Israel Economic Review Vol. 9, No. 1 (2011), 29–51

PARTIAL VERTICAL INTEGRATION IN TELECOMMUNICATION AND MEDIA MARKETS IN ISRAEL[1]

DAVID GILO[*] AND YOSSI SPIEGEL[**]

1. INTRODUCTION

Partial vertical integration is common in many telecommunication and media markets in Israel. That is, there are many cases in which the supplier of an input holds a partial (often controlling) stake in the input's customer (which we call the "distributor" for concreteness), or the distributor holds a partial ownership (often controlling) stake in the supplier.[2] This is in contrast to full vertical integration, in which the supplier holds 100% of the distributor's equity, or the distributor holds 100% of the supplier's equity. For example, since early 2010, when it took over Bezeq, Eurocom Communications Ltd. which imports Nokia cellular phones to Israel has an indirect control over Pelephone, which is the third largest cellular operator in Israel and buys cellular phones from Eurocom for its customers. However, even though Eurocom now indirectly controls Pelephone, its stake in Pelephone is far below 100%. Similarly, Bezeq International Ltd., which is fully owned by Bezeq, currently holds a 67% stake in Walla! Communications Ltd., which operates the Walla internet portal. Walla, Bezeq International and Bezeq, are (partially) vertically integrated because Walla requires internet-access services that Bezeq International supplies, and it also requires access to the infrastructure that Bezeq supplies.

When the markets that the supplier or the distributor operate in are concentrated, as is the case in many telecommunication and media markets in Israel, vertical integration raises a concern for either "upstream foreclosure" – the vertically integrated firm will refuse to buy, or will buy at inferior terms from competing suppliers – or "downstream foreclosure" - the vertically integrated firm will refuse to sell, or will sell at inferior terms to competing distributors. This paper examines whether partial vertical integration alleviates or exacerbates these concerns, and assesses the resulting implications for various cases of partial vertical integration in telecommunication and media markets in Israel.

The rest of the paper is organized as follows: In Section 2, we review existing literature several that examines the concerns for vertical foreclosure that results from full vertical

[1] This paper was prepared for the Sapir Forum on the subject of "Regulation in Israel." We would like to thank the Sapir Forum for its financial support for writing the paper.
[*] The Buchman Faculty of Law, Tel-Aviv University, email: gilod@post.tau.ac.il.
[**] Recanati Graduate School of Business Administration, Tel Aviv University, email: spiegel@post.tau.ac.il, http://www.tau.ac.il/~spiegel.
[2] The term "distributor" is used solely for convenience: the input's buyer could also be a manufacturer that uses the input to produce a final product (e.g., a manufacturer of concrete that merges with a cement manufacturer, or a manufacturer of reinforcing steel bars that merges with a steelmaker). Here, the term "distributor" refers to the buyer, while the term "supplier" refers to the seller.

integration. In Section 3, we discuss how partial vertical integration can affect the concern for either upstream or downstream foreclosure. We argue that relative to full vertical integration, partial ownership of the distributor by the supplier ("forward vertical integration") exacerbates the concern for upstream foreclosure of competing suppliers, but alleviates the concern for downstream foreclosure of competing distributors. These conclusions are reversed when the distributor controls the supplier by holding a partial ownership stake ("backward vertical integration"). In Section 4, we review several prominent cases of partial vertical integration in the Israeli telecommunication and media markets, and discuss them in light of the insights from the analysis in Section 3. Finally, in Section 5, we extend the policy conclusions regarding partial vertical integration in several directions.

2. HOW DOES VERTICAL INTEGRATION AFFECT THE INCENTIVE TO FORECLOSE INDEPENDENT SUPPLIERS OR DISTRIBUTORS?

The economic literature on vertical integration has examined, among other things, the possibility that vertical integration will lead to either upstream or downstream foreclosure (for a recent literature review, see Rey and Tirole, 2007, and Riordan 2008). In this section we review some of the key theoretical models on this issue, as well as several relevant empirical studies.

a. Theory

Most of the theoretical literature on the effect of vertical integration on the incentive to foreclose competing suppliers or distributors, has focused on full vertical integration. We review this literature briefly in this section. To the best of our knowledge, the literature on partial vertical integration and its effect on vertical foreclose is still very small - we review it in Section 3 of the paper.

One of the first papers to study the effect of vertical integration on the incentive to foreclose competing distributors was Salinger (1988). He examines a model in which several competing suppliers manufacture a homogenous input and sell it to several competing distributors who use it to manufacture a final product. Salinger shows that vertical integration between one of the suppliers and one of the distributors creates two opposing effects: first, following the merger, the merged entity chooses to foreclose competing distributors, because its profit from using the input itself to produce the final product exceeds its profit from selling the input to competing distributors. The merger, therefore, reduces the number of suppliers that independent distributors can buy from, and hence increases the input's price. Second, the merger eliminates the double marginalization within the merged entity and therefore induces it expand its sales to final consumers.[3] This expansion in turn, lowers the profitability of independent distributors, and hence lowers

[3] For a detailed discussion of the double marginalization problem, see Tirole (1988). In Section 5b below, we discuss the implications of partial vertical integration for the double marginalization problem.

their demand for the input. This effect lowers the input's price. Salinger concludes that vertical merger could either increase or decrease the input's price. When the input's price falls, the vertical merger leads to a decrease in the price of the final product, and therefore it benefits final consumers. When the input's price increases due to the merger, independent distributors contract their output, and since the merged entity expands its own output, it is difficult to tell a-priori the overall effect in the final market and hence the effect of the merger on final consumers.

Another paper that examines the incentive of a vertically integrated firm to foreclose competing distributors is Ordover, Salop and Saloner (1990). In their model, two distributors, A and B, market a product to final consumers. To produce the final product, the two distributors buy a homogenous input from two competing suppliers, A and B. Ordover, Salop and Saloner show that following a merger between supplier A and distributor A, the vertically integrated firm will have an incentive to foreclose distributor B because this action gives supplier B monopoly power vis a vis distributor B, and therefore raises the price that distributor B ends up paying for the input. Consequently, distributor A gains a strategic advantage over distributor B in the final market. Since distributor B ends up paying a higher price of the input, the price of the final product increases as well and hence the merger harms final consumers.

Reiffen (1992) claims that the foreclosure strategy that Ordover, Salop and Saloner consider is not credible: once supplier B raises the price it charges distributor B for the input, supplier A will have an incentive to offer the input to distributor B at a slightly lower price. This offer will only have a negligible effect on distributor B's cost and will allow supplier A to make a profit on sales of the input to distributor B. To illustrate, imagine that before the merger, the input's price is 8 dollars per unit, and imagine that following the merger between supplier A and distributor A and the foreclosure of distributor B by supplier A, the rival supplier, supplier B, asks distributor B to pay him for the input 10 dollars per unit. Since distributor B's cost increases, he becomes a weaker rival in the final market; this boosts the profit of distributor A in the final market. Now, the merged entity can offer the input to distributor B at a price of, say, 9.90 dollars per unit. This offer, if accepted, only has a negligible effect on distributors B's costs and hence on distributor A's profits. Reiffen claims that supplier B would anticipate that once it raises the input's price it will be undercut by the merged entity and will therefore refrain from raising the input's price in the first place. Hence, the vertical merger should not harm distributor B as Ordover, Salop and Saloner claim. Ordover, Salop and Saloner (1992) reply to this criticism by arguing that in a broad range of cases, the criticism is unrealistic: for example, if distributor B invites offers from the two suppliers and allows them to react to each other's offers, then the merged supplier has no incentive to undercut supplier B, as it anticipates that any offer it gives distributor B will be undercut by supplier A thereby undermining its strategic advantage over distributor B. Ordover, Salop and Saloner (1992) therefore claim that under realistic circumstances, the merged entity can credibly commit to foreclose distributor B.

Chen (2001) examines a similar model to that of Ordover, Salop and Saloner (1990), but in his model the distributors need to choose in advance which supplier they wish to buy from. Chen shows that when the merged entity produces the input more efficiently than competing suppliers, independent distributors will have an incentive to buy the input from the merged entity, even if it charges them a higher price. As a result, competing suppliers are foreclosed. It is important to note that in this model, foreclosure is not a deliberate refusal to sell by the merged supplier, but rather a result of the independent distributors' preference to buy the input from the merged entity rather than from independent suppliers. The reason for this preference is that buying the input from the merged entity induces it to soften its behavior in the final market in order to boost the sales of independent distributors and hence its own profit from selling the input to these independent distributors. Chen shows that vertical integration has two opposing effects: first, it induces the vertically integrated firm to soften its behavior in the final market; this effect harms consumers. Second, the merger eliminates the double marginalization problem within the merged entity and can therefore lower the price of the final product.

Bolton and Whinston (1991, 1993) examine a model in which two distributors buy an input from a single supplier. The distributors do not compete with each other in the product market, but since there is a limited supply of the input in some states of nature, they may compete with each other for the right to buy the input. The distributor that ultimately gets the input is the one who earns a higher profit from using the input and hence can pay the supplier a higher price. Bolton and Whinston assume that the profit that each distributor makes by using the input is a random variable, but each distributor can increase the probability that this profit is high by investing. Without vertical integration, the two distributors invest an equal amount, so each has a 50% chance to buy the input in case of a supply shortage. The key observation here is that the distributors' investments have a positive externality on the supplier's profit, because they raise the distributors' willingness to pay for the input. Vertical integration between one of the distributors, say distributor A, and the supplier internalizes this externality and hence boosts the merged entity's incentive to invest. Since the distributors' investments are strategic substitutes (each distributor invests less if he expects that his rival will invest more), distributor B that did not merge invests less in equilibrium. Given that distributor A invests more while B invests less, the probability that distributor B ends up buying the input when there is a supply shortage is now less than 50%. Bolton and Whinston interpret this result as downstream foreclosure, even though distributor B is actually foreclosed only if there is a supply shortage and if its willingness to pay for the input is lower than that of the merged entity. Moreover, as in Chen's case, foreclosure here is not a deliberate refusal to sell but rather the outcome of the effect of integration on the incentives of the two distributors to invest.

b. The foreclosure effect of vertical mergers in telecommunication and media markets - empirical findings

Several papers have examined the competitive effect of vertical integration in the cable TV industry in the U.S.[4] Waterman and Weiss (1996) find that relative to average nonintegrated cable TV systems, cable systems owned by Viacom and ATC (the two major cable networks that had majority ownership ties in the four major pay networks, Showtime and

[4] For a comprehensive review of vertical integration in the cable TV industry, see Waterman and Weiss (1997).

the Movie Channel (Viacom) and HBO and Cinemax (ATC)) tend to (i) carry their affiliated networks more frequently and their rival networks less frequently, (ii) offer fewer pay networks in total, (iii) "favor" their affiliated networks in terms of pricing or other marketing behavior.

Chipty (2001) also finds evidence that vertical integration between cable TV operators and content suppliers leads to the foreclosure of competing content suppliers. In particular, she finds that operators that own premium movie services are less likely to carry the rival basic movie service, American Movie Classics (AMC). In addition, TCI and Comcast, two operators who own the basic shopping service QVC, are less likely to carry rival shopping service Home Shopping Network (HSN), and they are less likely to carry both QVC and HSN. At the same time, there are also significant efficiency gains from vertical integration: operators integrated with basic programming offer somewhat larger basic cable packages with less program duplication and more premium services. And, operators integrated with premium programming offer smaller, cheaper basic cable packages though they also offer significantly fewer premium choices at higher prices. Chipty concludes that vertical integration does not harm, and may actually benefit consumers.

Ford and Jackson (1997) find that concentration and integration between cable operators and content providers lower the programming cost to cable systems affiliated with larger multiple-system operators. These discounts are partially passed along to consumers in the form of lower prices.

3. HOW DOES THE CONCERN FOR FORECLOSURE CHANGE WHEN VERTICAL INTEGRATION IS PARTIAL?

When a supplier and a distributor are partially integrated, their objective functions do not coincide; this affects the incentive of the merged entity to foreclose competing suppliers or distributors. To see why, note that the downstream foreclosure of competing distributors diverts profits from the input market to the final market, as it lowers the supplier's profit from selling the input to competing distributors and as it boosts the distributor's profit in the final product by hurting its rivals. By contrast, upstream foreclosure of competing suppliers diverts profits from the final market to the input market. The diversion of profits from market A to market B is more likely to be profitable when the controlling firm obtains 100% of the profit in market B, but less than 100% of the profits in market A. Moreover, this effect if stronger the smaller the (partial) ownership stake of the controlling firm in market A. Therefore, downstream foreclosure which diverts profits from the input market to the final market is more likely to be profitable if the distributor controls the supplier with a partial ownership stake, and is less likely to be profitable if the supplier controls the distributor with a partial ownership stake. Likewise, upstream foreclosure that diverts profits from the final market to the input market is more likely to be profitable if the supplier controls the distributor with a partial ownership stake, but is less likely to be profitable if the distributor controls the supplier with a partial ownership stake.

Apart from the size of the partial controlling stake, the incentive engage in vertical foreclosure also depends on the market shares of the merging firms. There are two reasons for this. First, the larger the market share of the firm that benefits from the foreclosure, the greater is the incentive to foreclose competing firms, both because the benefit of foreclosure is larger and because the cost of foreclosure is smaller (competing firms have smaller market shares so the lost profit from not selling to them is limited). Second, the larger the market share of the foreclosing firm, the more severe is the resulting anticompetitive effect.

a. Partial forward integration

In order to illustrate how partial forward integration affects the incentive to foreclose rivals, suppose that supplier A controls distributor A by holding 60% of distributor A's equity. As we saw above, upstream foreclosure of competing suppliers by distributor A (either by refusing to buy from them or by buying from them under inferior terms), will generally lower the profits of distributor A, but at the same time it will give supplier A a competitive advantage in the input market over competing suppliers. Let us denote the increase in supplier A’s profit in the input market by S_A and the decrease in distributor A’s profit in the distribution market by D_A. Clearly, under full integration, the merged entity would have an incentive to foreclose competing suppliers only if $S_A > D_A$.

However, when supplier A’s stake in distributor A’s profit is 60%, supplier A is interested in foreclosing competing suppliers whenever $S_A > 0.6D_A$. That is, supplier A now has an incentive to use its control over distributor A to foreclose competing suppliers for a larger range of values of S_A and D_A. Of course, according to the Companies Law, supplier A is not allowed to use its control over distributor A to further its own interests at the expense of the minority shareholders.[5] However, in practice it is very hard to enforce this legal duty due to the difficulty of third parties to verify that the foreclosure of the competing suppliers is not done in good faith and for legitimate business reasons.

The larger the market share of distributor A in the final market, the greater the competitive harm to final consumers; this is because a larger number of final consumers will not be able to find the products of competing suppliers when they buy from distributor A (or will be able to buy these products only under inferior terms). Furthermore, the larger share of supplier A in the input market will facilitate foreclosure by making it less costly for distributor A to foreclose competing suppliers.[6] Therefore, an increase in the market shares of supplier A and distributor A will facilitate foreclosure and make it more harmful to final consumers.

[5] According to Sections 192 and 193 of the Israeli Companies Law, “a holder of control in the company” needs to fulfill his duties towards the company and towards other shareholders “with good faith and in a customary manner, and shall avoid exploiting his power in the company,” and “shall avoid discriminating against other shareholders.”

[6] When competing suppliers have large market shares, their foreclosure by distributor B will greatly harm the demand recorded by distributor B, and will lead to increasing abandonment of customers in favor of competing distributors.

By contrast, downstream foreclosure of competing distributors by supplier A will lower supplier A's profit in the input market, but will give distributor A a strategic advantage in the final market over competing distributors. Using the same notation as before, let S_A be decrease in supplier A's profit in the input market and let D_A be the corresponding increase in distributor A's profit in the final market. Under full vertical integration, foreclosure will occur whenever $D_A > S_A$. However, when supplier A only holds 60% of distributor A's equity, he will have an incentive to foreclose competing distributors only when $0.6D_A > S_A$. Here, the partial ownership stake of supplier A in distributor A shrinks the set of values of S_A and D_A for which foreclosure is profitable. Intuitively, supplier A bears the full cost of foreclosure in the input market, but enjoys only 60% of the corresponding benefits in the final market. It is easy to see that a decrease in supplier A's controlling stake in distributor A will alleviate the concern for downstream foreclosure of competing distributors even further by shrinking the range of parameters for which foreclosure is profitable.

b. Partial backward integration

The conclusions regarding the effect of partial integration on the incentive to foreclose competing firms are reversed when distributor A controls supplier A with a 60% ownership stake ("partial backward integration"). Now, distributor A captures the full profits and losses in the final market but only 60% of the profits and losses in the input market. Thus, if foreclosing competing suppliers raises supplier A's profit by S_A and lowers distributor A's profit by D_A, then distributor A will agree to foreclose suppliers only if $0.6S_A > D_A$. As a result, distributor A will have a weaker incentive to foreclose competing suppliers in comparison to the full integration case.

On the other hand, if foreclosing distributors increases the profit of distributor A in the final market by D_A, but lowers the profit of supplier in the input market by S_A, then distributor A will now have an incentive to use its control of supplier A to foreclose competing distributors whenever $D_A > 0.6S_A$. That is, now downstream foreclosure is profitable for a wider range of values of D_A and S_A. The reason for this is that distributor A captures the full increase in D_A, but bears only 60% of the decrease in S_A.

As in the case of partial forward integration, here too the competitive harm to consumers is exacerbated when supplier A and distributor A have larger market shares. An increase in the market share of supplier A exacerbates the harm to final consumers, since now the consumers of competing distributors will not be able to buy supplier A's products or will only be able to buy them at inferior terms. An increase in the market share of distributor A means that competing distributors have smaller market shares, so foreclosing them is less costly for supplier A.

c. Summary

Table 1 summarizes the discussion so far. It shows how partial vertical integration affects the incentive to foreclose competing suppliers or distributors, compared to the full integration case. A plus sign in the table indicates that compared to full vertical integration, the incentive to foreclose is stronger, while a minus sign indicates the opposite.

Table 1
The Influence of Partial Vertical Integration on the Incentive to Foreclose Competing Firms

	Partial Forward Integration	Partial Backward Integration
Downstream foreclosure	-	+
Upstream foreclosure	+	-

Table 1 shows that under partial ownership, the controlling firm has a stronger incentive to use its control in order to foreclose its direct rivals, but has a weaker incentive to foreclose the rivals of the firm it controls. In particular, when a supplier controls a distributor, with an equity stake of less than 100% ("partial forward integration"), the supplier has a stronger incentive to use its control to foreclose competing suppliers relative to the full integration case. At the same time, the supplier has a weaker incentive to foreclose competing distributors relative to the full integration case. These conclusions are reversed when the distributor controls the supplier by holding a partial ownership stake ("partial backward integration"): relative to the full integration case, now the distributor has a stronger incentive to foreclose competing distributors and a weaker incentive to foreclose competing suppliers.

d. Relevant economic literature

To the best of our knowledge, the economic literature on partial vertical integration and its effect on vertical foreclosure is quite small. Greenlee and Raskovich (2006) examine a model in which two distributors compete with each other in the final market and buy an input from a single supplier. The two distributors have partial ownership stakes in the supplier, but these stakes are passive: the distributors are unable to influence the price that the supplier charges for the input. However, the distributors' stakes in the supplier's profit affect their behavior in the final market, because each distributor gets back part of the payment for the input due to his ownership stake in the supplier. Hence the price of the input from the distributors' point of view is now lower.

Greenlee and Raskovich show that an increase in distributor A's stake in the supplier has two opposing effects: first, it lowers the price of the input from distributor A's perspective, and therefore induces the distributor to expand its output. Since the distributors' strategies in Greenlee and Raskovich are strategic substitutes, the increase in distributor A's output induces distributor B to contract its own output, though by less than the expansion in distributor A's output. Therefore, the supplier faces a larger demand for its input, and hence raises its price. Second, the increase in the input's price lowers the distributors' demand for the input, and hence induces them to cut their output levels. Greenlee and Raskovich show that the two effects cancel each other out, so in the end, the distributors' aggregate output does not change. As a result, the price of the final product does not change and consumers are not affected.

Reiffen (1998) examines empirically the effect of partial vertical integration on the incentive to foreclose rivals. Specifically, he studies the stock market reaction to Union Pacific (UP) Railroad’s attempt in 1995 to convert a 30% nonvoting stake in Chicago Northwestern (CNW) Railroad to voting shares. A group of competing railroads argued that since the remaining 70% of CNW's shares were held by dispersed shareholders, UP would gain effective control over CNW and would use it to foreclose them from some of CNW’s transportation routes. Reiffen finds however that CNW’s stock price reacted positively, rather than negatively, to events that made the merger more likely to take place. This is inconsistent with the idea that UP would have diverted profits from CNW to itself by foreclosing competing railroads.

The following example from Reiffen’s paper demonstrates how foreclosing a distributor could be profitable under partial vertical integration, even though it is not profitable under full integration. Two competing railroad companies, 1 and 2, need access to a railroad owned by railroad company 3 in order to ship freight for a customer who is willing to pay 100 dollars for the service. Firms 1’s cost of shipment is 11 dollars and firm 2’s cost is 10 dollars. If firm 3 demands 89.50 dollars for accessing its railroad, then firm 2 will accept the offer and will make a profit of 100 – 10 – 89.50 = 0.50 dollars. Firm 1, on the other hand, will reject the offer since accepting yield a negative profit of 100 – 11 – 89.50 = -0.50 dollars. This situation does not change if firms 1 and 3 fully merge. The merged entity can still charge firm 2 a price of 89.50 for accessing its railroad and thereby make a profit of 89.50. This profit exceeds the profit that the merged entity can earn by shipping the freight itself, in which case its profit is merely 100 – 11 = 89 dollars.

Let us now assume that firm 1 controls firm 3 with a 30% equity stake. If firm 3 gives firm 2 access to its railroad for 89.50 dollars, then firm 1’s profit is 89.50 x 30% = 26.85 dollars. By contrast, if firm 1 ships the freight and pays 87 dollars for accessing to firm 3’s railroad, then its direct profit is 100 – 11 – 87 = 2 dollars; in addition, firm 1 gets 30% of firm 3’s profit of 87 dollars, so the overall profit of firm 1 is 2 + 87 x 30% = 28.10 dollars. Therefore, firm 1 will use its control over firm 3 to foreclose firm 2, and will ship the freight itself even though it is more efficient to let firm 2 ship the freight. The example shows that foreclosing firm 2 can be profitable under partial integration, even though it is not profitable under full integration. The reason, of course, is that firm 1 increases its share in the joint profit of firms 1 and 3 at the expense of firm 3’s non-controlling shareholders who now earn 87 x 70% = 60.9 dollars instead of 89.50 x 70% = 62.65 dollars. That is, partial integration raises the payoff of firm 1’s shareholders by 1.25 dollars but lowers the payoff of the non-controlling shareholders of firm 3 by 1.75 dollars and also lowers the profit of firm 2 by 0.50 dollars.

4. PARTIAL VERTICAL INTEGRATION IN THE ISRAELI TELECOMMUNICATION AND MEDIA MARKETS

As mentioned in the Introduction, partial vertical integration is common in telecommunication and media markets in Israel. Below, we review some notable cases, and examine them in light of the economic insights that emerge from Section 3.

a. Samsung-Partner

In September 2009, the Israel Antitrust Authority (IAA) approved the merger between the importer of Samsung cellular phones to Israel, Scailex Corporation Ltd., controlled by Mr. Ilan Ben-Dov, and Partner Communications Company Ltd., which is the second largest cellular operator in Israel. As part of the merger, Scailex acquired 51% of Partner's equity from the Singaporean Hutchison Group.[7] According to Cellcom's annual report for 2009, the market shares of the cellular operators as of the end of 2009 were as follows: Cellcom - 34.6%, Partner - 32%, Pelephone - 28.9%, and Mirs - 4.5%.[8]

According to a survey conducted at the end of 2009, Nokia had a 45.7% share in the Israeli cell phones market, with Samsung having a market share of 20.4%, Sony Ericsson 13.4%, Motorola 7.6%, and LG 5%.[9] It is not obvious however how accurate these numbers are: according to Scailex, its share in the sales of cell phones to cellular operators in Israel was around 33% in 2009.[10] Nokia's market share in terms of sales was estimated at around 40% to 45%,[11] while Sony Ericsson's market share in terms of sales in 2009 was estimated at around 21%.[12] According to the Gartner technological consulting and research firm, the shares of cell phone producers in the global cell phones market in the first quarter of 2010 were as follows: Nokia - 36.2%, Samsung - 19.1%, LG - 9.9%, Motorola - 6.2%, and Sony Ericsson - 5.4%.[13]

The analysis in Section 3 suggests that the fact that Scailex holds only 51% of Partner's shares, exacerbates the concern that Partner will foreclosure competing cell phone suppliers. While it is true that such foreclosure would have a negative effect on Partner's profits, Scailex itself internalizes only 51% of the lost profits, while it enjoys 100% of the extra profit from the increase in its own sales of cell phones. This concern is exacerbated given the large market shares of the firms involved in the merger: Partner's large market share exacerbates the harm to Partner's customers from having a smaller choice of cell phones, while Scailex's relatively large market share in the cell phones market makes it easier for Partner to discriminate against other cell phone suppliers. Despite these considerations, the Antitrust Commissioner cleared the merger between Scailex and Partner without imposing any restrictions on the vertical relationship between Partner and the cellular phone suppliers that compete with Scailex. The Commissioner's only concerns regarding the merger were horizontal and involved the "Dynamic" retail chain store, owned by Scailex, which effectively operated as a retail arm of Cellcom, Partner's competitor, and sold cell phones to Cellcom customers and marketed Cellcom's various calling plans. The

[7] See the press release of the IAA of September 21, 2009, http://archive.antitrust.gov.il/files/10012/39-2009.pdf

[8] See Cellcom Israel annual report for the year ended December 31, 2009 on Form 20-F, http://maya.tase.co.il/bursa/report.asp?report_cd=51752 .

[9] See http://www.themarker.com/tmc/article.jhtml?ElementId=skira20091008_1119499.

[10] See Section 4.4.8 in the Periodic Report of Scailex Corporation Ltd. for 2009, http://maya.tase.co.il/bursa/report.asp?report_cd=526602.

[11] See http://it.themarker.com/article/7998.

[12] See http://www.bizportal.co.il/shukhahon/biznews02.shtml?mid=224299.

[13] See http://www.gartner.com/it/page.jsp?id=1372013

Commissioner required Scailex to cease this activity. Indeed in February 2010, Scailex sold the "Dynamic" chain store to Cellcom.

In a press release about the Scailex–Partner merger, the Antitrust Commissioner determines that "the large variety of cell phones offered by the other firms, and the even larger variety available worldwide and not marketed in Israel, will not enable Scailex to block Partner's competitors from supplying cell phones."[14] Indeed, the analysis in Section 3 reveals that given that Scailex holds only 51% of Partner, the concern for upstream foreclosure of competing cellular operators by Scailex is minimal since Scailex bears the full cost of this foreclosure, but captures only 51% of the associated profits.

b. Nokia-Pelephone

Eurocom Management Investments 2005 Ltd. (henceforth: Eurocom) is controlled by Mr. Shaul Elovitz with an ownership of 80%, and holds a 50.009% stake in Eurocom Communications Ltd. which imports and distributes Nokia cell phones in Israel.[15] Eurocom holds, as of October 2010, 70.85% of the shares of Internet Gold-Golden Lines Ltd.[16] The latter, for its part, holds, as of October 2010, 76.62% of the shares of B Communications Ltd. (formerly 012 Smile Communications Ltd.).[17] In April 2010, B Communications Ltd. acquired a controlling stake in Bezeq The Israel Telecommunication Corporation Ltd. (henceforth: Bezeq) by acquiring a stake of 30.44% in Bezeq from the Apax-Arkin-Saban group.[18] Because Bezeq fully owns Pelephone, Eurocom now indirectly controls Pelephone, with an ownership stake of 70.85% x 76.62% x 30.44% = 16.5% of Pelephone's.

Given that Eurocom supplies Nokia cell phones and indirectly controls Pelephone, which buys Nokia cell phones for its customers, there is concern that Pelephone will discriminate against competing suppliers of cell phones, such as Samsung, Sony Ericsson, Motorola, and LG. This concern is exacerbated by the fact that Eurocom holds a stake of only 16.5% in Pelephone as Eurocom internalizes only 16.5% of the lost profits of Pelephone from foreclosing competing cell phone suppliers, but it fully captures the associated benefits from this action. The resulting harm to consumers is likely to be significant given that Pelephone serves almost a third of the Israeli cellular market. Furthermore, the fact that Nokia's share in the cell phones market is over 40% makes it easier for Pelephone to foreclose competing cell phone suppliers.

The Antitrust Commissioner's decision to approve the merger between Scailex and Partner, which we discussed in the previous subsection, reveals that the Commissioner was not concerned with the possibility that cellular operators will foreclose suppliers of cell phones. The Commissioner's laconic justification for this decision is that there are many

[14] See the press release of the IAA of September 21, 2009, http://archive.antitrust.gov.il/files/10012/39-2009.pdf

[15] See http://mayafiles.tase.co.il/RPdf/358001-359000/P358741-00.pdf

[16] See http://maya.tase.co.il/bursa/CompanyDetails.asp?CompanyCd=2156&company_group=3000

[17] http://maya.tase.co.il/bursa/CompanyDetails.asp?CompanyCd=1422&company_group=3000

[18] See http://maya.tase.co.il/bursa/report.asp?report_cd=530080

suppliers of cell phones.[19] This justification, however, ignores the fact that the merger is only partial. In fact, the concern for upstream foreclosure of cell phone suppliers by Pelephone is even greater than the concern for the upstream foreclosure of cell phone suppliers by Partner, given that Eurocom's controlling stake in Pelephone is merely 16.5%, while Scailex's controlling stake in Partner is 51%. Moreover, Nokia's share in Israeli market for cell phones is larger than Samsung's share, and it is therefore easier for Pelephone to foreclose competing suppliers (when it relies on Nokia whose market share is over exceeds 40%) than for Partner (that can rely on Samsung whose market share is around 20%).[20]

On the other hand, the fact that Eurocom holds only 16.5% of Pelephone, alleviates the concern that Eurocom will foreclose Cellcom, Partner, and Mirs, which compete with Pelephone in the cellular operators market. The reason is that Eurocom bears fully the cost of such foreclosure but captures only 16.5% of the resulting increase in Pelephone's profits from such foreclosure.

c. Bezeq-YES

Bezeq serves 59% of all subscribers in the broadband internet infrastructure market,[21] and holds a 49.77% stake in DBS Satellite Services (1998) Ltd. (henceforth: YES),[22] whose share in the multi-channel TV broadcast market in Israel is around 38%.[23]

About two years ago, Bezeq sought to obtain control in YES by increasing its holdings from 49.77% to 58.36%. The Commissioner's opposition to the transaction,[24] which was ultimately upheld by the Supreme Court,[25] was based mainly on horizontal concerns. The Commissioner argued that the proposed control of YES would discourage Bezeq from using its internet infrastructure as a new platform for multi-channel TV broadcast services (IPTV services) that will directly compete with YES.

The Commissioner's opposition to the transaction was also based on "vertical" concerns: the Commissioner argued that Bezeq would reserve its internet infrastructure for the exclusive use of YES and would foreclose competing broadcasters. However, the proposed deal would have increased Bezeq's stake in YES to only 58.36%. Bezeq may be reluctant to sacrifice profits from infrastructure services to YES's rivals to obtain only 58.36% of YES's additional profits from this action. Furthermore, the proposed transaction

[19] See the press release of the IAA of September 21, 2009, http://archive.antitrust.gov.il/files/10012/39-2009.pdf

[20] See also the press release of the IAA of September 21, 2009, in which the Commissioner refers to this difference between the market shares of Nokia and Samsung: http://archive.antitrust.gov.il/files/10012/39-2009.pdf.

[21] See Bezeq Ltd., Periodic Report for 2009, Section 2.2.3, maya.tase.co.il/bursa/report.asp?report_cd=517756

[22] See Bezeq Ltd. Periodic Report for 2009, Section 1.1, "The group's activities and description of the business development."

[23] See Bezeq Ltd., Periodic Report for 2009, Section 5.7.1.

[24] See the IAA, Commissioner's decision 5000481 (2007).

[25] See Civil Appeal 2082/89, and the IAA, Ruling 5001462 (2009)

would have raised Bezeq's stake in YES by only 8%. It is therefore difficult to see how this increase would have significantly changed Bezeq's incentive to foreclose YES's rivals.

It is possible that the Commissioner was mainly concerned with the control that Bezeq would have gained by increasing its ownership stake in YES to above 50%. For example, suppose that Bezeq was prohibited, as a condition for approving the merger and by virtue of the Telecommunications Law, from discriminating against YES's rivals. The competitive concern in this case might be that Bezeq could have artificially raised the fees that it charges for access to its internet infrastructure. Using its control over YES, Bezeq could have forced YES "to accept" this price hike, while without control, Bezeq might have found it harder to raise its access fees.

d. Channel 10-Netvision

In July 2007, the IAA approved a merger between Netvision Ltd. (henceforth: Netvision), which until then was controlled by the IDB Corporation, and operates, among other things, as an internet provider (ISP) and also owns the "Nana" web portal, and Channel 10, which is a private firm controlled by Mr. Yossi Meiman, and operates a commercial TV channel. As part of the merger deal, Netvision and Channel 10 established a joint venture through which they operate an internet portal "Nana10" that has the exclusive rights to use of the media contents of Channel 10.[26]

This merger is vertical, because Channel 10 supplies media contents while Nana is a web portal that distributes media content to internet users. Apart from Channel 10, media content is also produced by Channel 2's franchisees Keshet and Reshet, the satellite firm (YES), the cable operator (HOT), and independent media content providers. Nana, for its part, competes with several additional portals, such as Walla, YNET, and MSN. The analysis in Section 3 above reveals that the fact that Channel 10 holds, after the merger, a stake of only 50% in the Nana10 portal, alleviates the concern that Channel 10 will foreclose competing portals. This is because Channel 10 bears the full cost of such foreclosure, but obtains only 50% of the associated profit. On the other hand, our analysis also reveals that the concern for upstream foreclosure of competing media content providers by the Nana10 portal is exacerbated, because after the merger, Channel 10 bears only 50% of the cost of the foreclosure, while it enjoys the full increase in profits from the supply of media contents.

After reviewing the merger, the IAA determined that in light of the significant competition that Channel 10 faces in the media content market from Keshet, Reshet, YES, HOT, and independent media content providers, there is little concern that portals which compete with Nana10 will be foreclosed. Furthermore, the Authority determined that in view of the fact that Nana10's share in the Hebrew-language portals in Israel is only around 8% in terms of revenues and around 10%-15% in terms of the number of users, there is also little concern that following the merger, media content providers that compete with Channel

[26] See the press release of the IAA 5001113 (2007), and also the IAA, "Decision regarding notification of merger between the companies: Israel 10 – Broadcasts of the New Channel Ltd.," File No. 6945, Government Gazette 5705.

10 will be foreclosed."[27] The IAA, therefore, based its conclusions on the fact that both Channel 10 and the Nana10 portal have limited market shares in their respective markets.

Based on the analysis in Section 3 above, the fact that Channel 10 holds only 50% of the ownership of the Nana10 portal further reduces the concern that it would attempt to foreclose competing portals. On the other hand, the concern for foreclosing competing media content suppliers by the Nana10 portal actually increases relative to the case where Nana and Channel 10 would have fully merged. At the same time, Channel 10's relatively small market share in the TV market suggests that foreclosing competing media content providers would be very costly for the Nana10 portal, and hence alleviates the concern for such foreclosure. Moreover, given the limited market share of the Nana10 portal, it is highly doubtful that consumers would have been significantly affected by such foreclosure had it been implemented.

e. Bezeq-Pelephone

In August 2004, the Antitrust Commissioner approved the merger between Bezeq and Pelephone, subject to certain provisions. Prior to the merger, Bezeq held a 50% stake in Pelephone. The remaining 50% were held by a subsidiary of the Shamrock Holdings of California Inc. Following the merger, Pelephone became a fully-owned subsidiary of Bezeq. Bezeq and other cellular operators like Pelephone have a vertical relationship as the cellular operators buy transmission services, access, and various infrastructure services from Bezeq.

The analysis in Section 3 above suggests that the increase in Bezeq's stake in Pelephone from 50% to 100% strengthens Bezeq's incentive to foreclose Pelephone's rivals in the cellular market. The reason is that prior to the merger, Bezeq bore the full cost of such foreclosure, but captured only 50% of the associated profits (the remaining 50% were captured by Shamrock). Following the merger, Bezeq captures the full profit from the foreclosure of rival cellular operators, and therefore has a stronger incentive to foreclose them.

Although the provisions that the Antitrust Commissioner imposed when approving the merger prohibit Bezeq from discriminating against Pelephone's rivals, Bezeq can still artificially increase the price its charges for using its infrastructure and transmission services. While this price increase raises the real costs of Pelephone's rivals, it does not raise the real costs of Pelephone, because the price that Pelephone pays Bezeq is a transfer payment within the Bezeq group. Hence, the non-discrimination provision imposed by the Antitrust Commissioner may have only a limited effect on Bezeq's behavior vis a vis its rivals.

[27] According to the TIM survey of the Telseker Institute, the rate of exposure to the Nana10 site among internet users age 13 and above in the Jewish population was 23.8% in September 2010. The site is ranked 6th among Hebrew websites in terms of exposure rates, trailing Walla, YNET, Mako, Yad2.co.il online classifieds website, and Zap. See http://b.walla.co.il/?w=/3050/1742603

f. Bezeq-Walla

In 1999, Bezeq International Ltd. (henceforth: Bezeq International), which is a fully owned subsidiary of Bezeq, acquired a 44.5% stake in “Walla! Communications Ltd.” (henceforth: Walla), which owns the internet portal Walla!. As of the end of 2009, Bezeq held a 34.24% stake in Walla, and in March 2010 it increased its stake to 67%. Of this stake, 44.99% were directly held by Bezeq International and the remainder stake was held in blind trust on behalf of Bezeq International.[28] Walla and Bezeq International have vertical relationship because Walla requires internet access services that Bezeq International provides, and also requires access to the infrastructure of Bezeq, which is the parent company of Bezeq International.[29] Furthermore, Walla recently began operating jointly with YES the internet site yes.walla.co.il which provides YES media content; as mentioned earlier, YES is controlled by Bezeq.[30]

The provisions that the Antitrust Commissioner imposed when approving the merger,[31] focus on the potential foreclosure of Walla’s rivals by Bezeq International and/or by Bezeq. In order to alleviate the concerns for such foreclosure, the Commissioner required Bezeq to provide Walla’s rivals with access to its infrastructure, media content, and databases. In particular, Provision 2 in the Commissioner’s decision stipulates that:

“Bezeq will offer any of Walla's competitors that seek to buy from Bezeq or sell to it a product or a service, equal conditions - depending on the circumstances - to those given to Walla in every agreement, arrangement or any business undertaking between Bezeq and Walla for providing Bezeq services to Walla or by means of Walla, or for providing Walla services to Bezeq. In this context, “Bezeq services” are those stipulated in the definitions chapter, including, and without limitation: (a) any business undertaking with Bezeq; (b) advertising of Walla by Bezeq; (c) providing access to contents that are in Bezeq's hands; (d) providing information about technological changes in anything connected to Bezeq infrastructure or Bezeq services, or providing access to them; (e) supplying databases or access to databases in Bezeq's hands; (f) debiting by means of Bezeq's debiting system; and (g) anything connected to experiments on the Bezeq network or other Bezeq equipment.”

The Commissioner reiterated these provisions in approving the acquisition of Walla’s shares from the “Haaretz” corporation in September 2010, and stipulated that:[32]

[28] See Bezeq Ltd., Periodic Report for 2009, Section 1.1, “The group's activities and description of the business development,” and also:
http://ir.bezeq.co.il/phoenix.zhtml?c=159870&p=irol-newsArticle&ID=1417578&highlight=walla,
as well as http://www.themarker.com/tmc/article.jhtml?ElementId=az20100381_77556
http://www.themarker.com/tmc/article.jhtml?ElementId=az20100381_77556

[29] Thus, for example, since April 2007, Walla’s main servers farm is collocated with Bezeq’s servers farm. See Walla! Communications Ltd. Periodic Report for 2009, Section 2.1.11.

[30] See the IAA, “Decision according to Section 14 of the Restrictive Trade Practices Law 5748-1988 regarding granting an exemption from authorizing a restrictive arrangement between DBS Satellite Services (1998) Ltd. and Walla! Communications Ltd.”

[31] See the conditional approval of the merger between Bezeq The Israel Telecommunication Corporation Ltd., and Walla! Communications Ltd., IAA, Commissioner's Decision 3003317 (1999).

[32] See conditional approval of merger between: Walla! Communications Ltd., Bezeq The Israel Telecommunication Corporation Ltd., Bezeq International Ltd., IAA, Commissioner's Decision 5001675 (2010).

"Bezeq will not favor Walla over any of Walla's competitors with regard to any product or service given by Bezeq in which it enjoys a monopoly, including access (connection to Bezeq's network for the purpose of providing services), availability (excluding experiments for a limited time) or performance regarding a product or service in which it enjoys a monopoly."

However, the fact that Bezeq International holds only a partial stake in Walla alleviates the concern for foreclosure of competing internet sites, because Bezeq International might be reluctant to sacrifice profits from dealing with competing internet sites, to benefit Walla, in which it holds a stake of only 67%.

On the other hand, the merger exacerbates the reverse concern that Walla would foreclose access providers which compete with Bezeq International. This is because Bezeq International, which controls Walla, will bear only 67% of Walla's losses from this foreclosure, but will capture the full associated profits. According to Bezeq's financial statements, Bezeq International currently holds a share of 36% in the internet-access services market.[33] Regarding Walla, according to the TIM survey of the Teleseker Institute, the exposure rate to the Walla site among the Jewish population aged 13 and over was 64.7% in September 2010, ranking it first among all the Hebrew sites in terms of exposure rates, lagging behind only Google and Facebook in terms of the overall rate of exposure.[34] Given the significant market shares of Bezeq International and Walla in their respective markets, the concern for foreclosure of internet-access suppliers and infrastructure suppliers by Walla is non negligible.

Similarly, Bezeq's partial ownership stake in Walla exacerbates the concern that Walla will favor YES over other media content suppliers, because Bezeq bears only part of Walla's loss from favoring YES, and will therefore have a stronger incentive to favor it relative to the full ownership case.[35]

g. Coca-Cola's ownership of "Keshet"

Mr. Muzi Wertheim fully owns the Central Bottling Company Ltd. (henceforth: Coca-Cola Israel). Coca-Cola Israel, for its part, holds directly and indirectly via subsidiaries which it controls, the full ownership of Keshet-Communication Services Group Ltd., which in turn, holds 43.38% of the Channel 2 Keshet Broadcasting franchise. In addition, the Wertheim family (David and Drorit Wertheim) fully owns, directly and by via a trustee, "M. Wertheim Holdings Ltd.," which in turn holds 7.62% of Keshet. As a result, Mr. Wertheim and his family own, directly and indirectly, 51% of Keshet.[36]

According to the economic press, Keshet's share in the television broadcasting market (which includes Keshet, Reshet, Channel 10, Channel 1, and niche channels) in terms of

[33] See Bezeq Ltd., Periodic Report for 2009, Section 4.6.2, "Internet services."

[34] See http://b.walla.co.il/?w=/3050/1742603, and also Walla! Communications Ltd., Periodic Report for 2009, Section 2.2.1.

[35] Admittedly, Bezeq holds only 49.77% of YES's share capital, and thus the concern that it will divert profits from Walla, in which it holds 67% (directly or indirectly) to YES does not, on the surface, seem to be high. However, this concern is greater than the case in which Bezeq would have fully owned Walla.

[36] See http://www.rashut2.org.il/tree_popup.asp?print=true&imgSrc=keshet_new3.gif

rating is 40.5%.[37] The market shares of the other channels are as follows: Reshet - 22.6%, Channel 10 - 19.7%, Channel 1 - 11.1%, and niche channels - 6.1%.

The soft drinks market, which Coca-Cola operates in, is also highly concentrated: Coca-Cola's market share in the bar-coded beverages market is 56.6%, while the market shares of Jafora-Tabori and Tempo are 15.5% and 9%, respectively.[38]

Since Coca-Cola and the Wertheim family control Keshet with an ownership stake of only 51%, the concern that Coca-Cola Israel will foreclose Keshet's competitors (Reshet, Channel 10, and Channel 9) in the television advertising market is relatively small because Coca-Cola Israel will bear the full cost of such foreclosure but will capture only 51% of the associated increase in Keshet's profits. On the other hand, the concern that Keshet will foreclose Tempo and Jafora-Tabori which compete with Coca-Cola Israel in the soft drinks market is greater than in the full ownership case because Coca-Cola Israel captures the full profits from the foreclosure, but bears only 51% of Keshet's associated losses.

h. The ownership of Reshet

The second franchisee of Channel 2, Reshet, is also partially held by owners of commercial firms that buy advertising time on television. The Ofer family, which directly and indirectly controls 25.67% of Mizrahi Tefahot Bank Ltd.,[39] holds through a trustee the full ownership in Lynav (Holdings) Ltd., which in turn holds 49% of L.Y.N – Or (Communication) Ltd., which holds 51% of the Channel 2 Reshet-Noga franchisee. Accordingly, the Ofer family controls Reshet with an ownership stake of 24.99%.[40]

Mizrahi bank, for its part, holds a 10% share in the Israeli commercial banking market (measured in terms of the volume of assets), and around a 35% share of the Israeli mortgages market.[41] The bank's advertising budget was around NIS 62 million in 2009, which is around 8.2% of the overall advertising budget of the Israeli banking sector (including credit card companies) for that year.[42] According to the economic press, Reshet's share, in terms of ratings, in the TV market is around 22.6%.[43]

Since the Ofer family controls Reshet with only a partial ownership stake, the concern for foreclosure of Reshet's rivals by the Mizrahi Tefahot bank in the advertising market is smaller than it would have been under full ownership. On the other hand, the concern that

[37] See http://www.themarker.com/tmc/article.jhtml?ElementId=skira20100111_1141617 (the figures are based on rating data).

[38] See http://www.globes.co.il/news/article.aspx?did=1000422115

[39] See Mizrahi Tefahot Bank Ltd., Periodic Report for 2009, "Regulation 24, convertible shares and securities held by stakeholders in the corporation as of March 17, 2010."

[40] As of March 2010, the other significant shareholders of Reshet are the Strauss family (Mr. Michael Strauss and Ms. Raya Ben Dror Strauss) which holds full ownership in Strauss Investments (1993) Ltd., which in turn holds 16% of Reshet, and Mr. Aviv Giladi who fully owns Aviv Giladi Management and Consulting Ltd., which holds 57.64% of R.G.E. Group 2 Ltd, which fully controls Aviv Giladi Television Communication Company (1992) Ltd., which in turn holds 20% of Reshet. See http://www.rashut2.org.il/tree_popup.asp?print=true&imgSrc=reshet_229109

[41] See http://www.nrg.co.il/online/16/ART1/942/699.htm

[42] See http://www.globes.co.il/news/article.aspx?did=1000554005&fid=821

[43] See http://www.themarker.com/tmc/article.jhtml?ElementId=skira20100111_1141617

Reshet will foreclose the rivals of Mizrahi Tefahot's bank is higher than it would be under full ownership, although the relatively limited share of the Mizrachi Tefahot bank in the banking sector suggests that such foreclosure strategy is not very likely.

i. The ownership of Tzomet Books

Kinneret-Z.B.M.-Dvir Ltd. (henceforth: Kinneret) is currently the largest publishing house in Israel, publishing around 300 titles a year (the total number of commercial titles published in Israel each year is over 3,000).[44] Kinneret is held in trust on behalf of Mr. Yoram Rose,[45] who owns one third of the shares of Tzomet Yerid Books (2002) Ltd. (henceforth: Tzomet), which owns a chain of bookstores. Mr. Oded Modan, the owner of the Modan Publishing House, also holds one third of the shares of Tzomet.[46] Two major chains of bookstores dominate the Israeli retail book market: Steimatzky and Tzomet. According to the IAA, as of 2009, Steimatzky owned 132 bookstores all over Israel, Tzomet owned 87 bookstores, while other bookstores were owned by small chains and by single private owners.[47] In a 2005 decision, the Antitrust Commissioner approved the merger between Tzomet and Modan under the provision that: "Tzomet will not make any undertaking to any of its shareholders… regarding the size of the display area or the shelf space allocated to publishing houses that any of them holds."[48]

The commissioner's provision notwithstanding, one might suspect, based on the analysis in Section 3 above, that since Kinneret and Modan hold only 33% stakes in Tzomet, they will have an incentive to induce Tzomet to foreclose competing publishing houses (such as Keter Books, Am Oved, Yediot Aharonot, and HaKibbutz Hameuchad) more than they would do had they fully owned Tzomet. To assess the likelihood of foreclosure, recall that the retail book market in Israel is highly concentrated. Hence, upstream foreclosure of rival publishing houses could cause a significant harm to consumers. As for publishing houses, there are more than 200 different entities, although only a few of them publish more than 100 titles each year.[49] The relatively large number and diversity of publishers suggests that foreclosure could potentially be very costly to Tzomet.

[44] http://eng-archive.antitrust.gov.il/ANTItem.aspx?ID=203

[45] See the decision regarding granting of an exemption from authorizing a restrictive arrangement between: Kinneret-Z.B.M.-Dvir Ltd., Kibbutz Hameuchad Printing House, and Siman Kri'a Association, IAA, Commissioner's Decision 5001499 (2009).

[46] See the decision regarding granting of an exemption from authorizing a restrictive arrangement between the companies: Tzomet Sfarim 2002 Limited Partnership, BUG MultiSystem Ltd., and Modan Publishing House Ltd.

[47] See http://archive.antitrust.gov.il/ANTItem.aspx?ID=10167&FromSubject=100197&FromYear=2011&FromPage=0

[48] See conditional approval of the merger between: Modan Publishing House Ltd., Tzomet Books 2002 Limited Partnership, BUG MultiSystem Ltd., IAA Commissioner's Decision 5000117 (20059).

[49] See conditional approval of the merger between: Modan Publishing House Ltd., Tzomet Books 2002 Limited Partnership, BUG MultiSystem Ltd., IAA Commissioner's Decision 5000117 (20059).

In the Antitrust Commissioner's decision to grant an exemption from for a restrictive arrangement for a joint venture between Kinneret-ZMB Publishing, HaKibbutz Hameuchad Publishing and the Siman Kri'a Society, the Commissioner explicitly discusses the possibility of vertical foreclosure in the Israeli book market:[50]

"An economic examination of all the books purchased during the years 2007-2008 and during the beginning of 2009 by Tzomet Books, does not at all indicate that the average purchase price of the books reflects the exercise of market power by Tzomet Books. In particular, we have found no factual basis for the arguments of the publishers regarding the exercise of market power by Tzomet Books in relation to the prices for its purchases of books from the publishers… to the extent that the combination will [indeed] strengthen Tzomet Books and Kinneret, this will not happen in an improper manner such as through the foreclosure of competitors, but rather through the improvement of the portfolio of products that Tzomet Books and Kinneret can offer the consumer in an efficient manner and at attractive prices…. The concern may arise that the other publishers will be excluded from Tzomet Books's shelves in favor of the New Library books. Regarding this, I will first note that the agreement between the parties does not include any restriction whatsoever on Tzomet Books with regard to the marketing of the other publishers' books. It is indeed reasonable to assume that Tzomet Books will promote the sale of the New Library books following the arrangement. Nevertheless, this is not all equal to the exclusion of the other publishers' books. Since, *inter alia***,** the agreement is only temporary, Tzomet Books does not appear to have any incentive to remove the other publishers' from its shelves. The various publishers have noted that a consumer who enters a bookstore is often interested in a particular book. If the Tzomet Books chain reduces the offerings of books that are on its shelves, it risks losing some of its customers."

It should be noted that since the publishers that own Tzomet only hold partial equity stakes in Tzomet, the concern that they will foreclose Steimatzky or other independent bookstores is actually smaller than in the case of full integration. In the decision to exempt the joint venture between Kinneret, HaKibbutz Hameuchad, and Siman Kri'a Society, the Commissioner stresses that this concern is small (albeit without discussing the implication of partial ownership for this concern):

"To the extent that the concern arises that the publishers who are combined together in the joint venture will refuse to sell their books to stores other than Tzomet Books, it appears that at this stage the parties do not have an incentive not to sell the books to the other retail stores… and experience until now shows that the publishers who own the chain sell their books in various stores, including in the Steimatzky chain's stores."[51]

In 2009, a group of Knesset members headed by Nitzan Horowitz proposed a new legislation designed to protect Israeli literature and authors. Section 8 of the proposed bill stipulates that: "Book publishers…will not own a bookstores chain; a bookstores chain…will not own a publishing house." Furthermore, Section 5(a) of the proposed bill stipulates that in the first two years following the publication of a book, a minimum price will be imposed in all parts of the value chain: authors, publishers, stores. The proposed

[50] http://eng-archive.antitrust.gov.il/ANTItem.aspx?ID=203
[51] http://eng-archive.antitrust.gov.il/ANTItem.aspx?ID=203

legislation is based on the idea that there is a market failure in the Israeli book market which requires some policy intervention. This view stands in contrast to the IAA's position that does not believe that such a market failure exists and does not see a need for policy intervention.

5. DISCUSSION OF THE POLICY IMPLICATIONS

In this section we extend the discussion on the policy implications of partial vertical integration in several directions. First, an immediate policy implication that arises from the analysis in Section 3 is that the IAA needs to assess forward partial integration differently from backward partial integration when it considers vertical mergers remedies. Second, one of the major considerations in assessing the competitive effects of vertical mergers is the elimination of double marginalization within the merged entity. We will show that when vertical mergers are partial, the merger's effect on the double marginalization problem critically depends on whether the supplier holds a partial stake in the distributor or vice versa. Third, we will consider the policy implications of partial vertical integration for non-discrimination provisions. Finally, we will discuss the implications of our analysis for the duty of fairness in corporate laws.

a. Implications for vertical mergers remedies

Our conclusions regarding the effect of partial vertical integration on vertical foreclosure have implications for the IAA's review of vertical mergers. In particular, if the concern that a vertical merger raises is downstream foreclosure, then it is preferable that the supplier controls the distributor and that his ownership stake is reduced. These, for example, are the above mentioned cases of Bezeq and Walla and Bezeq and YES. In both cases, the major concern was the foreclosure of Bezeq's customers (the rivals of Walla and YES). A possible remedy that could alleviate these concerns is to require Bezeq to decrease its holdings in Walla or in YES.

By contrast, if the main concern is for upstream foreclosure, then it is preferable for the distributor to control the supplier. An effective merger remedy in this case, is to require the distributor to decrease its ownership stake in the supplier. For example, the concerns about foreclosing rival book publishers would be alleviated had Tzomet held a partial ownership stake in Kinneret Publishing House rather than vice versa.

b. Implications for the double marginalization problem

A common presumption in the economic literature is that vertical integration yield efficiency gains by eliminating the double marginalization problem within the merged entity. The double marginalization problem, first formulated by Spengler (1950), arises when both a supplier and a distributor earn positive profits margins on their respective sales. The resulting retail price then is higher than it would be under full vertical merger and retail price in the final market is above the monopoly level.

Vertical integration solves the double marginalization problem because the wholesale price is merely a transfer payment within the integrated entity and hence has no effect on its decisions. The retailer price that the vertically merged entity would set would then be based on the true cost of production.

This conclusion also holds under partial backward integration in which the distributor controls the supplier by holding a partial ownership stake α. Now, every dollar that the distributor pays the supplier as a wholesale price costs the distributor only $1\text{-}\alpha$ since the distributor gets back α dollars due to his ownership stake in the supplier. Clearly, if the distributor can determine the wholesale price, he will prefer to set it as low as possible to minimize his cost. If the distributor must ensure that the supplier does not lose, he will set the wholesale price equal to c, exactly as in the case of full vertical integration.

The situation is totally different in the case of partial forward integration where the supplier controls the distributor by holding an ownership stake of α. Now, every dollar that the distributor pays the supplier as a wholesale price costs generates for the supplier a net income of $1\text{-}\alpha$ dollars. The supplier then can benefit from raising the wholesale price as much as he would have absent vertical integration (or even higher if he controls the distributor and the non controlling shareholder cannot prevent the supplier from charging an artificially inflating wholesale price)

In sum, partial backward integration fully solves the double marginalization problem, while partial forward vertical integration does not solve it at all.

c. Implications regarding non-price discrimination provisions

Antitrust authorities often approve vertical mergers subject to conduct remedies. One of the most common forms of conduct remedies is a non-discrimination provision: under this provision, the merged entity is prohibited from discriminating against rival suppliers or distributors. In the case of full integration, prohibiting price discrimination is not effective, since any payment that the merged distributor pays its affiliated supplier is merely a transfer payment within the same vertically integrated firm and hence it does not affect the firm's incentive. However, under partial ownership, prohibiting price discrimination could be effective. To see why, consider the Pelephone – Eurocom case discussed above, and suppose (counterfactually) that Pelephone had a partial ownership stake in Eurocom (instead of vice versa). Now, if Eurocom were to raise the price it charges for Nokia cell phones by a dollar, the cost to Pelephone would increase in real terms (albeit by less than a dollar) since Pelephone holds only a partial stake in Eurocom and would get back less than one dollar due to its partial stake in Eurocom. Hence, the (partially) merged entity would no longer be able to completely ignore the non-discrimination provision. Nonetheless, it is conceivable that Pelephone would still have an incentive to induce Eurocom to inflate the wholesale price of its cell phones, because a one dollar increase in the wholesale price of Nokia cell phones would cost Pelephone's rivals one dollar, but would effectively cost Pelephone less than a dollar. As a result, the price increase would give Pelephone some strategic advantage over its rival cellular operators.

A non-discrimination provision might also have a real effect when Eurocom controls Pelephone (as it does in practice). Given its partial stake in Pelephone, Eurocom might wish to give Pelephone better conditions than it gives Pelephone's rivals. However, under a non-discrimination provision, Eurocom has to extend the same improved conditions to rivals, which could make the whole thing unattractive. As mentioned above, the Antitrust Commissioner approved the merger between Bezeq and Walla subject to a non-discrimination provision that prohibits Bezeq from discriminating against Walla's rivals. Here too, the concern is that after the merger, Bezeq would give Walla better conditions than it gives its rivals. A non-discrimination provision alleviates this concern.

A related problem with partial vertical integration is that when a supplier controls a distributor with a partial ownership stake (as in the Eurocom and Pelephone or the Bezeq and Walla examples), the supplier might wish try to abuse its control over the distributor and charge the distributor excessive price for the inputs it supplies. Such prices will transfer money from the distributors' non-controlling shareholders to the suppliers' shareholders. Company laws are supposed to eliminate this type of moral hazard problems, although they probably cannot totally prevent them.

d. Implications regarding the controlling shareholder's duty of fairness

As we argued above, Sections 192 and 193 of the Israeli Companies Law stipulate that a controlling shareholder needs to fulfill his duties towards the firm and towards other shareholders "with good faith and in a customary manner, and shall avoid exploiting his power in the company," and "shall avoid discriminating against other shareholders." In our context, the law implies that the controlling shareholder must act as if he fully owned the firm. Clearly, if the law was fully enforced, partial vertical mergers would be no different than full vertical mergers.

In practice, however, the Companies Law cannot be strictly enforced due to the difficulty of verifying that the controlling shareholder abused his control over the firm for his own benefit. One implication of this difficulty that we have not yet discussed is the following: a controlling shareholder can abuse his control over the firm in order to benefit a vertically related firm that he fully controls (or in which he holds a higher ownership stake) at the expense of the non-controlling shareholders. For example, the ownership stakes that Kinneret and Modan publishing houses have in Tzomet Books may induce them to raise the wholesale prices that Tzomet pays for books published by Kinneret and Modan. Note that such an action would tend to counteract the concern that Kinneret and Modan will discriminate against Tzomet's rival bookstores.

By contrast, partial implementation of the fiduciary duty towards minority shareholders could have an additional unintended consequence: suppose that the minority shareholders in Tzomet cannot prevent Kinneret and Modan from artificially inflating the wholesale price of books, but can enforce company laws in a way that prevents Kinneret and Modan from charging Tzomet a higher wholesale price than rivals bookstores pay. In this situation, if Kinneret and Modan wish to abuse their influence over Tzomet in order to inflate the wholesale price of their books, they will have to simultaneously inflate the wholesale price that they charge rival bookstores. The result of such partial implementation of the company laws will have an unintended adverse competitive effect on the book market.

REFERENCES

Bolton P. and Whinston M. (1991). "The Foreclosure Effects of Vertical Mergers", *Journal of Institutional and Theoretical Economics* 147, 207–226.

Bolton P. and Whinston M. (1993). "Incomplete Contracts, Vertical Integration and Supply Assurance", *Review of Economic Studies* 60(1), 121–148.

Chen Y. (2001). "On Vertical Mergers and Their Competitive Effects", *RAND Journal of Economics* 32(4), 667–685.

Chipty T. (2001). "Vertical Integration, Market Foreclosure, and Consumer Welfare in the Cable Television Industry", *American Economic Review* 91(3), 428–453.

Ford G. and Jackson J. (1997). "Horizontal Concentration and Vertical Integration in the Cable Television Industry", *Review of Industrial Organization* 12, 501–518.

Greenlee P. and Raskovich A. (2006). "Partial Vertical Ownership", *European Economic Review* 50, 1017–1041.

Ordover J., Salop S. and Saloner G. (1990). "Equilibrium Vertical Foreclosure", *American Economic Review* 80, 127–142.

Ordover J., Salop S. and Saloner G. (1992). "Equilibrium Vertical Foreclosure: Reply", *American Economic Review* 82, 698–703.

Reiffen D. (1992). "Equilibrium Vertical Foreclosure: Comment", *American Economic Review* 82, 694–697.

Reiffen D. (1998). "Partial Ownership and Foreclosure: An Empirical Analysis", *Journal of Regulatory Economics* 13(3), 227–244.

Rey P. and Tirole J. (2007). "A Primer on Foreclosure", M. Armstrong and R. Porter (eds.), *Handbook of Industrial Organization*, Volume 3, Ch. 33, Elsevier, 2145–2220.

Riordan M. (2008). "Competitive Effects of Vertical Integration", in Handbook of Antitrust Economics, edited by Buccirossi P., MIT Press, pp. 145-182.

Salinger M. (1988). "Vertical Mergers and Market Foreclosure", *The Quarterly Journal of Economics* 103(2), 345–356.

Spengler J. (1950). "Vertical Integration and Antitrust Policy", *Journal of Political Economy* 58, 347–352.

Tirole J. (1988). *The Theory of Industrial Organization*, Cambridge MA.

Waterman D. and Weiss A. (1996). "The Effects of Vertical Integration Between Cable Television Systems and Pay Cable Networks," *Journal of Econometrics* 72(1–2), 357–395.

Waterman D. and Weiss A. (1997). *Vertical Integration in Cable Television,* Cambridge, Massachusetts.