed be efficient to leave contracts open to "self-completion" by one party.[36] Though this may leave one party at a disadvantage ex-post, the efficiency gains that are realized by using this contract instead of another may be sufficient to (ex-ante) compensate this

[35] For a very detailed account see Dobson, P., 2006, Buyer-led Vertical Restraints, Chapter Prepared for the ABA Antitrust Section Handbook, Issues in Competition Law and Policy (W.D. Collins, ed., in preparation).
[36] For an overview, see Masten, S.E., 1999, Contractual Choice, in Boukaert, B. and De Geest, G. (eds.), *Encyclopedia of Law & Economics* (Cheltenham and Northampton: Edward Elgar).

party. Moreover, giving retailers (explicitly or implicitly) the right to ex-post adjust some contractual terms, or to delay payment without paying interest, may reduce incentives for suppliers to behave opportunistically, for example in their choice of quality or the time of delivery. Though this in turn may expose the supplier to opportunistic behaviour by the retailer, the retailer may be disciplined by its desire to uphold its reputation with respect to all other suppliers. Applied for example to late payments, one could also speculate that powerful retailers use their discretion as a flexible tool for such an ex-post adjustment of contractual terms, acting once again in a "quasi-judicial" function.[37]

Key Point 7: *Seemingly "abusive" practices between suppliers and powerful buyers may enhance overall efficiency. Moreover, if a restriction on some contractual practice does not structurally change the allocation of bargaining power, e.g., through increasing the supplier's outside option, this may only lead to the extraction of profits from the supplier by less efficient contractual provisions.*

While the discussion of policy responses so far centres on protecting suppliers, we discussed also the potential for selective and non-cost related discounts to cause consumer detriment by eroding the competitive position of other retailers.

Much ink has been spilled on the pros and cons of disallowing discriminatory pricing. At least on the other side of the Atlantic, where antitrust authorities have become reluctant to pursue cases of unlawful discriminatory pricing under the Robinson-Patman act, the mainstream opinion of antitrust economists seems to be that such a restriction causes more harm than good. An alternative approach may be to force suppliers to disclose the discounts they grant to individual buyers. However, if not combined with the threat of intervention in cases where price differentials become too large, it is doubtful how this would generally force a supplier to grant similar discounts to all buyers. In contrast, making all wholesale prices publicly observable may allow the supplier to commit not to act opportunistically by giving secret discounts to individual buyers, which could allow it to monopolize the downstream market despite the presence of competing retailers. Also, greater transparency may allow suppliers to sustain a collusive scheme, raising prices for all buyers and final consumers.[38]

---

[37] This term is borrowed from Arrunada, 2005, The Quasi-Judicial Role of Large Retailers: An Efficiency Hypothesis of Their Relation with Suppliers, Economics and Business Working Papers Series 445. Based on evidence from a study among European companies he concludes that there is no obvious relationship between measures of retailer power and payment periods. (On the other hand, he finds that payment periods are longer for goods where it takes the longest to know their quality in detail (e.g., textiles vs. perishable food), which seems to support the efficient contracting perspective.)

[38] Albaek, S., Mollgaard, P., Overgaard, PB., 1997, Government-Assisted Oligopoly Coordination? A Concrete Case, The Journal of Industrial Economics 45, 429-443, show for the Danish ready-mixed concrete industry that this is more than just a theoretical possibility. Interestingly, they report that the Danish competition authority has also taken the step of publishing the *negotiated prices* of the largest wholesalers in a number of industries, including the production of flat glass, double-glazed windows and electrical suppliers.

6. Concluding Remarks

Issues of buyer power have become increasingly important in antitrust, and not just in the areas of distribution and retailing. An analysis that is not thoroughly grounded in economic theory, in particular in bargaining theory, risks making profound mistakes both regarding the sources and measures of buyer power and regarding the potential competitive harm of its exercise. In particular, the concepts and insights from the analysis of seller power (vis-à-vis final consumers) cannot be directly applied to the analysis of buyer power in bilateral negotiations.

Our analysis, which rests on a growing literature on buyer power in economics but has to remain selective, points, amongst others, to the following potential pitfalls. Taking the textbook view, which equates buyer power with monopsony power, the starting presumption could be that the exercise of buyer power should lead to a reduction of total supply, while typically the opposite may be more likely. Next, one may want to equate buyer power with some measure of overall dependency such as the ratio of the buyer's and the supplier's overall business or the ratio of the respective fractions for which they account. As we argued, this may often bear no relation to the actual distribution of bargaining power. Also, an analysis of competitive harm arising from the exercise of buyer power, both with respect to suppliers and with respect to competing buyers, must be guided by an economic analysis of the underlying bargaining situation. We illustrated this, in particular, in relation to the "waterbed" effect and in relation to suppliers' incentives to invest and innovate. Finally, the choice of policy measures aimed either at curbing buyer power at its source, or at limiting its potentially harmful consequences, also needs a thorough economic underpinning. We illustrated this, in particular, with a discussion of the possible inefficiencies that could arise when restricting supposedly exploitative terms.