

American University Washington College of Law

Digital Commons @ American University Washington College of Law

Contributions to Books

Scholarship & Research

2018

Cartel Ringmaster or Competition Creator? The Ebooks Case Against Apple (2013)

Jonathan Baker

American University Washington College of Law, jbaker@wcl.american.edu

Follow this and additional works at: https://digitalcommons.wcl.american.edu/facsch_bk_contributions



Part of the [Antitrust and Trade Regulation Commons](#), and the [Internet Law Commons](#)

Recommended Citation

Baker, Jonathan, "Cartel Ringmaster or Competition Creator? The Ebooks Case Against Apple (2013)" (2018). *Contributions to Books*. 123.

https://digitalcommons.wcl.american.edu/facsch_bk_contributions/123

This Book Chapter is brought to you for free and open access by the Scholarship & Research at Digital Commons @ American University Washington College of Law. It has been accepted for inclusion in Contributions to Books by an authorized administrator of Digital Commons @ American University Washington College of Law. For more information, please contact kclay@wcl.american.edu.

Cartel Ringmaster or Competition Creator? The Ebooks Case against Apple (2013)

Jonathan B. Baker*

Apple became a retail outlet for electronic books (ebooks) in April 2010, when it opened the iBookstore in conjunction with the introduction of its iPad tablet computer. From the start, the iBookstore offered ebooks from five of the six leading publishers. Books from the sixth were added early in the following year.

At the time that the iBookstore opened, Amazon (Kindle) accounted for nearly 90% of ebook sales, and Barnes & Noble (Nook) sold most of the rest. Over the next three years, Amazon's share fell to around 60%.

Shortly after the iBookstore opened, the prices of ebooks sold through the iBookstore – nearly half of all ebooks – rose substantially, and the same was true at Amazon. On average, those prices increased nearly 20%. Many new releases and best sellers that Amazon had previously sold for \$9.99 were now priced at \$12.99 or \$14.99.

The U.S. Department of Justice (DOJ), together with 33 states and U.S. territories, charged that the increase in ebook prices was the product of an agreement among Apple and the five leading publishers that sold through the iBookstore when it opened. The government contended that Apple orchestrated the cartel when negotiating iBookstore distribution agreements with the publishers, in part through the adoption of parallel provisions in those contracts. According to the government, the contractual provisions committed the publishers to wrest control of ebook pricing from Amazon, made it possible for the publishers to succeed in doing so by presenting Amazon with a united front, and identified the elevated prices that the publishers set once they obtained pricing authority.

The publishers settled, but Apple did not. Apple contended that the contractual provisions on which the government focused were necessary to assure the iBookstore's entry, and thus helped promote competition in ebook retailing. Apple did not take a position on whether the publishers had colluded, but insisted that had the publishers done so, Apple was not involved.

The district court found for the government. An appeals court affirmed by a divided vote.

* Professor of Law, American University, Washington College of Law. The author was a non-testifying economic expert for the government in the ebooks case. He is grateful to Orley Ashenfelter, Doug Fontaine, Rich Gilbert, Ruth Gilgenbach, and Ben Klein. A revised version will be published in John E. Kwoka, Jr. & Lawrence J. White, eds., *The Antitrust Revolution: Economics, Competition, and Policy* (7th ed. 2019).

Section I of this chapter sketches the industry background and the “hub-and-spoke” structure of the alleged conspiracy. Section II describes the central economic issue in the litigation: the competitive impact of the contractual provisions that were highlighted by the government. Section III discusses three possible economic reasons why competition may not have been harmed even if Apple’s conduct led to higher ebook prices: the dissenting appellate judge’s argument that Apple’s iBookstore entry promoted competition; the possibility that Amazon’s prior ebook prices were below cost and raising them enhanced economic welfare; and the possibility that higher ebook prices were the natural consequence of greater competition in the market for ebook readers: a complementary product. Section IV asks what Apple could have done differently to enter without harming competition. Section V concludes with a summary and a brief discussion of events in the ebook market since the case. The facts described in this chapter are taken from court opinions and testimony, except as noted.

I. Industry Background and the Alleged “Hub-and-Spoke” Agreement

The major publishers typically release new “trade” books (general interest books intended for a broad readership) simultaneously in hardcover and ebook formats. Some books that are sold initially in hardcover are made available a year or so later as paperbacks.

When Apple began to plan its entry into ebook retailing, a book’s hardcover retail price was commonly three or more times its ebook price. The six major publishers accounted for 90% of bestseller sales (across all formats). They also earned the majority of trade book revenues; the five defendant publishers alone accounted for 48%. At that time, ebooks were a small but growing fraction of trade book revenues.

Amazon sold many popular new releases and bestsellers in an ebook format for \$9.99. In some cases, Amazon’s retail prices were below the wholesale prices that Amazon paid the publishers for these titles.

The major publishers saw Amazon as a threat for three reasons: First, they feared that with ebook prices so much lower than hardcover prices for the same books, consumers would increasingly substitute away from hardcovers, on which their wholesale margin was greater. As the demand for hardcovers grew more elastic, the publishers would be compelled to reduce hardcover prices. Doing so would reduce their profit margins on hardcovers and potentially threaten the viability of the brick-and-mortar stores that were the primary distribution channel for hardcover books.

Second, the publishers feared that Amazon’s large share of ebook sales would allow Amazon to negotiate reductions in the wholesale prices of ebooks. That would reduce publisher profit margins on ebooks. Third, the publishers saw a disintermediation threat: They worried that Amazon’s large share of ebook sales would

make it attractive for authors to publish their books on Amazon's retail site, which would remove the publishers from the distribution chain.

From the publishers' perspective, Apple's iBookstore entry into ebook retailing directly addressed the threat of lower profit margins. It had the potential to compete away some of Amazon's market share, which would thereby lessen Amazon's bargaining power in negotiating wholesale prices. Any reduction in Amazon's share would also make it less attractive for authors to use Amazon as their publisher, which would reduce the disintermediation threat.

Contemporaneous with Apple's iBookstore entry, moreover, the five defendant publishers addressed the threat to their profits from the large gap between hardcover and ebook prices. They did so by changing the terms of their distribution agreements with Amazon.

Ebook publishers and retailers are related vertically: The former supply ebooks to the latter. Before the iBookstore entered, Amazon's distribution agreements with publishers employed a "wholesale" model: The publisher sold ebooks to the retailer at a wholesale price, and the retailer set the retail price. Apple's iBookstore distribution agreements instead adopted an "agency" model: The publisher set the retail price and split the resulting revenues with the retailer. As a matter economic theory, neither distribution model is necessarily superior for vertically-related firms or their end user customers (Gilbert 2015, pp. 177-178).

Around the time that the iBookstore opened, the five defendant publishers negotiated a change in their distribution contracts with Amazon: They switched from a wholesale model to an agency model.¹ Doing so shifted the power to set retail prices from Amazon to the publishers. The publishers used their price-setting authority to increase the retail prices of ebooks, thereby reducing the incentive of consumers to substitute away from hardcovers to ebooks.

The competitive significance of Apple's role in these events was disputed: In the government's view, Apple organized collective action by the publishers to do two things: to convert Amazon to the agency model, which thereby took away pricing authority from an aggressive discounter; and to raise retail prices. Apple facilitated that outcome, the government charged, by employing certain provisions in its contracts with the publishers that is discussed more fully below and by letting each publisher know that Apple's contracts with the other publishers had similar terms.

The alleged anticompetitive conduct was both exclusionary and collusive: The publishers were said to have acted in concert to prevent the discounting by Amazon that was keeping retail prices low and, once they obtained price-setting authority, to raise

¹ The publishers also negotiated agency agreements with other ebook retailers, including Barnes & Noble.

ebook prices. Although the case was framed as a collusive agreement among the publishers and Apple to raise ebook prices, the exclusion of Amazon (in the sense of preventing Amazon from discounting) was at the center of the government's anticompetitive theory.² If the publishers took away Amazon's price-setting authority, according to the government, it was predictable that retail ebook prices would rise.

The alleged unlawful agreement has what is called a "hub-and-spoke" structure (referring to the way that some wheels are constructed). In the metaphor, Apple is at the hub; the publishers are placed around the rim; and the distribution agreements between Apple and each publisher are the spokes. In this structure, the firms around the rim are rivals, while the firm at the hub is their supplier or distributor – and their coordinator.

In prominent prior antitrust cases that alleged hub-and-spoke conspiracies, including *Interstate Circuit*³ and *Toys "R" Us*⁴, the critical legal question was whether the firms around the rim – the horizontal rivals – had agreed. In the ebooks litigation, an agreement around the rim was assumed; the key legal question was whether the vertically-related firm at the hub had orchestrated it and should be considered part of it.⁵

Economically, a hub-and-spoke structure could facilitate cartel enforcement if a vertically-related firm that purchases from the colluding firms on the rim can deter or punish cheating by shifting its purchases from a cheating firm to another firm on the rim (Klein 2017). Here, as discussed in Section II, Apple was said to have aided publisher coordination in a different way: primarily by facilitating the exclusion of a discounting retailer that posed a threat to the colluding publishers (*i.e.*, by converting

² As used here, the term "exclusion" extends beyond complete foreclosure to include conduct that disadvantages a firm without necessarily inducing it to exit: in this case, by preventing Amazon from employing its preferred distribution model.

³ *Interstate Circuit, Inc. v. United States*, 306 U.S. 208 (1939).

⁴ *Toys "R" Us, Inc. v. FTC*, 221 F.3d 928 (7th Cir. 2000).

⁵ This chapter emphasizes the economic issues that were raised in the litigation. On the law, Apple's vertical relationship with the publishers was the basis for an argument about the standard under which Apple's conduct should be reviewed. The district court and the appellate majority saw Apple as participating in a horizontal agreement among the publishers to fix prices and found that agreement to be illegal per se, which means that harm to competition (*e.g.*, higher prices) was presumed. In addition, the district court found that competition was harmed in fact, so the agreement also violated the antitrust laws under the rule of reason. One of the appellate judges agreed based on a "quick look" analysis (a way of applying the rule of reason that allows a court to condemn suspicious conduct when the defendant cannot show that the conduct benefits competition, without need for an elaborate industry analysis). But the other judge in the appellate majority chose just to consider whether the per se rule had been applied correctly, so the district court's decision was upheld based solely on its application of the per se rule. The dissenting appellate judge contended that Apple's vertical agreements should be reviewed under the rule of reason even if allegedly designed to facilitate a horizontal agreement, and that the district court should not have found Apple's conduct anticompetitive under that standard.

Amazon to the agency distribution model), not mainly by helping the publishers enforce a coordinated consensus on price after they obtained price-setting authority.

Prices of the ebooks affected by the conspiracy rose substantially. The most convincing estimates presented at trial identified average price increases of around 17%-18%. This figure is consistent with the conclusion of an academic study that was conducted after the litigation, which found that when the publishers reverted to a distribution model that restored price-setting ability to the ebook retailers, prices declined by 18% at Amazon and 8% at Barnes & Noble (De los Santos & Wildenbeest 2017). An appendix to this chapter describes the price studies that were discussed in the court opinions.

II. Did Apple Orchestrate an ebook Cartel?

The government and Apple differed sharply over the economic impact of certain provisions in Apple's distribution agreements with the publishers. The government argued that those provisions facilitated a conspiracy to take pricing authority away from Amazon (by establishing an agency distribution relationship) and to raise retail ebook prices. Apple contended that the same provisions were necessary predicates for successful iBookstore entry into a concentrated ebook retailing market that was dominated by Amazon, and thus enhanced competition.

A. The Government's Perspective

In the government's view, the conspiracy could not work unless Amazon shifted to the agency distribution model. So long as Amazon retained the authority to set prices, it would keep ebook prices low. Amazon could have resisted any individual publisher's demand that it convert to the agency model, but Amazon had to go along when faced with a united front because it could not risk losing ebooks from five major publishers at the same time.

Apple's iBookstore contracts with the publishers were not explicitly conditioned on publisher efforts to negotiate agency distribution agreements with Amazon (though Apple had considered requiring that). But, the government contended, two features of those contracts – their near-simultaneous timing, and their “most favored nation” (MFN) provisions – allowed the publishers to create the necessary united front in dealing with Amazon. The government also claimed that a third feature of the iBookstore distribution agreements – tiered price caps – established the prices that the publishers charged once they obtained the ability to set retail prices.

Apple sought to line up multiple publishers to sell ebooks through the iBookstore when the iBookstore opened. It signed those agreements during a ten-day period around the time that Apple launched (introduced publicly) the iPad, which was slightly

more than two months before the new tablet became available and the iBookstore opened.

As a result of that timing, multiple publishers approached Amazon to renegotiate ebook distribution agreements nearly simultaneously, around the end of the ten-day period. The publishers gave Amazon a choice between reaching agency distribution contracts, or remaining on wholesale distribution but not obtaining ebooks for months after those books first became available on the iBookstore.⁶ When a publisher delays making a book available in a different format, the practice is termed “windowing.”

The publishers faced a “prisoners’ dilemma” in achieving their anticompetitive goal: In the government’s view, any single publisher’s demand that Amazon convert to agency was unlikely to succeed, even if the publisher threatened windowing. That threat was not credible because windowing was very costly to the publishers: It reduced ebook sales in the short run and encouraged piracy in the long run. Even worse, the publishers correctly anticipated that Amazon would respond by removing the “buy button” that allowed customers to purchase the publisher’s ebooks after viewing them, making it even costlier to threaten windowing.⁷

By contrast, a coordinated demand would likely (and did indeed) succeed. When Amazon was threatened with the simultaneous loss of access to the ebooks of five major publishers, Amazon capitulated. Amazon agreed to agency distribution with four of the defendant publishers before the iBookstore opened, and with the fifth several weeks later. In the language of bargaining theory, Amazon saw its best alternative to a negotiated agreement (BATNA) (or Amazon’s disagreement payoff or the publishers’ “threat point”) as substantially worse when five publishers simultaneously threatened to take away Amazon’s access to new ebooks than it would have been if Amazon had been negotiating with any publisher individually or even with all five publishers serially.⁸

The defendant publishers’ distribution agreements with Apple included MFN provisions, which are also termed “parity pricing”. Under these provisions, if a specific book were offered by Amazon or another ebook retailer at a price that was below the price that the publisher selected for the iBookstore, the publisher was required to reduce the iBookstore’s price to match that lower price: *i.e.*, to maintain parity. Retail prices for ebooks would stay low, most likely putting pressure on the publisher to reduce hardcover prices. If Amazon stayed on the wholesale distribution model and its low

⁶ The iBookstore would be able to sell an ebook as soon as the title was released in hardcover format, but Amazon would not.

⁷ Amazon responded this way to the first publisher that approached it about converting to agency after signing an ebook distribution agreement with Apple.

⁸ Amazon also complained to the Federal Trade Commission (FTC). Amazon may have preferred to ask government enforcers to investigate in order to avoid the cost of litigation and to avoid antagonizing Apple and the publishers, with which it had continuing business relationships.

prices prevailed across ebook retailers, moreover, a publisher would earn less per book from the iBookstore than from Amazon.⁹ In that case, the publisher would earn less overall than it would have earned absent the iBookstore's entry.¹⁰

For this reason, the iBookstore distribution agreements, which adopted agency distribution with an MFN, raised the cost to each publisher of not switching Amazon to the agency distribution model. The more that Amazon (under wholesale distribution) discounted ebooks, the lower was a publisher's per-book revenue at the iBookstore (under agency distribution with parity pricing). In aggregate, the publisher's revenue reduction would be greater the more successful the iBookstore was in taking ebook sales away from Amazon.¹¹

A publisher could avoid this adverse outcome by preventing Amazon from discounting, which the publisher would be able to do after switching Amazon to agency distribution with an MFN. The government contended that the increased cost of not switching Amazon to agency distribution meant that none of the publishers would back down: Through their individual MFNs with Apple, each publisher effectively (though not explicitly) committed to the others that it would seek an agency distribution agreement with Amazon. The MFNs could also have facilitated coordination on price among the publishers once they obtained price-setting authority by making it unprofitable for them to discount ebooks selectively below the price-cap levels, which thus deterred "cheating".¹²

In the government's view, these two features of the publishers' individual agency distribution agreements with Apple – the MFN provisions, and the contemporaneous timing – worked together to give the publishers the incentive and ability to negotiate new distribution agreements with Amazon that shifted price-setting authority to the publishers, and that thereby allowed the publishers to eliminate Amazon's discount retail pricing. A third feature – tiered price caps – operated to determine the retail prices that the publishers set across all ebook retailers, including Amazon and the

⁹ This arises from the way iBookstore revenue would be split with Apple, and the way the publisher's compensation from that split compares with the wholesale price that was paid by Amazon. Under the wholesale model, if an ebook had a \$12.99 wholesale price, Amazon would pay the publisher \$12.99 regardless of the retail price that Amazon charged. Under the iBookstore's agency distribution agreements, the publisher would instead receive 70% of the retail revenue. If Amazon priced the book at \$9.99 and the iBookstore matched, the publisher would be paid only \$6.99. This is a short-run comparison, based on the then-prevailing wholesale prices. The publishers might not earn more selling ebooks through Amazon if Amazon were to negotiate lower wholesale prices with the publishers, as the publishers feared would happen.

¹⁰ This assumes that the introduction of the iBookstore would not expand overall ebook sales markedly (relative to what they would have been, as through continuation of the prior upward trend).

¹¹ This again assumes that ebook sales would not expand so much as to counteract this adverse effect on profits.

¹² Baker & Chevalier (2013) survey the economic literature on the beneficial and adverse competitive consequences of MFN provisions.

iBookstore, once the publishers obtained the authority to select retail prices. The new prices were well above those that Amazon had previously set.

Apple's iBookstore contracts with publishers established maximum prices for various ebook categories (tiers). The price caps were keyed to the suggested retail price for the same book title that was sold in hardcover format. For example, the cap was set at \$12.99 for bestsellers with hardcover list prices of \$30 or less and for new releases with hardcover list prices between \$25.01 and \$27.50. Although the publishers were contractually permitted to set prices below the caps, the vast majority of ebooks covered by the caps were sold within 10% of their price cap level. The government viewed the caps as the product of a negotiation among Apple and the publishers to establish collusive retail prices.

B. Apple's Perspective

In Apple's view, the practices highlighted by the government were necessary prerequisites for successful iBookstore entry, and thus promoted competition. The iBookstore would be most likely to succeed if it opened when the iPad was introduced, and if it contained ebooks from most if not all of the major publishers. By signing up multiple publishers, Apple obtained the critical mass of ebooks needed to attract customers.

Apple began negotiations with the publishers close to its internal deadline for including the iBookstore in the new iPad, which made simultaneous negotiations necessary. Had Apple had the time to negotiate with the publishers serially, moreover, those negotiations might not have succeeded. Each publisher had an incentive to hold out until after others reached deals with Apple in order to obtain more advantageous contract terms than the others received. Accordingly, Apple explained, it was unremarkable and all but essential for Apple to negotiate with multiple publishers simultaneously and to sign iBookstore distribution agreements with each at about the same time.

In addition, Apple said it was necessary for it to adopt the agency model in its distribution contracts with the publishers. The iBookstore would not have been profitable under the wholesale model with retail prices at the level that Amazon charged and wholesale prices at the level that the publishers set.

Apple also considered the MFNs necessary for the iBookstore's success. The MFNs ensured that ebooks that were sold through the iBookstore would not be priced above what Amazon charged in the event that Apple entered with agency distribution but absent the MFN, and Amazon did not convert to agency distribution. Absent the MFN and binding price caps, and with Amazon on wholesale distribution, the publisher would have competing incentives in setting ebook prices on the iBookstore. On the one

hand, it would have an incentive to keep iBookstore prices low in order to help the iBookstore take market share away from Amazon. On the other hand, and of potential concern to Apple, it would have an incentive to raise the price of books sold through the iBookstore in order to divert sales to Amazon, where the publisher would earn more per book.

Were the publishers to charge more when selling through the iBookstore, the difference in retail ebook prices would tarnish Apple's brand reputation and encourage customers to purchase ebooks from Amazon rather than from the iBookstore, which would threaten the iBookstore's ability to thrive (as well as undermining the benefit that the publishers hoped to receive from the introduction of the iBookstore). The MFNs prevented those adverse outcomes. Apple would not otherwise have found entry profitable, Apple contended, so the MFN promoted competition.

Furthermore, the MFN had little to do with the publishers' incentive to switch Amazon to agency distribution. According to one of Apple's economic experts, the publishers' collective threat to window ebooks was sufficient to induce Amazon to accept the agency model if Apple entered with access to all titles. That is, Apple's entry meant that the publishers' windowing threat was likely to succeed because it gave the publishers another good alternative (in addition to Barnes & Noble) for distributing ebooks if Amazon did not convert to agency, and thus increased the publishers' bargaining leverage. If so, the MFN provision in Apple's distribution agreements gave the publishers little incremental incentive to switch Amazon to the agency model even if the publishers colluded.

In Apple's view, moreover, the price caps also promoted competition. Absent the caps, Apple expected the publishers to set retail ebook prices substantially above the capped levels. The publishers would prefer high ebook prices; but Apple's iBookstore, which sold ebooks only, would more likely benefit from keeping ebook prices well below print book prices. Lower ebook prices would lead to greater ebook sales, both overall and through the iBookstore. The price caps thus protected Apple against the likelihood that, in their absence, the publishers would make the iBookstore's entry unsuccessful by setting retail prices too high.

C. The Courts Decide

The district court concluded that Apple was a partner with the publishers in a conspiracy to eliminate retail competition vis-a-vis Amazon and to raise the prices of trade ebooks.¹³ In reaching that conclusion, the court relied heavily on documentary evidence and witness testimony, and on its assessment that the testimony of several

¹³ *U.S. v. Apple, Inc.*, 952 F. Supp. 2d 638 (S.D.N.Y. 2013).

Apple and publisher executives was not credible.¹⁴ The district court adopted the government's perspective on the economic impact of Apple's distribution agreements, and concluded that the publishers' price-fixing conspiracy would not have succeeded without the active facilitation and encouragement of Apple.

A majority of judges on appeal upheld the district court, but a dissenting appellate judge sided with Apple.¹⁵ The dissenting judge accepted the facts that were found by the district court, including that Apple's agreements with the publishers resulted in the shifting of pricing power from ebook retailers to ebook publishers and that the publishers agreed to increase ebook prices. But the dissenting judge thought that the dominant effect of Apple's vertical agreements with the publishers was to promote competition in ebook retailing, and thus should have been found reasonable.

A related case that was brought by the states and private plaintiffs (a class of ebook buyers) sought damages from Apple and the publishers. The publishers settled before the district court case on Apple's liability was tried. Apple settled after the district court decision: for a payment that depended on the outcome of its appeal. Overcharged buyers received \$160 million from the publishers and \$400 million from Apple.¹⁶

III. Competitive Harm

The courts found that Apple harmed competition by entering ebook retailing through practices that involved the publishers that led to the exclusion of Amazon (in the sense of preventing it from discounting) and to higher retail ebook prices. Had Apple entered but not engaged in those practices, competition in ebook retailing would presumably have been enhanced, not harmed.

By contrast, the dissenting appellate judge viewed the agency distribution structure, the MFN provisions, and price caps as innocuous and legal. The dissent saw Apple's entry as procompetitive, because it challenged Amazon's monopoly position and reduced concentration in ebook retailing. The dissent emphasized that after the iBookstore entered, Amazon's share of ebook retail sales fell from 90% to 60%.

The dissent also viewed Amazon's low retail prices, which it characterized as often below cost, as a barrier to Apple's entry into ebook distribution. It described Amazon's shift to agency distribution as a means by which that entry barrier was eliminated and prices naturally rose to competitive levels.

¹⁴ Appeals courts defer to district court findings of fact and rarely overturn findings of fact based on a district court's assessment of witness credibility.

¹⁵ *U.S. v. Apple, Inc.*, 791 F.3d 290 (2d Cir. 2015).

¹⁶ Additional damage payments from Apple and the publishers covered the state and private plaintiffs' legal fees.

The dissent accepted the district court's conclusion that the publishers had agreed to raise retail ebook prices.¹⁷ But it argued that Apple's conduct should be evaluated based on its effect on competition in ebook *distribution*, where the iBookstore competed with Amazon, not on what happened to competition in ebook *retailing* where, after agency distribution became the norm, the publishers fixed prices.

A. What Counts as Harm to Competition?

These differing judicial perspectives raise the question of whether "competition" should be equated to market structure (number of firms), market outcome (higher or lower prices), or market conduct (the presence or absence of an agreement among rivals). The appellate dissent may have equated "competition" in a market with the number of significant rivals, and thought that fostering entry necessarily fostered competition. Or the dissent may have expected entry to lead to lower prices and greater output in the long run, notwithstanding an immediate increase in ebook prices.

By contrast the appellate majority and district court may have equated competition with conduct that leads to lower prices and greater output, and thus found conduct that supported a retail cartel objectionable notwithstanding that the conduct was accompanied by entry into distribution. Alternatively, the district court and appellate majority could merely have objected to the way that the publishers and ebook retailers (with Apple's assistance) undertook to make the transition from wholesale distribution to agency distribution, regardless of how prices changed after doing so. That is, Apple and the publishers harmed competition by making a coordinated transition by agreement, and there was an additional harm to competition because the publishers raised prices once distribution shifted to the agency model.¹⁸

The district court and appellate majority concluded that the collaboration between Apple and the publishers harmed competition in ebook retailing, while the dissent concluded that ebook retailing competition had been enhanced. None of the judges stated that the publishers harmed competition in ebook retailing while Apple did not. That possibility is raised by the controversial suggestion that vertical agreements almost invariably promote competition at one or both vertical levels.¹⁹ If so, any

¹⁷ The court case addressed Apple's liability. The dissent did not consider whether a price-fixing agreement among the *publishers* could be justified if the publishers could show that such an agreement was necessary to facilitate Apple's entry.

¹⁸ Under this view, an agreement among the publishers and Apple to take price-setting authority away from Amazon would presumably have been found to harm competition even if Amazon had been charging high retail prices and the publishers had reduced prices to competitive level.

¹⁹ The policy implications of empirical studies of vertical restraints, such as those surveyed by Lafontaine & Slade (2008), are disputed. Cooper et al. (2005) find in those studies little support for anticompetitive theories and much support for procompetitive theories, and advise caution in condemning vertical agreements under the antitrust laws. By contrast, Baker (2015, pp. 17-23) concludes that the empirical economic literature does not support the inference that vertical practices cannot readily be used to harm competition.

competitive harm in ebook retailing would be attributed to a horizontal agreement among the publishers, not to Apple.²⁰

B. Amazon's Below-Cost Pricing

Before 2009, Amazon's retail prices for best sellers and new releases were generally no lower than the wholesale prices that the publishers charged. During 2009, the year before the iBookstore entered, some publishers raised the wholesale prices of ebooks in an unsuccessful effort to induce Amazon to increase retail prices. Afterwards, until Amazon reached agency distribution agreements with the publishers, Amazon's retail prices for many best sellers and new releases were below the wholesale prices that Amazon paid the publishers.

The dissent saw Amazon's low prices as a method by which Amazon deterred entry by Apple and others into ebook retailing, and thereby protected its dominant market share from erosion. It described Amazon's prices as below competitive levels, and appeared to assume that the higher prices charged by the publishers after they obtained price-setting authority were competitive.

The district court, by contrast, characterized Amazon's below-cost sales as "loss leaders". It accepted that Apple would run the risk of losing money if it matched Amazon's prices, but declined to consider whether Amazon's low prices violated the antitrust laws. The anticompetitive theory would be that Amazon was charging low prices to exclude retailer rivals: either with the reasonable expectation that doing so would later allow it to charge ebook buyers higher than competitive prices (the usual predatory pricing story), or with the expectation that the exclusion of other retailers would give Amazon the ability to negotiate lower wholesale prices and thereby appropriate more rents from the publishers.²¹

Even if some of Amazon's prices were below Amazon's variable costs, those low prices were not necessarily inconsistent with competition. If Amazon was competing vigorously, it is possible that it could profitably sustain low ebook prices for new releases and best sellers if doing so allowed it to sell more Kindle ebook readers, or if customers shopping for ebooks were more likely to shop for backlisted ebooks or other products on Amazon's site.²² If Amazon sold more products that were complementary to ebooks

²⁰ Under this view, Apple at most participated in an agreement among the publishers to agree jointly to the terms that Apple proposed in its iBookstore distribution agreements, not in a distinct agreement among the publishers to convert Amazon to agency and raise retail ebook prices.

²¹ Reimers & Waldfogel (2017) provide evidence that Amazon's ebook prices and physical book prices in 2012-13 were below the static profit-maximizing level, and suggest predatory pricing as one possible explanation. Khan (2017) argues that the antitrust rules that govern predatory pricing are inadequate to address an anticompetitive threat from Amazon's strategy of maintaining a dominant position in online commerce by charging low prices across multiple product categories.

²² Even in a competitive market, in which no firm is charging low prices in order to exclude rivals, a firm may price a product below its short-run variable cost when it obtains offsetting benefits in the production

than did Apple, Amazon could have found it profitable to charge low ebook prices even if Apple would not have found it profitable to charge the same prices under wholesale distribution.

Even if Amazon were pricing below competitive levels, moreover, the higher prices that were set by the publishers after they converted Amazon to agency distribution could have overshot the competitive price. The price cap levels, at which prices were generally set, were the product of negotiation between Apple and the publishers. If the dissent's views had carried the day on appeal, it would presumably have been necessary for the appellate court to remand the case to the district court to determine whether retail prices were the product of competitive price-setting.

The dissent's view that ebook prices rose to competitive levels raises a policy question.²³ Suppose that the district court had found that Amazon's prices were below competitive levels and that the publishers, acting in concert with Apple, had increased prices to competitive levels and no higher.²⁴ Whether that conduct should be considered harmful economically depends importantly on the welfare standard.²⁵ Relative to a but-for world in which Apple did not enter and Amazon continued to sell at low prices, buyers would pay more, so Apple's conduct would be anticompetitive under a consumer welfare standard.²⁶ But raising price immediately to competitive levels avoids an allocative efficiency loss,²⁷ and thus would be procompetitive under an aggregate welfare standard. Should the antitrust laws be interpreted to maximize buyer (consumer) welfare, maximize aggregate welfare (allocative efficiency), pursue some other economic goal (perhaps rivalry for its own sake), or pursue some combination of economic and political or social goals?

or sale of other products, or the production or sale of the same product in the future. Gilbert (2015, pp. 171-72) concludes that Amazon set low prices for both ebooks and physical books in order to attract consumers to its shopping website, not because it was building an installed base of customers with high switching costs, to whom it will eventually charge high prices.

²³ The policy question that is identified in this paragraph would not come up if Amazon were expected to charge higher-than-competitive prices in the long run, as under the usual predatory pricing theory. Then consumers would benefit in the short run but be harmed in the long run, and there would be an allocative inefficiency loss from prices not equal to marginal cost in both periods (as prices would be below marginal cost initially and above it later).

²⁴ An agreement to fix prices with no plausible efficiency justification violates the Sherman Act regardless of whether the prices that are charged exceed competitive levels. Under one interpretation of the dissent's views, the agreement would be justified by the iBookstore's entry – in which case the hypothetical agreement discussed in this paragraph would presumably be reviewed for its reasonableness, not considered illegal per se.

²⁵ Kirkwood (2014) argues that under some circumstances, seller collusion in response to buyer market power would benefit competition regardless of the welfare standard.

²⁶ If instead Amazon would eventually have raised prices above competitive levels in the but-for world absent Apple's entry, buyers would pay less in the long run. An immediate price increase would still make buyers worse off if the discounted present value of prices would be lower in the but-for world (in which prices are lower during early periods and higher later).

²⁷ This analysis assumes that competitive prices equal a reasonable measure of long run marginal cost, which might be the average cost of an efficient entrant.

C. Ebooks and Ereaders

Amazon sells both ebooks and ereaders (Kindles), which are complements in demand. Apple's iPad can be used to read ebooks, including ebooks purchased from Amazon, and the iPad likely competes with the Kindle. Hence Apple's introduction of the iPad would be expected to reduce the demand for Kindles (relative to what that demand otherwise would have been). If the demand for Kindles also became more elastic,²⁸ Amazon's profit-maximizing Kindle price would likely fall.

If Amazon were competing (not exercising market power) and were constrained by rivalry to earn zero economic profits in ebooks and ereaders taken together, its profit-maximizing ebook price would be expected to increase when its profit-maximizing ereader price declined.²⁹ Intuitively, it would no longer be as profitable for Amazon to market Kindles by keeping ebook prices low. With lower Kindle profit margins, Amazon would do better by raising ebook prices and increasing the margin that it earns on that complementary product.

This argument suggests that had Amazon continued to operate under the wholesale model, it would have raised ebook prices when Apple introduced the iPad, which was simultaneous with Apple's iBookstore entry into ebook retailing. But it is implausible that the publishers set prices identically to what Amazon would have charged under such circumstances. Even if Amazon's wholesale model prices could be considered reasonable proxies for competitive ebook prices, therefore, this possibility provides little basis for arguing that ebook prices rose to competitive levels.

Regardless of whether Amazon's wholesale model prices were set at competitive levels before the iPad's introduction, the possibility that Amazon would have raised them had Apple introduced the iPad without opening the iBookstore could matter for the calculation of damages to ebook customers. Damages to buyers in a price-fixing case are based upon a comparison between the prices that the publishers charged and the prices that would have prevailed but-for the illegal conspiracy.

IV. Did Apple Have an Alternative?

The courts found that Apple orchestrated an agreement among the publishers to convert Amazon to the agency model and raise ebook prices. Apple entered into ebook

²⁸ If the availability of the iPad lowered many Kindle customers' willingness to pay, Kindle demand likely became more elastic. But it is possible that the remaining Kindle customers were Kindle loyalists, with a high willingness to pay. In that case, Kindle demand could fall without growing more elastic, and could possibly become less elastic.

²⁹ The quality-adjusted price of Kindles declined rapidly when Amazon distributed ebooks on the wholesale model, before the iBookstore's entry (Reimers & Waldfogel 2017, pp. 5-6). Yet Amazon did not reduce ebook prices during that period, contrary to what the simple model of Amazon's pricing that is set forth in this section would suggest.

retailing, but did so in a way that led to higher ebook prices and allowed Apple's iBookstore to share the profits from that exercise of market power.

Apple could potentially have entered without orchestrating a collusive arrangement even while adopting the agency model. It could have developed its distribution terms independently, announced them, and told the publishers that the iBookstore would go forward if more than a specified critical mass of publishers accepted them. The terms would presumably have involved a revenue split that would have made the iBookstore profitable for Apple, on the assumption that the publishers matched Amazon's retail prices. Apple may even have been willing to accept narrow profit margins if it expected that opening the iBookstore would increase iPad sales, or it expected that the iPad's success would create competition for Amazon's Kindle ereader and lead Amazon to raise the price of ebooks (a complementary product). Or the publishers may have been willing to subsidize Apple's entry by accepting a revenue split that was tantamount to reducing their wholesale price, even though their profit margins would have been squeezed, in order to create ebook retailing competition with Amazon.

It is also possible that Apple could have entered without orchestrating a collusive arrangement by adopting the wholesale model in its distribution agreements with the publishers. Doing so would have been profitable for Apple if the publishers charged Apple wholesale prices that were substantially below their wholesale prices to Amazon – presumably ones that made iBookstore sales profitable if Apple matched Amazon's low retail prices. Again, the publishers may have been willing subsidize Apple's entry by accepting a lower wholesale price in order to create competition with Amazon. Apple considered proposing this approach, but rejected it in favor of the agency distribution agreements that it offered the publishers.³⁰

If Amazon's low retail prices made it unprofitable for the publishers and Apple to work out contracts that would have made it profitable for Apple to open the iBookstore without converting Amazon to agency and raising ebook prices, then Apple would not have entered. Apple would have been able to revisit that decision in the future if Amazon shifted to the agency model or raised ebook prices. If Amazon did neither, and Apple could not compete profitably at Amazon's low retail prices, then Apple had no practical way to enter. Whether that outcome would be good or bad depends in part on whether Amazon's pricing strategy was thought to benefit or harm competition.

V. Summary and Aftermath

Apple was found to have orchestrated a conspiracy by five publishers to take ebook pricing authority away from Amazon (by establishing an agency distribution

³⁰ This strategy would not be precluded by the Robinson-Patman Act's prohibitions on price discrimination in the sale of "commodities" if the retail transaction involves the acquisition of a license, not the sale of a product.

relationship) and to raise retail ebook prices. That determination was based in part on a judicial conclusion about the economic impact of several provisions in Apple's distribution agreements with the publishers, including their near-simultaneous timing and their most favored nation (MFN) and maximum price (price cap) provisions. The courts adopted the government's view that these provisions helped the publishers solve a prisoners' dilemma in negotiating to convert Amazon to agency distribution and established the collusive retail prices that the publishers subsequently charged. One dissenting judge took Apple's view that the same contractual provisions benefitted competition, as they were necessary predicates for successful iBookstore entry into a concentrated market for ebook retailing that was dominated by Amazon.

The five defendant publishers' settlements with the government, entered in 2012 and 2013, generally prohibited the publishers from setting retail prices for two years and from employing MFNs in their contracts with ebook retailers for five years. When the district court's ban on agency distribution contracts expired, several publishers reportedly negotiated agency agreements with Amazon (Gilbert 2015, p. 180).³¹ Some industry observers have suggested that the five largest publishers³² have used their regained pricing authority to increase ebook prices. Since the litigation, ebook sales have stopped growing rapidly.³³

Appendix: Empirical Analyses of Pricing Data

The economic experts who evaluated what happened to prices after the iBookstore opened and the defendant publishers converted Apple to agency distribution had access to weekly data from every ebook retailer (including Amazon, Barnes & Noble, and Apple). The data set included the number of units that were sold and the revenue that was received, by book title. It also identified the publisher of each ebook title and other information about it, including its genre, release date, and the publication date of all print editions. The experts used average revenue (revenue divided by units sold) as a proxy for price. These data were analyzed in various ways.³⁴

One government expert did so by specifying a regression model

$$P_{ijk} = \alpha D_1 + \beta D_2 + \gamma_i + \delta_j + \theta_t + \varepsilon_{ijt}$$

³¹ The publishers and Amazon could instead have chosen to shift pricing authority to the publishers while preserving wholesale distribution by adopting minimum resale price maintenance.

³² With the 2013 merger of Random House and Penguin, the six leading publishers have become five.

³³ The ebook share of all books sold (including print books) leveled off in 2012 and declined in 2015 (Klein 2017, fig. 2). In 2015, Amazon, still the largest retailer of ebooks, began to open physical bookstores.

³⁴ The various approaches are described non-technically in the trial transcript and the redacted direct testimony of the government's economic experts. This exposition captures their general spirit, but not every detail. The expert testimony is available at: <https://www.justice.gov/atr/antitrust-case-filings-alpha/united-states-vapple-inc-hachette-book-group-inc-harpercollins-publishers-llc-verlagsgruppe>

where P_{ijk} is the price of title i sold by retailer j at time t ; D_1 and D_2 are dummy (indicator) variables that equal zero before the date of iBookstore entry and one after entry, for titles that were sold by publishers that sold through the iBookstore (D_1) and a major publisher that did not (D_2), respectively; α and β are parameters to be estimated; γ_i , δ_j , and θ_t are fixed effects for title, retailer, and time, respectively; and ε_{ijt} is a random error term.³⁵ The model was estimated using data that covered a six-month window on each side of April 2010. The effect of the conspiracy was measured as the difference between α and β : the coefficients on the two dummy variables.

This regression model controlled for influences on prices other than the conspiracy in two ways: First, the use of a control group – the titles of a major publisher that did not sell through the iBookstore – holds constant factors that affect cost and demand for ebooks generally. Second, the fixed effects for title, retailer, and time control for variation in the mix of books sold across publishers and retailers, and over time. Using this approach, the expert found that the prices of ebooks from the defendant publishers increased by an average of about 17%.

Another government expert computed the average price of each publisher's ebooks sold by Amazon during two periods: the two weeks just before the iBookstore entered, and the two weeks just after. These averages were computed for the publishers' titles as a group (total publisher revenues divided by units sold). The definition of price as average revenue per book sold was termed a weighted average because it counts more heavily books with greater sales. The short time period over which the comparison was made informally held constant the mix of titles sold. Using this approach, the expert found that that immediately after the iBookstore opened, the average price of ebooks from the defendant publishers sold through Amazon rose by more than 18%, while the average price of books from other publishers held roughly constant.³⁶

Three other estimates of price changes were also discussed in the court opinions. First, an economic expert for Apple testified that the average price of all ebooks declined after April 2010 without distinguishing between two possibilities: that the prices of specific books generally declined, or that the prices of specific books generally rose while the mix of books sold shifted toward lower-priced products. Second, a figure included in the district court's opinion shows that over 2010, average ebook prices at Amazon increased more for some publishers than others, without controlling for the mix of books sold. Third, an appellate judge referenced testimony that indicated that the weighted average ebook price rose nearly 24%. This estimate appears to come from a government expert's analysis of weighted average prices for ebooks that were sold

³⁵ In estimation, prices were converted to natural logarithms, and the weekly data were grouped into four-week periods. The regression equation also included other variables that are not described here.

³⁶ This conclusion was consistent with a similar analysis of the prices of books that were sold at Barnes & Noble.

through Amazon between February 2010 and February 2011. That analysis did not control for changes in the mix of book titles sold or factors other than the conspiracy over the 13-month period that was studied.

References

- Jonathan B. Baker and Judith A. Chevalier. 2013. "The Competitive Consequences of Most-Favored-Nation Provisions." *Antitrust* 27 (2): 20-26.
- Jonathan B. Baker. 2015. "Taking the Error Out of 'Error Cost' Analysis: What's Wrong with Antitrust's Right." *Antitrust Law Journal* 80: 1-38.
- James C. Cooper, Luke M. Froeb, Dan O'Brien, and Michael G. Vita. 2005. "Vertical Antitrust Policy as a Problem of Inference." *International Journal of Industrial Organization* 23: 639 – 664.
- Barbur De los Santos and Matthijs R. Wildenbeest. 2017. "E-book Pricing and Vertical Restraints." *Quantitative Marketing and Economics* (forthcoming) <http://www.kelley.iu.edu/mwildenb/ebooks.pdf>.
- Richard Gilbert. 2015. "E-books: A Tale of Digital Disruption." *Journal of Economic Perspectives* 29: 165-83.
- Lina M. Khan. 2017. "Amazon's Antitrust Paradox." *Yale Law Journal* 126: 710-805.
- John B. Kirkwood. 2014. "Collusion To Control a Powerful Customer: Amazon, E-Books, and Antitrust Policy." *University of Miami Law Review* 69: 1-63.
- Benjamin Klein. 2017. "The Apple E-Books Case: When is a Vertical Contract a Hub in a Hub-and-Spoke Conspiracy?" *Journal of Competition Law & Economics* (forthcoming).
- Francine Lafontaine and Margaret Slade. 2008. "Exclusive Contracts and Vertical Restraints: Empirical Evidence and Public Policy." In *Handbook of Antitrust Economics*, edited by Paolo Buccirosi, 391-414. Cambridge: MIT Press.
- Imke Reimers and Joel Waldfogel. 2017. "Throwing the Books at Them: Amazon's Puzzling Long Run Pricing Strategy." *Southern Economic Journal* (forthcoming) <http://ssrn.com/abstract=2442747>.