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Non-Per Se Treatment of Buyer Price-Fixing in Intellectual Property Settings

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NON-PER SE TREATMENT OF BUYER PRICE-FIXING IN INTELLECTUAL PROPERTY SETTINGS

HILLARY GREENE

ABSTRACT

The ability of intellectual property owners to earn monopoly rents and the inability of horizontal competitors to price fix legally are two propositions that are often taken as givens. This iBrief challenges the wholesale adoption of either proposition within the context of buyer price-fixing in intellectual property markets. More specifically, it examines antitrust law’s role in protecting patent holders’ rents through its condemnation of otherwise ostensibly efficient buyer price fixing. Using basic economic analysis, this iBrief refines the legal standards applicable at this point of intersection between antitrust and patent law. In particular, the author recommends the limited abandonment of per se condemnation of buyer price-fixing within pure intellectual property contexts. As an alternative, a coarse screen which accounts for both price and innovation effects is proposed. This recommendation represents one example of how antitrust law can better account for the complicated and imperfectly understood effects of the patent system on social welfare.

1 Associate Professor, University of Connecticut School of Law. I would like to thank William F. Adkinson, Jr., Loftus Becker, Geoffrey G. Dellenbaugh, Warren S. Grimes, James D. Hurwitz, Mark A. Lemley, Kathleen E. Lombardi, Thomas Morawetz, Sachin Pandya, Kurt A. Strasser, Manuel A. Utset, Marc L. Winerman, Dennis A. Yao and conference participants at the 2007 AALS Annual Meeting and the 2008 Second Annual Intellectual Property Scholarship Roundtable at the University of Minnesota Law School for helpful comments. I am particularly grateful to the editors of the DUKE LAW & TECHNOLOGY REVIEW for their assistance.
# TABLE OF CONTENTS

Introduction .................................................................................................................. 1

I. Buyer Price-Fixing Conspiracies Without Intellectual Property .......................... 6
   A. Legal Treatment of Concerted Action .................................................................. 7
   B. Tangible Property Hypothetical ....................................................................... 10
   C. Economics of Buyer Price-Fixing Involving Tangible Property .................... 15

II. Buyer Price-Fixing Conspiracies Involving Intellectual Property .................... 23
   A. Intellectual Property Hypothetical .................................................................. 24
   B. Economics of Buyer Price-Fixing Involving Intellectual Property ............ 30
      1. Constant Marginal Costs and a Monopolist Seller .................................... 31
      2. Innovation Incentives and the Harm to Innovation ............................... 36

III. The General Problem of Balancing Innovation Harm Versus Price
   Efficiency Benefits .................................................................................................. 43
      A. Balancing in Price-Fixing Settings .............................................................. 46
      B. Balancing in Non-Price-Fixing Settings .................................................. 59

IV. Recognizing Efficiencies within Intellectual Property Settings ...................... 66
   A. Recommendation ............................................................................................. 67
   B. Noneconomic Considerations ....................................................................... 86
      1. Should Price Efficiencies from Joint Action Go Unrecognized? .............. 88
      2. Should the Patent System Dominate? ....................................................... 101

Conclusion .................................................................................................................. 105
INTRODUCTION

1 The ability of intellectual property owners to earn monopoly rents and the inability of horizontal competitors to price fix legally are often taken as givens. This iBrief, however, challenges the wisdom of adopting wholesale either proposition within the context of buyer price-fixing in intellectual property markets. More specifically, it examines antitrust law’s role in protecting patent holders’ rents through the law’s condemnation of otherwise ostensibly efficient buyer price-fixing. This inquiry, and the resulting recommendation, entails deploying basic economic analysis to refine the legal standards applicable at such points of intersection between the antitrust and patent regimes despite society’s limited understanding of the factors affecting innovation.

2 With regard to antitrust, this iBrief revisits the economic assumptions underlying the *per se* prohibition on horizontal price-fixing and highlights their dubious applicability within the context of pure intellectual property. With regard to patents, this iBrief distinguishes what a patent typically is thought to confer (the ability to pursue monopoly rents) from what it actually confers as a legal matter (exclusivity). Based on this analysis, this iBrief recommends the limited abandonment of *per se* condemnation of buyer price-fixing within pure intellectual property contexts. Although it does not suggest a full rule of reason balancing test in its place, it does propose a coarse screen which accounts for both price and innovation effects. This proposal represents an attempt to more realistically account for the complicated effects of the patent system on social welfare.

3 Part I explains the relevant law and the underlying economic analysis behind the *per se* treatment of conventional buyer price-fixing conspiracies. More specifically, Part I provides a general overview of the legal treatment of concerted action. This overview highlights the similar treatment price-fixing receives regardless of the conspirators’ identity as buyers or sellers. The discussion also identifies the features distinguishing conduct that is judged under the *per se* rule rather than the rule of reason standard. Part I continues with a hypothetical involving a buyer price-fixing conspiracy in which intellectual property is not implicated. This hypothetical provides a non-intellectual property (*i.e.*, tangible property) baseline for comparison with the intellectual property-based hypothetical that is developed subsequently. The non-intellectual property hypothetical also provides a setting in which to review the economics of buyer price-fixing conspiracies which, in their strongest form, effectively constitute monopsonies. The economic analysis
generally supports the symmetric treatment of seller and buyer price-fixing in conventional non-intellectual property settings.

An intellectual property-based buyer price-fixing hypothetical is then discussed in Part II. The main difference between tangible and intellectual property is that the latter has a zero marginal cost of use. This difference is critical because the underlying economic justifications for *per se* condemnation of buyer price-fixing are based on economic models that assume increasing marginal cost (*i.e.*, a rising supply curve). The zero marginal cost characteristic means that a buyer conspiracy could constitute a welfare-enhancing countervailing force against seller market power—without introducing price inefficiencies. A cost such buyer conspiracies likely impose is reduced incentives for future innovation. *Per se* treatment of intellectual property-based buyer price-fixing then reflects—whether consciously or not—a determination that the boycott’s harmful influence on reducing future innovation outweighs the benefit associated with lowering current price. Subsequent parts of this iBrief reject this assumption.

Part III then introduces the perennial and difficult problem of weighing current benefits against uncertain future harms which, within the intellectual property context, would become central if such boycotts received *rule of reason* treatment. Part IV proposes a partial solution that entails a coarse screen, which accounts for price efficiencies and innovation harms while avoiding outright weighing. The course screen avoids such weighing by focusing upon the existence or nonexistence of these efficiencies rather than their relative magnitudes. Finally, Part IV concludes by considering two implicit noneconomic assumptions that might erroneously be viewed as supporting the status quo *per se* treatment of the conduct at issue. One such assumption is that price efficiencies from joint action are not worthy of consideration. The second assumption is that protecting the exclusivity conferred by the patent system should dominate competition concerns. Addressing these assumptions is critical because adherence to them, whether wittingly or unwittingly, dissuades inquiries such the one undertaken here.

I. BUYER PRICE-FIXING CONSPIRACIES

WITHOUT INTELLECTUAL PROPERTY

Part I presents the basic law and economics of buyer price-fixing conspiracies that do not involve intellectual property. As a basis for that discussion, Section A provides a brief overview regarding price-fixing with a particular focus upon the comparison of buyer and seller treatment. Section B then introduces a simple hypothetical involving buyer price-fixing characterized by the general type of buyer conspiracy with which the law has traditionally dealt—non-intellectual property—
and provides a clear baseline against which subsequent fact patterns involving intellectual property can be compared. Several features of this hypothetical warrant particular attention including the description of the market pre- and post-conspiracy and the conspiracy’s likely treatment under the law. Section C then explores the welfare implications of buyer price-fixing when viewed through an economic lens. This economic welfare analysis occurs primarily through a discussion of the most extreme form of buying power—monopsony. The analysis provides some support for the symmetric treatment of buyer and seller price-fixing involving tangible goods.

A. Legal Treatment of Concerted Action

The antitrust implications of collusion among buyers of intellectual property are best understood within the broader context of concerted action by buyers and by sellers. This section provides a general foundation upon which subsequent parts of this iBrief elaborate. What is important, for instant purposes, is identifying the key features which distinguish those concerted actions that receive *per se*, rather than rule of reason, treatment. The distinction between these two legal standards is critical because it essentially dictates the role of market power and efficiency defenses in the antitrust analysis. Under a *per se* standard, the conduct itself is illegal, whereas under a rule of reason standard, the plaintiff must prove a competitive harm.

Horizontal price-fixing conspiracies fall within the broader category of concerted refusals to deal. Depending on the context, concerted refusals to deal are analyzed under a *per se* or a rule of reason standard. The primary determinants of the applicable legal standard are (1) the nature of the refusal to deal (e.g., price-fixing versus eliminating particular business practices, horizontal versus vertical agreement), (2) the goal of the refusal to deal (e.g., disadvantage a competitor), (3) the presence or absence of a legally cognizable justification for the action (e.g., increased efficiency), and (4) the nature of the entity or parties conducting the refusal (e.g., individual private parties or professional associations). Two important factors, which this iBrief argues receive inadequate recognition, are the identity of the conspirators as either buyers or sellers; and the nature of the boycotted goods as either tangible or intangible property.

Although the exact contours of what constitutes price-fixing are not always clear, it has been found when actions manipulate the pricing

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2 A horizontal price-fixing conspiracy among buyers is an agreement among competing purchasers to buy from one or more sellers at an agreed-upon price.

mechanism in the economy and do not seem to further another legitimate objective. Horizontal price-fixing by sellers has long been treated as per se unlawful. This prohibition has been extended to a wide range of pricing conspiracies including bid rigging and bid allocation, agreement on credit terms, agreement to use previously announced prices that were set independently and agreements on maximum prices.

B. Tangible Property Hypothetical

But what about price-fixing among buyers? Consider the following hypothetical:

A large number of sellers with no proprietary intellectual property offer identical inputs to many identical buyers who compete against each other in the sale of a product that uses the input. The buyers allegedly conspire to refuse to purchase the inputs unless the price is reduced significantly beneath the level that otherwise would have been obtained in the market.

This hypothetical involving tangible property describes a situation in which buyers in an otherwise competitive market combine to influence prices. In an antitrust lawsuit, the plaintiffs would need to prove the existence of a conspiracy. Assuming arguendo the existence of a conspiracy, the legal focus becomes assessing the characteristics of the restraint Section A delineated.

In this tangible property hypothetical, the buyers seek a price lower than what the market would likely yield. In essence, this conspiracy, assuming buyer market power, could distort an otherwise competitive outcome. The hypothetical conspiracy not only is clearly designed to fix prices, and as such is inherently suspect, but it also enjoys no procompetitive justification.

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5 See ABA SECTION OF ANTITRUST LAW, ANTITRUST LAW DEVELOPMENTS 81–90 (6th ed. 2007) (discussing these and other direct price-fixing arrangements).
10 When the plaintiff is a private party, the plaintiff must also demonstrate a cognizable antitrust injury to have standing. See ABA SECTION OF ANTITRUST LAW, supra note 5, at 817–23. At least one court has “assumed without deciding that a lack of future innovation is a cognizable antitrust injury.” Glen Holly Entm’t, Inc. v. Tektronix, Inc., 100 F. Supp. 2d 1073, 1079 (C.D. Cal. 1999), aff’d in part, rev’d in part, 352 F.3d 367, 374 (9th Cir. 2003) (characterizing the district court’s “understanding of antitrust injury [as] too restrictive”).
On rare occasion, a court has distinguished between buyer and seller price-fixing conspiracies and treated the former more leniently because they are considered less inimical to efficiency, in part because the goal of such actions is normally a lower price, which may improve consumer welfare. Most often, however, courts do not distinguish between seller and buyer price-fixing conspiracies, subjecting both to *per se* analysis. *Mandeville Island Farms v. American Crystal Sugar Co.* is the seminal Supreme Court case establishing the contours of antitrust treatment of buyer-side boycotts. *Mandeville Island* involved a conspiracy of three sugar refiners to fix the price they paid for sugar beets. The Court held, “[i]t is clear that the agreement is the sort of combination condemned by the [Sherman] Act, even though the price fixing was by purchasers, and the persons specially injured under the treble damage claim are sellers, not customers or consumers.” The Court explained:

The [Sherman Act] does not confine its protection to consumers, or to purchasers, or to competitors, or to sellers. Nor does it immunize the outlawed acts because they are done by any of these. The Act is comprehensive in its terms and coverage, protecting all who are made victims of the forbidden practices by whomever they may be perpetrated.

Based on *Mandeville Island*, a court analyzing the tangible property hypothetical would condemn it as *per se* illegal. This iBrief argues below that such *per se* treatment, while appropriate for most settings, is not appropriate for settings involving intellectual property, which typically present price efficiencies. In particular, this iBrief argues that antitrust law should recognize these efficiencies, and proposes a legal framework for doing so.

**C. Economics of Buyer Price-Fixing Involving Tangible Property**

The legal treatment concerted action receives relates to its anticompetitive effect (whether actual or presumed), which in turn reflects an economic assessment. That assessment entails comparing the

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12 See 334 U.S. 219 (1948).
13 Id. at 223.
14 Id. at 235.
15 Id. at 236.
16 *Mandeville Island* differs from the tangible property hypothetical in that, unlike the hypothetical defendants, the defendants in *Mandeville Island* (three sugar refiners) may have enjoyed some market power apart from their conspiratorial conduct.
economic efficiency of the pre-conspiracy market with that of the post-conspiracy market. To illustrate the basic economics, this section compares a perfectly competitive pre-conspiracy market (competitive for both buyers and sellers) with a post-conspiracy market in which the buyer side of the market is entirely cartelized (i.e., the buyers act as if they were a single buyer—a monopsonist) and the seller side is competitive.17

Perfectly Competitive Pre-Conspiracy Market. A given market typically consists of a number of buyers with different valuations for the product being sold and a number of sellers with different costs for producing various amounts of the product. For each possible price there is an aggregate number of units that buyers are willing to purchase and an aggregate number of units that sellers are willing to supply. Economists represent the aggregate willingness to purchase and the aggregate willingness to supply on a two-dimensional graph in which price and quantity are represented on the y and x-axes respectively. The aggregate willingness to purchase as a function of price, represented as a demand curve, is typically downward sloping because as price falls, the number of units that buyers are willing to purchase increases. Similarly, the aggregate willingness to supply as a function of price, represented as the supply curve, is typically upward sloping. If there is heterogeneity in production costs, the more efficient suppliers generate the lower part of the supply curve because they are willing to produce units at lower prices. Presumably, capacity constraints prevent even the most efficient suppliers from supplying the entire market.

In a competitive market, the market price is the price at which the total amount the buyers demand equals the total amount the sellers supply at that price and is represented graphically by the point at which the demand and supply curves intersect. A competitive market has the valuable feature of allocative efficiency18 because all buyers willing to purchase at an amount greater than or equal to the suppliers’ marginal cost can do so, and no buyer is supplied whose willingness to purchase is less than the cost to supply that buyer. Assuming that price discrimination19 is impossible, all buyers pay the same price. As noted, the pre-conspiracy hypothetical assumes a perfectly competitive market.

18 “Allocation of goods in which no one can be made better off unless someone is made worse off.” ROBERT S. PINDYCK & DANIEL L. RUBINFELD, MICROECONOMICS 666 (5th ed. 2001).
19 “Practice of charging different prices to different consumers for similar goods.” Id. at 670.
Post-Conspiracy Market. Now consider the effect if all buyers in the hypothetical participate in a buyer price-fixing conspiracy and act as a single monopsonist. This extreme case of a complete buyer conspiracy simplifies the economic analysis; however, even with less extensive conspiracies, the same basic outcome will result. The buyer conspiracy alters the price dynamics of the market in several ways. Assume, for example, that the buyers refuse to purchase unless the price is five percent lower than the competitive price. If the sellers acquiesce to this demand, the buyers would then receive every unit supplied at this discounted price; however, some marginal sellers with costs above this lower price (and below the previous competitive price) will now refuse to supply. The effect of this particular conspiracy, therefore, would be to lower both the price and the overall quantity purchased relative to the fully competitive outcome. Given an upward sloping supply curve, monopsony leads to misallocated resources and reduced social welfare. Misallocation necessarily occurs because additional units can be produced at a cost that is lower than the value of those additional units to some unsatisfied buyers in the market. Assuming an efficiency-based standard, this necessarily inefficient outcome warrants per se condemnation. The question then becomes, under what circumstances, if any, will buyer price fixing not necessarily yield an inefficient outcome? The answer, explored subsequently, includes when the supply curve is flat.

Seller Market Power. One might initially assume a lack of symmetry exists between buyer and seller price-fixing. After all, sellers fix prices above the competitive price whereas buyers fix prices below the competitive price and lower prices would seem to have the potential of improving social welfare. The key economic question, though, is can buyer price-fixing result in more efficient resource allocation?

As constructed, the hypothetical is restricted to settings with many sellers and, therefore, no seller market power. If market power existed on the seller side, the impact of a buyer conspiracy would be affected. A divergence from perfect competition resulting from seller market power would result in higher prices and lower quantity supplied.

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20 This iBrief primarily addresses the sale of intermediate goods for which the buyers and sellers are firms. Without further assumptions regarding downstream market structure, it is difficult to draw definitive conclusions regarding consumer welfare.

21 The role of non-efficiency based rationales is beyond the scope of this iBrief. For a discussion of those rationales, see Robert H. Lande, Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged, 50 HASTINGS L.J. 871, 899 (1999) (arguing that the Sherman Act’s primary goal was “protecting consumers from unfair transfers of wealth”).
than would have been obtained in a competitive market. In such an imperfect market, if the buyers (who individually lack market power) did not form a conspiracy, then the market price would exceed the competitive price. Consequently, a buyer conspiracy that forced price lower might have some positive welfare effects. The welfare effect of this form of “countervailing power” depends on many economic variables and can be either positive or negative.\footnote{22}

\footnote{22} The analysis of buyer price-fixing is further complicated in settings where the conspirators are not the ultimate end users but are intermediate good users who purchase inputs to make a product then sold to end consumers. Given an intermediate purchaser, the welfare effect of the various conspiracy scenarios depends upon the nature of the downstream final good market, the upstream intermediate good market, as well as the conduct of the market participants.\footnote{23} Though the role of countervailing power is discussed in greater detail subsequently, it is clear that an ambiguous effect on efficiency undermines the case for per se condemnation.

\footnote{22} The economic analysis above provides a limited justification for the symmetric treatment (i.e., per se condemnation) that has developed in the law for both buyer and seller price-fixing. Part II explores the limitations of that symmetric per se condemnation through an economic analysis of buyer price-fixing conspiracies specifically involving intellectual property and a critical assessment of the primary legal precedents.

II. BUYER PRICE-FIXING CONSPIRACIES INVOLVING INTELLECTUAL PROPERTY

\footnote{23} A critical feature of the tangible property hypothetical in Part I is the presence of an upward sloping supply curve. Revisiting that

\footnote{22} \textit{John Kenneth Galbraith, American Capitalism: The Concept of Countervailing Power} 111 (Sentry ed. 1956). Galbraith identifies “countervailing power” as the “counterpart to competition.” \textit{Id.} “In the competitive model – the economy of many sellers each with a small share of the total market – the restraint on the private exercise of economic power was provided by other firms on the same side of the market.” \textit{Id.} at 110. When the “restraint on private power” emanates from customers or suppliers rather than competitors vis-à-vis the power, it is “countervailing power.” \textit{Id.} at 111. “The first [private power] begets the second [countervailing power],” \textit{Id.} For further discussion, see discussion infra Part IV.B.1.

\footnote{23} See \textit{Blair & Harrison, supra} note 17, at 121–25 (discussing the ambiguous effects of monopsony as countervailing power and the risk buyer collusion may pose for downstream markets); \textit{see also infra} note 106 (discussing the possible interplay of upstream buyer collusion and downstream seller collusion).
assumption, and instead incorporating a flat supply curve, is the focus of Part II. If a patent confers a unique advantage, then it is possible that both market power and a flat supply curve may be present. The following hypothetical facilitates exploration of the law and economics of such a scenario.

A. Intellectual Property Hypothetical

A single seller offers to multiple buyers a license which allows them to produce products that would incorporate the seller’s patented technology. No substitutes for the seller’s patented technology exist and the seller is charging a per use price (royalty). The buyers allegedly conspire to purchase a license for the patented technology only for prices at an agreed upon level. This conspiratorial price is less than the monopoly price that would have prevailed without the conspiracy.

24 Though the intellectual property hypothetical (“IP hypothetical”) generally parallels the tangible property hypothetical, it differs in three ways. First, a single seller exists with an effective monopoly over a required input. Second, the seller’s input is intellectual property instead of tangible property. Finally, the seller is licensing its product (the intellectual property) rather than selling a physical input. This hypothetical focuses on patent licensing, which is a commonly encountered practice that also provides a useful starting point for understanding buyer price-fixing involving other types of intellectual property transactions.

25 The assumption of a monopoly seller implies that the selling price is likely to exceed the competitive price, perhaps by a significant margin. A variant of the IP hypothetical, more aligned with the tangible property hypothetical, would assume that multiple sellers of patented technologies exist that are perfect substitutes for each other. In such a scenario, the pre-conspiracy market outcome would be competitive. This variant underscores the idea that a patent, while offering exclusivity, does not guarantee the patent-holder market power. The analysis of this variant would be similar to the analysis presented below except no countervailing power would be implicated.

26 Under existing law, the critical similarity between the IP and tangible property hypotheticals is the presence of a buyer price-fixing conspiracy. Therefore, the conspiracy in the IP hypothetical, just as the conspiracy in the tangible property hypothetical, is per se illegal, or at least it is under conventional interpretations of Mandeville Island. Closer inspection of the facts of the Mandeville Island line of cases, however, reveals an underappreciated dimension of analysis. Despite its broad pronouncements regarding buyer price-fixing, Mandeville Island
involved a specific fact pattern wherein the buyers enjoyed market power that the sellers lacked. The relative market power of buyers and sellers can have profound consequences for a conspiracy’s economic impact and welfare implications. This point will be expanded upon subsequently, but what is most important for instant purposes is that a strong basis exists for arguing that Mandeville Island ought not receive a broad construction.

Perhaps the most nuanced treatment of Mandeville Island is Judge Posner’s ruling in Vogel v. American Society of Appraisers. Posner held that buyer cartels, the object of which is to force the prices that suppliers charge the members of the cartel below the competitive level, are illegal per se. Just as a sellers’ cartel enables the charging of monopoly prices, a buyers’ cartel enables the charging of monopsony prices; and monopoly and monopsony are symmetrical distortions of competition from an economic standpoint. Unfortunately, Posner’s analysis begs the question concerning what treatment is warranted when supplier market power exists and, therefore, it is possible that buyers engaging in price-fixing activities are not lowering price beneath a “competitive level.”

Albeit in dicta, the most prominent judicial ruling advocating treatment of a buyer conspiracy under the rule of reason standard is Balmoral Cinema, Inc. v. Allied Artists Pictures Corp. In Balmoral the Sixth Circuit refused to condemn a group boycott affecting price as per se illegal. The court noted that the boycott at issue “may simply lower prices” the boycotters pay to the upstream suppliers. These are suppliers who, the court further observed, “have historically wielded great market power . . . at the expense of [the boycotters].” The court then concluded that the boycotters “may be justified in combating the market power of [the suppliers] by group action. Such action may lower prices to [ultimate consumers] at the box office and may serve rather than undermine consumer welfare.” In so doing, Balmoral recognized

25 744 F.2d 598 (7th Cir. 1984).
26 Id. at 601. This harsh antitrust treatment of buyer price fixing is supported by the foregoing economic arguments in the presence of a normal supply curve. See discussion supra ¶ 18.
27 885 F.2d 313 (6th Cir. 1989).
28 Id. at 316.
29 Id.
30 Id. at 316–17.
in dicta the possibility that buyer price-fixing can legally function as a countervailing force against seller market power.

The Balmoral ruling is somewhat confused and has been broadly denounced, though it is doubtful whether the latter reflects the former. Phillip Areeda and Herbert Hovenkamp, representative of most commentators, are extremely critical of Balmoral. They write with a citation to Mandeville Island, “most courts understand a buying cartel’s low buying prices are illegal and bring antitrust injury and standing to the victimized suppliers.” Specifically identifying Balmoral, Areeda and Hovenkamp continue, “[c]learly mistaken is the occasional court that considers low buying prices pro-competitive or that thinks sellers receiving illegally low prices do not suffer antitrust injury.” But, crediting the facts posited by the Sixth Circuit, particularly regarding seller market power, Balmoral is factually distinguishable from Mandeville Island and its dicta regarding countervailing power has economic merit. Furthermore, even without seller market power, circumstances exist wherein buyer price-fixing does not create market inefficiency; one such circumstance involves intellectual property settings. Section B analyzes the effects of buyer price-fixing and finds that the characteristics typifying intellectual property undermine the price inefficiency justification for per se treatment.

B. The Economics of Buyer Price Fixing Involving Intellectual Property

This section analyzes the economics of buyer price-fixing involving intellectual property. As in Section A, this section assumes that the buyer conspiracy includes all buyers in the market and that they act jointly as a monopsonist. It first addresses the potential for buyer price-fixing regarding intellectual property, with its constant marginal cost of zero, to increase static efficiency. To understand overall competitive impact, however, such price efficiency gains must be offset against any innovation losses. Therefore, this section then considers the impact of such conduct on innovation incentives and, ultimately, innovation. The difficulty of balancing price and innovation effects is addressed in Part III.

1. Constant Marginal Costs and a Monopolist Seller

Unlike labor or tangible inputs to production, pure intellectual property (an information good such as the underlying knowledge in a patent) does not involve a cost in use. Stated alternatively, the cost of

31 PHILLIP E. AREEDA & HERBERT HOVENKAMP, 2 ANTITRUST LAW, § 375b at 297 (rev. ed. 1995).
32 Id.
using an additional unit of information is zero; intellectual property exhibits a flat zero marginal cost. Consequently, if the monopsonist is able to lower the per unit price for the intellectual property, no reduction in supply of the input should occur (assuming the price remains above zero). Without this reduction in supply, there will be no static resource allocation issue or short-run inefficiency, only a redistribution of surplus from the sellers to the buyers. This intellectual property setting contrasts with the tangible property hypothetical that involves a rising industry supply curve. In the tangible property hypothetical, a reduction in price below the competitive level results in a reduction from the efficient output level.

Intellectual property is not unique among different forms of property in exhibiting a flat supply curve; it is, however, an easily identifiable class of property with this characteristic, and it has a zero marginal cost. In non-intellectual property settings, the flatness of the supply curve and the actual cost will frequently present contentious factual issues. Moreover, intellectual property, e.g., legal grants of exclusivity in patents, may involve settings where the intellectual property-holder (the seller) has market power. Exclusivity given as the result of a patent, of course, does not imply market power, but all other things held equal, exclusivity increases the likelihood of market power. Additionally, profitable buyer conspiracies are mounted against suppliers whose products are supplied competitively. Thus, an intent to counter supplier market power is not a necessary condition for a buyer conspiracy.

Consider, for example, a pure intellectual property scenario in which the relevant intellectual property is a strong patent. Patent strength, for instant purposes, varies inversely with both the likelihood it would be overturned as improvidently granted and the ease with which it

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33 See generally Jonathan M. Jacobson & Gary J. Dorman, Monopsony Revisited: A Comment on Blair & Harrison, 1992 ANTITRUST BULL. 151 (1992) (observing that a flat supply curve will not result in a short-run inefficiency). They advocate an asymmetrical treatment of monopoly and monopsony (with the latter receiving more lenient treatment than the former) because “in an industry with a flat supply curve, variations in the quantity purchased will have no effect on price at all.” Id. at 154–55. No mention is made of intellectual property or information goods.

34 Jacobson and Dorman argue that “strong evidence [exists] that, at prevailing levels of production, industrial market supply curves are typically flat.” Id. at 156. Though, firms in industries with cyclical demand will frequently operate in the upward sloping portion of their short-run supply curves.

could be circumvented with alternative technology.\textsuperscript{36} The holder of a strong patent has market power, which allows the holder to obtain a supracompetitive price for licenses to use the patent. In such circumstances, it is common for the license to involve a per unit (per use) royalty, especially when the buyers and sellers disagree about the value of the intellectual property (e.g., the scope or demand for the intellectual property’s use). Such a royalty reduces the quantity of use of the intellectual property, and because the marginal cost for use of the patent by these buyers is zero, a resource misallocation results. Reduction of the price charged to the buyers will lead to a short-run improvement in resource allocation. Stated alternatively, a conspiracy to reduce the price of the patent license (assuming per unit pricing) will increase price efficiency.

\textsuperscript{34} Licenses may involve a per unit fee, a fixed fee, or some combination thereof. Assuming a per unit fee, the price reduction which results from the buyer conspiracy carries with it the possibility of price efficiencies which could offset possible innovation harm. When a fixed fee is involved, the possibility of static efficiency gains is present, though in the form of a greater number of firms that could license the lower-priced intellectual property. Under such circumstances, the consumer benefit is somewhat more indirect because it depends on whether those additional buyers (who purchase as a result of the lower-priced intellectual property) sell to customers who otherwise would not have been supplied by the pre-existing buyers.\textsuperscript{37}

\textsuperscript{35} Importantly, it does not follow as a natural extension of this analysis that sellers without market power should be permitted to conspire against buyers with market power. The creation of a monopoly to counteract a monopsony should not be countenanced. The virtue of a flat supply curve is that regardless of the degree of buyer market power, the buyers can never drive price beneath an efficient level (marginal cost). In contrast, a supplier cartel will not be limited to prices at or below the efficient level unless the demand curve is flat (perfectly elastic), which is extremely unlikely.\textsuperscript{38}

\textsuperscript{36} James J. Anton, Hillary Greene & Dennis A. Yao, \textit{Policy Implications of Weak Patent Rights}, in \textit{6 INNOVATION POLICY AND THE ECONOMY} 1, 1 (Adam Jaffe \textit{et al.} eds., 2006) (distinguishing weak versus strong patents). Though this iBrief focuses on patents, the analysis is applicable to intellectual property more generally.

\textsuperscript{37} If the buyer conspiracy forced the seller to accept an “equivalent” fixed fee in lieu of per unit royalties, then social welfare would unambiguously improve. Proving that the fixed fee has not been forced downward, however, would be difficult.

\textsuperscript{38} See generally Jacobson & Dorman, \textit{supra} note 33, at 155.
2. Innovation Incentives and the Harm to Innovation

A per unit license fee of zero is price efficient for pure intellectual property goods. Such a license fee would not, by itself, allow the innovator to earn profits; therefore, it would likely reduce the incentives for future innovation. Harm to innovation in this setting refers to the reduction in future innovation that results from buyer conspiracies reducing the rewards innovators can expect in the future. The notion that harm to social welfare will ensue from harm to innovation reflects the general belief that markets typically generate innovation levels below, or at best equal to, optimal levels. In economic terms, this harm to innovation is referred to as dynamic or innovation inefficiency.

A buyer conspiracy directly reduces the profits from innovation and intellectual property that has already been created. Therefore, to understand the dynamic effects of the conspiracy, one must examine the connection between those current effects and the incentive to invest in future innovation. The strength of this link depends on several considerations. First, how many potential innovators (sellers) are likely to be affected and how important are they? Second, how aggressively will buyers attempt to expropriate innovators’ rents through a conspiracy? As a related matter, will buyers’ self-interest in on-going innovation serve as a check on their collective activity? Third, is the conspiracy likely to persist or another be created in response to a future innovation given the state of the law and the existence of a relevant conspiracy today? Although definitive answers to these questions are not available, the following observations provide the context for this iBrief’s antitrust analysis and proposed recommendation.

The impact of an effective buyer conspiracy on innovators is difficult to estimate. An effective conspiracy operating in a market today would seem most likely to affect innovation in that given market and in proximate markets with similar structural characteristics involving many of the same buyers. For example, the existence of a manufacturer buyer conspiracy within a given industry more greatly threatens future innovation profits of the sellers if seller-innovators anticipate that their inventions will be sold in significant part to the manufacturers in that conspiracy-laden industry. On the other hand, if most inventions purchased by the manufacturers in the given industry come from a wide range of innovators, few of which anticipate those manufacturers as their customers.

The debate regarding the use of innovation markets underscores how hard it is to predict effects of current choices (e.g., a merger) on future innovation outcomes. See discussion infra Part III.B.
primary buyers, it seems less likely that such a manufacturer conspiracy will significantly affect innovation incentives.\textsuperscript{40}

\textsuperscript{39} The aggressiveness of a buyer conspiracy also would affect the harm to innovation. Buyer conspirators would likely argue that it was contrary to their own interests to influence price to such an extent so as to reduce the number of suppliers in the market or to reduce future innovation.\textsuperscript{41} Such self-limiting arguments are superficially appealing; however, many reasons exist why such arguments warrant some skepticism. The buyers may not adequately weigh the effects of their action on future innovation by sellers because the buyers substantially discount the future or do not envision the sellers as likely sources of innovation that will individually advantage the buyers. Additionally, new innovations may have systemic effects on how a firm manufactures and markets its products to its buyers. Some innovations may undermine market structure by lowering economies of scale or may diminish the value of a firm’s particular competences (e.g., the value of being able to provide outstanding post-sale service might be reduced by innovations that increase product reliability).\textsuperscript{42} In such cases, incumbent buyers may value innovation to a lesser extent than society. Finally, some general skepticism about the complete foresight and rationality of the buyers seems warranted.\textsuperscript{43}

\textsuperscript{40} In addition to the aggressiveness of the buyer conspiracy, its durability is also critical. Will a buyer conspiracy that was formed to extract a lower price today persist, or be easy to reconstitute, in the future? Ample recognition exists that a history of successful collusion increases the probability of future successful collusion.\textsuperscript{44} On the other

\textsuperscript{40} One could argue more generally that any lenience towards buyer conspiracies reduces overall innovation incentives, but this effect is likely to be of much less significance than the direct industry effect discussed here.

\textsuperscript{41} See, e.g., Sony Elecs., Inc. v. Soundview Techs., Inc., 157 F. Supp. 2d 180, 185 (D. Conn. 2001) (argument made by defendants). In Soundview, for example, if the television manufacturers’ future profits depended on a stream of innovation that came, in part, from suppliers such as Soundview, then the manufacturers should consider the effects of their conspiracy on suppliers’ innovation incentives.

\textsuperscript{42} See, e.g., Michael L. Tushman & Philip Anderson, Technological Discontinuities and Organizational Environments, 31 ADM. SCI. Q. 439 (1986) (innovations can reduce an incumbent’s competitive advantage by undermining the significance of its existing competences).

\textsuperscript{43} Soundview, 157 F. Supp. 2d at 186 (“[B]usiness conduct is not always rational, and economic actors do not always have access to perfect information, the utopian ideal of economics.”).

\textsuperscript{44} See, e.g., U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES § 2.1 (1997) [hereinafter U.S. HORIZONTAL MERGER
hand, a history of competition involving exclusive access to cutting-edge technologies would also suggest that a future conspiracy would be unlikely because important innovations are frequently best exploited through exclusive or near-exclusive supply relationships. Finally, conspiratorial relationships that normally would be extremely unlikely might, nonetheless, arise in response to an unusual circumstance such as the innovation in question being mandated as part of a government regulation or as part of an industry standard. Without another catalyst for concerted action, renewed conspiratorial conduct would be unlikely.

These brief observations suggest that establishing a link between a conspiracy today and a reduction in incentives to invest tomorrow is both fact-intensive and a notoriously uncertain undertaking. Moreover, establishing harm to innovation based on reduced innovation incentives is even more uncertain. First, it is not always true that reducing incentives to innovate in one market will reduce overall innovation. Second, although the directional effect of the conspiracy in reducing direct innovation incentives is usually clear, with possible exceptions including when the intellectual property is an input to further innovation, it does not necessarily follow that welfare will be reduced. Reducing innovation incentives in this specific manner would reduce welfare if the current incentives to innovate were either optimal or too low. If direct innovation incentives are already excessive, then reducing those incentives would improve innovative efficiency. Arguments abound concerning poorly directed innovative efforts or efforts channeled to circumvent existing patents rather than to generate truly new knowledge. Moreover, even if the overall innovation incentives were correctly calibrated, the incentives as applied in any individual market-innovation setting may still be misaligned. Third, when the intellectual property at issue is an input for further innovation (e.g., a research tool), it is plausible that increased access to the input (owing to a lower price) will sometimes lead to an increase in downstream innovation sufficient to offset the effects of the reduced incentives for upstream innovation.

In sum, buyer price-fixing of intellectual property can have both price and innovation effects that may be difficult to discern and potentially contradictory. The question becomes whether rigid


With limited substitutes for the technology, exclusivity allows the licensee to extract monopoly-like profits that are typically greater than the sum of the profits of the sellers who compete with each other.

adherence to *Mandeville Island* will undermine the courts’ ability to adequately address that complex reality. Part III specifically explores the circumstances requiring a balancing of price benefits and innovation harms.

III. THE GENERAL PROBLEM OF BALANCING INNOVATION HARM VERSUS PRICE EFFICIENCY BENEFITS

The indeterminacy associated with intellectual property-based rents and innovation is particularly challenging for policy makers and courts that seek to assess the extent of innovation harm caused by a buyer conspiracy and weigh it against other benefits or costs. There are various ways to proceed given the oftentimes unquantifiable and arguably incommensurate welfare effects at issue. One could favor approaches that minimize the need for weighing, such as allowing current “more certain” effects to dominate future “speculative” benefits and harms or permitting any innovation effect to trump a price effect. Such bright-line, albeit one-sided, rules have some appeal given society’s inability to meaningfully compare current price effects and future innovation effects. But, such simple rules may also become attractive nuisances that weaken attempts to make progress on the critical underlying issues.

Although the challenge of balancing innovation harms and price efficiency benefits is large, it is not entirely novel. Courts are often plagued by the need to balance the benefits and harms associated with more concrete current effects against uncertain future effects (e.g., deterrence).

The challenge attendant to assessing the future effects of buyer conspiracies is not unique to innovation-related matters, though the presence of an innovation component may influence the assessment. Consider, for example, the implications of a buyer price-fixing conspiracy upon (1) the incentive of non-intellectual property sellers’ investment in plants or other tangible property that are anticipated to provide an increased stream of future profits and (2) the incentive of intellectual property sellers to invest in research and development. With regard to the tangible property investment, assume a seller is considering undertaking a substantial fixed cost to upgrade its plant equipment so that the variable cost of production is reduced. The prospect of a successful buyer conspiracy to push the sale price close to marginal cost would reduce the incentive of the sellers to invest in this plant upgrade. Determining whether this “harm to future investment” would be harmful in a welfare sense would, for example, entail an assessment of whether the pre-existing investment level was efficient or inefficiently high. Engaging in an analogous assessment of future research and development investment, anticipation of a buyer conspiracy would reduce the incentive of the intellectual property sellers to invest in research and development with decreased innovation as a likely consequence. Decreased
conduct at issue has uniformly negative effects on price efficiency and (supposedly) innovative efficiency. But the prior analysis makes clear that with intellectual property, buyer price-fixing does not have such characteristics, because the nature of intellectual property makes it very likely that buyer price-fixing will yield positive benefits regarding price efficiency. The question becomes, should antitrust law embrace a substantially imperfect but easy to implement rule or a theoretically more precise but difficult to implement rule?

In Part II, this iBrief argued that buyer price-fixing conspiracies involving pure intellectual property do not have the same negative welfare characteristics as seller price-fixing conspiracies. If colorable claims of both price-based efficiencies and innovation harm exist and are considered, the court’s task in weighing these effects becomes extremely complex. The benefit derived from promoting innovation does not relate to the particular patent in question since that invention already exists. Rather, the harm at issue concerns incentives for future innovation. Thus, compared to the immediate and relatively quantifiable effects of a decreased price on welfare, harm to innovation is hard to quantify, but could potentially be of greater significance than the price effects. Part III explores efforts to engage in such a weighing in price-fixing (Section A) and non-price-fixing (Section B) settings.

A. Balancing in Price-Fixing Settings

The core of the per se standard (here, per se condemnation) is the absence of balancing. Not surprisingly, balancing static and dynamic effects in price-fixing settings is an extremely infrequent occurrence, although more informal weighing may occur. Section A discusses two cases that are notable for their apparent openness to engage in the weighing of static and dynamic effects, though neither court ultimately engaged in such weighing. The third case is noteworthy for the court’s unwillingness to consider possible, perhaps even likely, future effects and, thereby, avoids weighing altogether.

In Shapiro v. General Motors Corp., a holder of patents pertaining to automobile seat belt retractors argued that the major innovation, like decreased investment in tangible property (e.g., physical plant), need not always result in decreased social welfare. Such a conspiracy-induced decrease in innovation translates into a decrease in welfare if the pre-conspiracy level of innovation was not excessive; while such a condition is usually assumed to be met, it is not always met. Owing to the pervasiveness of this assumption, however, decreased innovation is largely equated with a “harm to innovation.”

See, e.g., Fed. Trade Comm’n, supra note 46, ch. 1, at 4 (citations omitted) (“It is unlikely that there is too much innovation from the viewpoint of economic welfare.”).
automakers’ royalty-free second sourcing policies toward supplier technologies were anticompetitive because the policies harmed innovation. In granting summary judgment for the defendant automakers, the court found “no colorable showing of a conspiracy” and, absent a conspiracy, ruled that the plaintiff lacked standing. Nonetheless, the court’s dicta provides interesting insight into the uneasy relationship between static and dynamic efficiency. The court acknowledged the possibility that, given sufficient pass-through, consumers could benefit from lower prices for access to the patents and that this possible gain would have to be balanced against any harm to innovation.

Although the court did not have to determine the extent of the innovation harm due to the alleged expropriation of patent rents because it found no conspiracy, the court expressed skepticism regarding the size of the expropriation itself. Had a conspiracy been found, the court suggested that it would have been difficult to determine the level of expropriation since the pre-conspiracy pricing would have been negotiated between parties possessing market power.

Sony Electronics, Inc. v. Soundview Technologies, Inc., which transpired more than two decades after Shapiro, demonstrates both the persistence of the underlying issues and the lack of legal guidance that emerged during that time period. Soundview involves a fact pattern similar to that in the IP hypothetical. Soundview held a patent on a technology necessary to implement the V-chip standard that became effective in 2000 for televisions manufactured for sale in the United States. Sony and its co-plaintiffs sought a declaratory judgment that Soundview’s patent was invalid. Soundview alleged in its antitrust

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49 Id. at 664.
50 Id. at 641. Finally, the court held that construing standing requirements narrowly was appropriate given the plaintiff’s ability to obtain relief through an infringement suit. Id. at 661. The court voiced concern about the use or abuse of antitrust actions by disgruntled patent holders who were unable to negotiate a price they deemed appropriate. In fact, the court felt market negotiations should be relied upon in the absence of a conspiracy. Id. at 662–63.
51 Id. at 662–64.
52 Id. at 663.
54 See discussion supra Part II.A.
55 Soundview, 157 F. Supp. 2d at 181 (“[D]evice mandated by the FCC to be included in all television sets . . . to allow parents to block [objectionable] programming.”).
56 Id.
counterclaim that Sony, other television manufacturers, and an industry trade association, conspired to fix the prices at which they would be willing to license Soundview’s patented technology and to boycott Soundview if it demanded higher prices. The counter-defendants sought to dismiss the antitrust counterclaims arguing that the requisite antitrust injury was lacking. The district court found that antitrust injury was adequately alleged and denied the motion to dismiss.

The court’s discussion raises several important issues relating to the treatment of buyer price-fixing involving intellectual property. First, Sony argued that Soundview’s basic collective monopsony theory is “predicated upon production reductions, resulting in higher consumer prices.” In response, Sony claimed that consumers would enjoy a lower price and that the number of television sets sold would not be reduced, so there was no consumer harm attendant to a decrease in input price. The court noted that “[n]othing in the counterclaims alleged here indicated that Sony and the counterclaim defendants are producing fewer television sets, or that their conspiracy was to do so.” It is with that statement, however, that the court concluded its discussion regarding static harm to consumers.

The court then focused upon the alleged dynamic harm, which ultimately provided the basis for denying the motion to dismiss. Soundview argued that buyer price-fixing would diminish incentives for future innovation because the inventors would anticipate lower rewards from innovative activity. In response, Sony claimed that buyers had no incentive to induce a decrease in the innovation upon which they depend. The court seemed more persuaded by Soundview’s harm to innovation argument than by Sony’s argument that output would not fall. The court held that the “the all-or-nothing price set by these colluding purchasers can depress the price below the optimal price that would obtain if usual market forces . . . were at work. The price to consumers does not decrease, but there may be social welfare consequences in the

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57 Id. Based on an alleged telephone conversation the plaintiffs had with a representative of one of the defendants, the plaintiff in Soundview asserted that the defendants agreed to a five cent licensing fee. In contrast, the defendants argued that the five cent figure was merely the opinion of one of the manufacturers’ representatives concerning what constituted a reasonable price.

Id. at 183.
58 Id. at 181.
59 Id. at 186.
60 Id. at 185.
61 Id.
62 Id.
63 Id.
64 Id.
long run, because suppliers will leave the industry (or, as Soundview has it, will cease to innovate and invent)."\(^{65}\)

\(^{52}\) Based on the economic analysis presented previously, the *per se* treatment of buyer price-fixing in intellectual property settings would be warranted on normative grounds unless intellectual property has characteristics that would alter this analysis. The court’s ruling in *Soundview* arguably suggests that intellectual property may be different because it frequently presents settings in which (1) price will decrease and output will increase (e.g., sellers have market power), and (2) buyer price-fixing will potentially reduce future innovation. The implication, although not the actual ruling, is that when the conflicting effects are both present, balancing rather than *per se* condemnation may be warranted.\(^{66}\)

\(^{53}\) Finally, *Adaptive Power Solutions, LLC v. Hughes Missile Systems Co.* underscores the inherent difficulty in weighing current versus future effects in price-fixing settings.\(^{67}\) The court’s unwillingness to consider possible future effects enabled it to avoid any weighing issues. In taking this approach, the court issued a simple but substantively unsatisfying ruling.

\(^{54}\) In *Adaptive Power Solutions*, the only two buyers of a power supply system for the AMRAAM missile, Hughes and Raytheon, were accused of conspiring to drive Adaptive Power Solutions (APS), one of two suppliers of this system, out of the market by refusing to buy from APS.\(^{68}\) More specifically, APS alleged a concerted refusal to deal in an effort “to punish APS for attempting to raise prices”\(^{69}\) and “a price-fixing conspiracy . . . to drive it [APS] from the A3 power supply market as punishment for attempting to raise its price for A3s.”\(^{70}\) For summary judgment purposes a conspiracy was assumed.\(^{71}\) The court analyzed the allegation pertaining to the refusal to deal under a rule of reason standard because it held that the antitrust allegation fell outside of the categories

\(^{65}\) *Id.*

\(^{66}\) Ultimately, however, the court’s antitrust ruling focused on a different issue. After rejecting the television manufacturers’ motion to dismiss the antitrust claim, the court granted their motion for summary judgment of non-infringement. *Sony Elecs., Inc. v. Soundview Techs., Inc.*, 225 F. Supp. 2d 164 (D. Conn. 2002). The court subsequently dismissed Soundview’s antitrust claims for lack of standing. *Sony Elecs., Inc. v. Soundview Techs., Inc.*, 281 F. Supp. 2d 399 (D. Conn. 2003).

\(^{67}\) 141 F.3d 947 (9th Cir. 1998).

\(^{68}\) See *id.*

\(^{69}\) *Id.* at 949.

\(^{70}\) *Id.* at 950.

\(^{71}\) *Id.* at 949.
reserved for per se treatment, i.e., no disadvantaging of a horizontal competitor was involved.\textsuperscript{72} The price fixing allegation was summarily dismissed. The court explained, “[t]he defect in this argument is a factual one. This is not a case in which competitors try to fix their prices. This is a case in which manufacturers refuse to deal with a high-priced supplier.”\textsuperscript{73}

In examining the merits of APS’s refusal to deal allegation under a rule of reason, the court emphasized that shortly after APS exited the market two other suppliers nominally entered the market.\textsuperscript{74} One month after APS departed, its successor, SoraPower, to whom it sold its assets needed to manufacture A3s, entered the market.\textsuperscript{75} At about that time, Raytheon awarded a contract to ST Keltec for A3s.\textsuperscript{76} As noted by the court though, it took ST Keltec “four to ten months after APS left the market” before it became “qualified or operational.”\textsuperscript{77} The court therefore found only a temporary harm to market competition and concluded that it was an insufficient basis upon which to find an antitrust violation.\textsuperscript{78} The standard the court applied was that to constitute “an injury to competition, the restraint must be ‘of significant magnitude,’ and ‘more than trivial.’”\textsuperscript{79}

It appears that the court evaluated the price-fixing allegation solely as a means by which the conspirators could drive APS out of the market and not as an independent allegation. That is, the court did not appear to view a lowered price as the end to which the refusal to deal would be the means.\textsuperscript{80} One wonders, for example, whether the price-fixing allegation would have at least survived summary judgment if APS had lowered its price and Raytheon had accepted it, especially if the final price ended up lower than the original power supply system price.\textsuperscript{81} Further, there appears to be no evidence in the case of non-price

\textsuperscript{72} Id. at 949–50 (citing Nw. Wholesale Stationers, Inc. v. Pac. Stationery & Printing Co., 472 U.S. 284 (1985)).
\textsuperscript{73} Adaptive Power Solutions, 141 F.3d at 950.
\textsuperscript{74} Id. at 949.
\textsuperscript{75} Id. APS did not sell SoraPower its inventory of completed A3s. Id.
\textsuperscript{76} Id.
\textsuperscript{77} Id. at 952.
\textsuperscript{78} Id.
\textsuperscript{79} Id. (internal citations omitted).
\textsuperscript{80} The case includes insufficient discussion to determine whether the court adopted a narrow view of price-fixing or whether the price-fixing allegation failed because the allegation took a peculiar form which focused on a punishment versus a lower price objective.
\textsuperscript{81} See Adaptive Power Solutions, 141 F.3d at 947, 949 (the prices APS originally demanded were much higher than the original system price, suggesting that a lower than original price outcome was unlikely).
motivations for refusing to deal, such as a concern with the quality of the APS-built A3s. If a price-fixing conspiracy could have been established, the court would likely have ruled this conspiracy illegal *per se* under *Mandeville Island*.  

The court’s narrow treatment of the price-fixing allegation likely reflected its assessment that the alleged conduct did not make “economic sense.” The court held that it would be “counter-intuitive” for “two consumers . . . to punish [a supplier] by creating, at least temporarily, monopoly power in the remaining supplier.” The court also cited a prior Ninth Circuit ruling, which stated that “it would be ‘illogical’ for a large firm to restrict competition in a market for services which the large firm requires.” Ultimately, the court was unconvinced that Raytheon and Hughes punished APS in order to threaten other suppliers that did not offer sufficiently low prices. By crediting the defendants’ argument that entry had occurred while discounting the plaintiff’s argument that long-term price disciplining effects would result, the court revealed a strong presumption in favor of current actual effects when balanced against future theoretical effects. Although such a determination might be necessary during a trial on the merits, it was arguably premature to reject the plaintiff’s argument during summary judgment.

In stark contrast to the *Soundview* court’s more tempered view—that parties may not always behave rationally or have complete information—the court in *Adaptive Power Solutions* held that parties would usually act in their long-term interest. The particular difficulties in assessing competitive effects in intellectual property-based settings will be further addressed subsequently.

B. Balancing in Non-Price-Fixing Settings

The issues surrounding buyer price-fixing in intellectual property settings exemplify both the difficulty and importance of incorporating innovation effects into antitrust analysis. This section briefly considers two non-price-fixing examples characterized by similar struggles: mergers and monopolization. In each context, the decision-maker—whether it is an antitrust agency or the court—must determine how to

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84 *Adaptive Power Solutions*, 141 F.3d at 952.
85 *Id.* (citing *Coastal Transfer Co. v. Toyota Motor Sales, U.S.A.*, 833 F.2d 208, 211 (9th Cir. 1987)).
86 *Adaptive Power Solutions*, 141 F.3d at 952–53.
incorporate great uncertainty regarding innovation effects into its analysis. As in the buyer price-fixing context, questions regarding who bears the burden of proof and how that burden is discharged figure prominently.

Mergers. In the 1990s, the antitrust agencies began challenging acquisitions owing, in part, to potential harm to “innovation markets.” These markets were defined in terms of “research and development directed to particular new or improved goods or processes.” The defining feature of such markets is that they are for goods or services not already in existence at the time of the antitrust inquiry. The innovation methodology evaluates “the effects of a hypothetical merger on R&D” but one could use the approach to evaluate other arrangements. At its core, innovation market analysis reflects the recognition that “[t]he equivalence of the downstream and upstream [market] analyses breaks down when a merger alters incentives for innovation, which affects the cost structure of the firms or the development of new products. In this instance, downstream output market analysis fails to capture fully all of the economic consequences resulting from the merger.”

In re Ciba-Geigy illustrates the “innovation market” approach and involves the highly concentrated market for research and development of gene therapy. The merging parties were “the two leading commercial developers of gene therapy technologies and control critical gene therapy proprietary portfolios, including patents, patent applications, and know-how.” The merger was challenged on multiple grounds including: “reduce[d] innovation competition among researchers and developers of gene therapy products” and “creat[ion of] a disincentive in the merged firm to license intellectual property rights to

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88 Gilbert & Sunshine, supra note 87, at 594. The following is a “rough guide to the innovation market approach”: identify overlapping research and development (R&D) activities of the merging firms; identify alternative sources of R&D; evaluate actual and potential competition from downstream products; assess the increase in concentration in R&D and competitive effects on investment in R&D; assess R&D efficiencies. Id. at 594–97.

89 Id. at 583.

or collaborate with other companies compared to premerger incentives. The case settled with the merging parties agreeing to a series of divestitures of businesses and licensing of intellectual property. The antitrust agencies have been relatively sparing in their use of innovation markets and generally limited its use to circumstances where identifiable participants in a given market were comparatively better situated for innovation, such as with respect to pharmaceutical drug approval pipelines or where research and development expenditures were shown to have a strong link to current market shares.

Even such relatively targeted applications drew considerable criticism from the antitrust community, which may have interpreted these early actions as a harbinger of more aggressive uses in challenging proposed acquisitions. Some critics questioned how innovation markets were connected to product markets in which the effects of the acquisition were comparatively better understood; they also questioned whether traditional metrics such as market share could be meaningfully deployed. In any event, the use of the innovation market concept in mergers has arguably not been expanded.

The uncertainty attendant to the use of innovation markets in mergers and the relative inability of the antitrust agencies to otherwise gain traction on this issue would not appear to bode well for balancing price and innovation effects in the price-fixing contexts this Brief addresses. It is important to recognize, however, that merger analysis is forward-looking, seeking to predict future restraints of trade resulting from the transaction. Whereas the analysis of price-fixing is at least partially backward-looking, focusing on already apparent effects. Thus, documentable evidence may exist of the effects of buyer price-fixing on innovation inputs, e.g., R&D levels or employment levels.

91 Id. at 852.
92 Id. at 853–86.
95 See Willard K. Tom & Richard J. Gilbert, Is Innovation King at the Antitrust Agencies?: The Intellectual Property Guidelines Five Years Later, 69 ANTITRUST L.J. 43 (2001) (“[I]nnovation concerns were decisive in only a few cases.”).
Several high-profile monopolization cases also required courts to grapple with assessing competitive effects, of which, harm to innovation was a major component. Two such cases are In re Intel96 and United States v. Microsoft.97 John Lopatka and William Page characterize the applications of antitrust in these cases as “us[ing] the notion of harm to innovation to shift the burden to the defendant to justify conduct that harms a competitor.”98 They further argue that “to relax the antitrust plaintiff’s obligation to prove harm to competition, particularly when the conduct provides immediate consumer benefits, is unwarranted.”99 They then conclude, “[e]ven if a practice confers no immediate and discernable benefits, prohibiting it in hopes of promoting future innovation is problematic if the kind of practice at issue usually increases consumer welfare.”100 Lopatka and Page’s general frustration regarding the manner in which innovation harm is assessed and weighed has appeal. Within the price-fixing context at issue in this iBrief, the challenge is still greater because the static impact of such price-fixing upon consumer welfare is not well-recognized.

The trend in antitrust law generally is the incorporation of innovation effects into the overall analysis. Some would argue that in some cases (merger) that effect is undervalued and counts only as a supplemental argument. Some would argue that in other cases (monopolization), the innovation effect is often presumed and overstated. The problem both positions appear to highlight is the absence of some effort to balance. The balancing recommended in Part IV does not always require full-fledged economic analysis and weighing of all factors, but still offers a more nuanced treatment of the sometimes conflicting price and innovation effects.

IV. RECOGNIZING EFFICIENCIES WITHIN INTELLECTUAL PROPERTY SETTINGS

Buyer price-fixing of intellectual property introduces both potential benefits and harms to social welfare. In terms of benefits, such collective buyer action offers a possibility of superior resource allocation

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98 See John E. Lopatka & William H. Page, Monopolization, Innovation, and Consumer Welfare, 69 GEO. WASH. L. REV. 367, 372 (2001). Lopatka and Page focus their analysis upon Sherman Act section 2 (monopolization) offenses, though they believe it also could be applied to section 1 offenses “such as claims of exclusion through exclusive dealing.” Id. at 386 n.141.
99 Id. at 372.
100 Id.
and lower consumer prices and, hence, an efficiency. In terms of harms, such conduct also carries the likelihood of reduced innovation. Because the relative importance of these two factors is uncertain, per se treatment of buyer price-fixing in intellectual property settings is inappropriate. Unfortunately, balancing within this context is inherently difficult and the contours of an alternative approach are not straightforward. As a consequence, this iBrief eschews the actual balancing test that normally characterizes rule of reason evaluation. Instead, it proposes a coarse screen that relies, where possible, on inquiries into the presence of price efficiencies and innovation reductions as revealed through investments or other indicia of innovation activity. Despite being characterized by an attenuated form of the presumption embodied in the existing per se rule against buyer price-fixing, the proposed screen constitutes a preliminary and salutary departure from the current, unduly harsh per se treatment. As such, it can serve to prevent condemnation where the conduct might be procompetitive on balance.

A. Recommendation

The current per se rule against buyer price-fixing, as applied to intellectual property, effectively allows even theoretical innovation harms to trump all price efficiencies. In contrast, the proposed screen would enhance welfare by avoiding the per se rule’s heavy-handed, lexicographic preference for innovation harm over actual price efficiencies. At the same time, the proposed analysis, given its conservative nature, does not unduly jeopardize consumer welfare. The proposed screen reflects economic theory, which suggests that lowering price in intellectual property settings will improve price efficiency but will reduce expected returns to the sellers (innovators) and lower investment in innovation. Notably though, by requiring some demonstrable impact, the screen has the additional safeguard of applying only where the economic theory is corroborated.

Consistent with general antitrust pleading requirements, the proposed screen requires the plaintiff to bear the initial burden of demonstrating both that a conspiracy exists and that the plaintiff meets the requirements for standing (assuming a private, rather than governmental, plaintiff). If these threshold conditions are satisfied, the burden then shifts to the defendants to demonstrate either that their joint conduct has had only a de minimis price effect or that they substantially passed the benefit of their cartel activity through to the end consumers.

101 See HOVENKAMP, supra note 3, at 257 (suggesting that balancing could be avoided through condemnation of restraints for which less-restrictive alternatives are available).
If the defendants make such a showing, they prevail unless the plaintiff can show a non-trivial reduction in innovation. A discussion providing greater detail regarding the nature of these legal burdens follows.

De minimis Price Effect on Seller. The defendants can establish a de minimis price effect through market share evidence or actual evidence of effect or some combination thereof. Economic understanding suggests that with insubstantial market share, there is likely to be no price effect. In keeping with the conservative nature of this screen, only a showing of a small market share, absent other contradictory evidence, will satisfy the no-real-harm-to-the-seller element. As a working assumption, this iBrief proposes a sliding scale wherein the lower the market share, the less actual evidence of no price effect must be produced by the defendants. Nonetheless, defendants will be required to proffer evidence regarding price effect despite having market shares below those normally equated with market power.102

Substantial Pass-Through to Consumer. When a price effect exists and the buyers are intermediate goods producers, the proposed screen also allows the buyers to show that consumer welfare was enhanced by the reduced price buyers received.103 More specifically, if more than a de minimis price effect is present, the burden falls on the buyer (antitrust defendant) to demonstrate it has substantially passed through its savings to the consumers. Direct evidence of pass-through can come from comparing consumer prices before and after the conspiracy. Even when no meaningful “before” exists, the likelihood of pass-through may be suggested by retrospective evidence that other cost reductions were passed along to consumers.

Many commentators believe that pass-through is greater when the intermediate buyers encounter greater competition in their

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102 Because horizontal price fixing is condemned as per se illegal, market share thresholds have not been relevant in such actions. Therefore, one must look elsewhere for points of reference including, for example, monopolization cases. “[M]arket shares above 70 percent will likely establish prima facie monopoly power, market shares between 50-70 percent will likely place a company close to the threshold for establishing monopoly power, and market shares below 50 percent are very unlikely to result in a finding of monopoly power.” Brian A. Facey & Dany H. Assaf, Monopolization and Abuse of Dominance in Canada, the United States, and the European Union: A Survey, 70 ANTITRUST L.J. 513, 536 n.100 (2002) (citations omitted) (citing ABA SECTION OF ANTITRUST LAW, ANTITRUST DEVELOPMENTS, 234–37 (5th ed. 2002)).

103 Although some commentators have argued for a standard that recognizes producer as well as consumer welfare, this position has not been widely accepted by the courts or the antitrust agencies and is not adopted herein.
Although this relationship has intuitive appeal, economic theory suggests that in many market situations (e.g., depending on the characteristics of demand), firms with market power will pass through more than firms in competitive situations. Thus, the market power of the buyers in their downstream seller roles does not appear to reliably indicate the extent of the pass-through of price reductions.

Unfortunately, the most common use of pass-through in antitrust occurs in merger review, which provides limited useful guidance for this discussion. It is in the merger context that former Federal Trade Commission Chairman Robert Pitofsky offered his oft-cited characterization of the pass-through defense as a “killer qualification” owing to the considerable difficulties associated with proof. Proving pass-through, when it actually occurs, should be significantly less burdensome in a price-fixing context than in a merger context for two reasons. First, there will usually be direct retrospective evidence of pass-through in the price-fixing context. Second, indirect evidence, such as previous examples of how variable cost reductions have resulted in lower selling prices, will not suffer from the confounding effect of a change in market structure that is inherent to the merger context.

Assuming a pass-through defense, to whom should it be available: individual firms, the conspiratorial group, or both? This proposal would permit individual firms, but not the group, to proffer such a defense. Because each downstream market seller normally prices independently from the other sellers, the degree of pass-through may vary across firms. Therefore, two problems exist in characterizing a group-based pass-through standard. First, some firms passing through a low percentage of the price reductions gained via the buyer conspiracy could avoid liability if others in the group pass through high percentages of the price reductions. This free-riding on the pass-through of others could result in many socially undesirable outcomes including suboptimal pass-through or downstream price-fixing to ensure legally sufficient

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105 See Paul Yde & Michael Vita, Merger Efficiencies: The ‘Passing-On’ Fallacy, 20 Antitrust 59, 60 (2006) (“[Economic theory suggests that] firms with market power have a substantial incentive to reduce their prices when their costs fall, and this incentive increases with the degree of market power.”).
Second, a group-based standard limits a buyer's ability to reduce its potential liability by taking consumer welfare enhancing actions.

The next question to address is the percentage of pass-through needed to establish this defense. The overall welfare effect of an intermediate good price reduction depends on, among other things, the characteristics of demand and the market structure of the downstream market, which in turn becomes partially manifest in the pass-through of the reduction to the end-consumer. Both the price efficiency and the distribution of the benefits between producers and end-consumers are important in making welfare judgments. If the pass-through is considerable, perhaps fifty percent, then a substantial portion of the benefit from the buyer conspiracy will flow directly to the consumers; though a fifty percent pass-through also implies that firms are enjoying substantial benefits as well. Thus, determining the appropriate pass-through standard involves both economic analysis and a policy

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107 A related issue concerns whether it is more likely that competitors will collude downstream if they have colluded upstream. As a purely logistical matter, the creation and/or functioning of a conspiracy upstream would seem to increase the ease of re-creating such a conspiracy downstream. See, e.g., BLAIR & HARRISON, supra note 17, at 123–24 (discussing factors contributing to the formation of downstream conspiracies). It is important, however, not to overstate the true magnitude of that risk under this proposal either in terms of the harm or the likelihood of a downstream conspiracy. In terms of the harm, the requirement of substantial pass-through limits the ability of the conspirators to collude downstream. Even if they did so collude, the consumers may still fare better on net.

In terms of the likelihood of a downstream conspiracy, several factors warrant consideration. By definition, this risk is restricted to intermediate goods. If the conspirators are effectively end-users, no downstream market is at risk for collusion. If, however, the conspirators are intermediate good purchasers, the issue becomes how ongoing collusion among buyers in an upstream market affects the likelihood of collusion by the same firms in the downstream market where the firms are sellers. It is generally thought that prior collusion in a market increases the likelihood that future collusion can be supported in that same market. This risk of increased collusion, however, should be weaker across markets for two reasons. First, the common firms may be competing with different firms in the downstream market than in the upstream market. Second, the market structure is also likely to be different between the two markets. Assuming intermediate goods purchasers, upstream conspirators do not always compete, either directly or indirectly, in the downstream market. Therefore, the enhanced likelihood of collusion downstream remains unclear. Moreover, a history of collusion in one market does not carry the comparable implications as a history of collusion in a different market. Both types of prior conduct are relevant, but the former is clearly of greater significance than the latter.
The determination of the relevant value attributed to consumer versus producer surplus. The economic analysis can be complex if done precisely, and resolving the policy issue will be contentious. As a starting point, this iBrief proposes a standard requiring that the incremental benefits to consumers exceed those to the firms. Given that the incremental price efficiency loss from the intellectual property buyer conspiracies at issue is theoretically zero, any significant flow of benefits to the consumers would improve their static welfare.

The question then becomes if substantial pass-through of conspiracy-induced savings is required, would buyers even form the arguably efficiency-enhancing cartels at issue? The answer is yes for several reasons. First, substantial pass-through to consumers does not mean that the conspirators retain no benefits or only trivial benefits from the conspiracy-induced price reduction. Second, numerous business reasons exist why the conspirators (acting as downstream sellers) would want lower prices available to their consumers. The buyers may be able to generate greater profits from the higher volume of sales induced by the lower consumer price (even assuming 100 percent pass-through). Third, the upstream conspirators may sell additional goods that are complementary to the good whose input is at issue in the conspiracy.

Establishment of a Not Insubstantial Reduction in Innovation. If the defendant can demonstrate that the buyer conspiracy resulted in either a negligible price effect (*de minimis* effect) on the seller or a price benefit to the consumer (substantial pass-through), the plaintiff must then establish a not insubstantial reduction in innovation in order to prevail. Although a reduction in innovation does not necessarily imply a reduction in welfare, reductions in innovation have been typically treated as harms, and to be conservative, this iBrief adopts this perspective in its recommendations.

Arguments intended to establish or dispute a reduction in innovation will likely fall into two related categories: theoretical arguments linking various observable features of the situation in question to their innovation effect, and facts that provide direct and indirect evidence of an innovation effect, often buttressed by theory. Plaintiffs will argue that an effective conspiracy reduces the anticipated future rewards to innovation and, therefore, reduces innovation investment and ultimately innovation itself. Although directionally correct, this general argument does not by itself establish a not insubstantial reduction in innovation. Further, one can expect a number of partially countering theoretical arguments suggesting that future innovation investment is unlikely to be substantially affected by a given buyer conspiracy. For example, defendants may argue that the buyer conspiracy formed under unusual circumstances (*e.g.*, government imposition of the V-chip
standard, which was important in the Soundview case) that are unlikely to be repeated later, and hence that investment—which may respond to anticipated reductions in innovation rents—would not be affected. Defendants might also argue that because seller rents are commonly maximized by limiting the number of licensees and/or pitting licensees against one another, the likelihood of a buyer conspiracy is diminished. The defendants are also likely to argue that it would not be in their own interest to reduce the flow of innovation. For example, in Adaptive Power Solutions and in Soundview the buyers argued, respectively, that it was contrary to their interests to price in such a way as to reduce the number of suppliers in the market or to reduce future innovation.\(^{108}\) As discussed in Part III, such an argument has limited force.

78 In light of such arguments and counterarguments, this iBrief would not permit theory alone to establish a not insubstantial reduction in innovation. Moreover, if merely arguing the directional effect of the reduction in incentives suffices to meet the plaintiff’s burden, then such a lax standard would effectively reinstate per se condemnation of buyer price-fixing. Therefore, some level of empirical evidence is also required to support the alleged reduction in innovation. Such support could consist of concrete evidence of actual reduced innovation investment or some other indicia of innovation reduction. Reduced innovation investment may be difficult to interpret, as changes in industry conditions will change innovation investment for reasons unrelated to the conduct at issue. Nonetheless, a company could demonstrate that its investment in research and development has historically had a constant relationship, such as a set percentage, with the company’s current profit. Decreased profits due to the buyer conspiracy would reduce current profit and would, given the company’s history, translate directly into reduced innovation investment. Such evidence is less likely to be prone to litigation-strategic investment decisions. Similarly, it might be possible for a plaintiff to demonstrate that its competitors have decreased their innovation investments. More indirect metrics, such as a decline in the sales of equipment used as inputs to innovation, may be helpful in establishing this reduction. Reductions can also be inferred from the actions of buyers who might reduce their investment in capacity or in assets complementary to innovation because they anticipate reduced seller innovation. The characteristics of the innovation process may also be relevant. It is possible, for example, that

the efficient scale for innovation would dictate no post-conspiracy reductions in innovation.

Another evidentiary question concerns the weight accorded individual firm versus industry evidence. Reductions in incentives should affect all potential innovators in the industry, not just the seller targeted by the buyer conspiracy. Industry-level evidence may be preferable to plaintiff-specific evidence, which is more susceptible to gerrymandering through litigation-driven investment behavior. Unfortunately, while industry-level evidence appears to be most credible, for practical evidentiary reasons firm-specific evidence may sometimes constitute the bulk of the empirical evidence. Namely, the plaintiff has best access to its own investment information and other potential innovators are likely to be secretive regarding their innovation investments.

Finally, under the proposed screen the plaintiff can always prevail by demonstrating the requisite harm to innovation even if the defendants have demonstrated only a *de minimus* price effect on the plaintiff. Rather than relying solely upon economic theory, which suggests that innovation incentives should not decrease if there is no price effect, this iBrief adopts a cautious approach and preserves this alternative channel for the plaintiff.

*Industry-Wide Price Effects.* A buyer price-fixing conspiracy that disadvantages horizontal non-conspirator competitors may undermine downstream competition, even if it increases price efficiency. If horizontal competitors of the conspirators are excluded from the price reductions flowing from the conspiracy, then those excluded competitors may be disadvantaged relative to the conspirators. In the extreme, the disadvantaged competitors may exit the market resulting in less competition downstream. This could ultimately harm consumers by causing prices to increase, notwithstanding the initial period of increased price efficiency owing to pass-through. Importantly though, assuming non-collusion in the downstream market and sufficient numbers of upstream buyers, the fact that some non-members may be disadvantaged would not necessarily harm consumers.

Antitrust suits could be brought against the conspirators if the benefits of the exclusive deal were not shared more broadly. Nonetheless, to avoid the specter of such anticompetitive effects, this iBrief would require that any buyer price-fixing gains be shared throughout the entire market. This requirement eliminates the disadvantaging of any horizontal competitors as a result of the price-fixing activity. In other words, the buyer conspiracy’s demands must
concern general price decreases or they will likely be subject to *per se* treatment.

**Other Considerations.** Under the recommended approach, both parties have opportunities to rebut various presumptions. Much of the rebuttal evidence may entail comparing pre- and post-conspiracy market outcomes. Because the timing of both the identification of the conspiracy and the initiation of the lawsuit can have implications for what evidence is available, timing issues can also influence whether the burden of proof can be met. When a conspiracy is identified early, price effects are probably easier to demonstrate relative to innovation effects. Hence, one might argue that such cases would favor the defendant, particularly when the conspirator's market share is insubstantial; however, given a more sizable conspiracy, the defendant will need to demonstrate either no price effect or substantial pass-through. Both factors are likely to be somewhat harder to demonstrate persuasively with evidence drawn from a limited time period. Thus, even though the innovation effect will also be harder to demonstrate, when higher market shares are involved, the plaintiff may be favored.

An alternative approach, which would place a greater initial burden on the plaintiff, would require the plaintiff to establish a not insubstantial market share and to demonstrate a negative price effect. The defendant could then rebut with a pass-through defense. This alternative would be more lenient with respect to buyer price-fixing in intellectual property settings.

Although the instant proposal accounts for many elements, it does not entail fully weighing benefits and harms. Nonetheless, it constitutes an incremental improvement over a *per se* rule. Striking the correct balance when assigning burdens of proof is not easy, but experience will shape its evolution. For example, over time, one should expect the courts to further develop appropriate indicia of innovation harm. Unfortunately, many of these relevant indicia are likely to address incentives to innovate rather than the innovation harm itself. It is extremely difficult to establish the final link between reduced incentive to innovate and innovation harm. As a practical matter, if proving innovation harm is too difficult, one could relax the proof required or even reassign the burden of proof and require the defendant to demonstrate no innovation harm. Given the inherent difficulty associated with assessing innovation harm and price efficiencies and

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109 One could also alter the market share threshold for cases that involve recently established conspiracies.

110 Such a comparable evolution has characterized merger review as well as the antitrust treatment of vertical relationships.
society’s lack of experience and knowledge in implementing such trade-offs, this iBrief proposes incremental rather than radical reforms.

B. Noneconomic Considerations

Part II explored the need for antitrust to adopt a more nuanced approach to evaluating buyer conspiracies involving intellectual property. Part III underscored the difficulty, albeit not insurmountable, of balancing innovation harm and price efficiency benefits that are central to any more refined antitrust approach. Part IV(A) recommended one such approach based on economic reasoning. In its weakest form, the argument is that buyer conspiracies within this limited setting are not the unambiguous harm that warrants per se treatment. In its strongest form, the argument is that procompetitive efficiencies attendant to this suspect conduct would be lost with per se condemnation.

The remainder of Part IV evaluates whether either of two key noneconomic arguments justify retaining per se treatment despite the economic arguments favoring more lenient treatment. The first argument is that antitrust law simply should not recognize price efficiencies resulting from buyer price-fixing. The second is that conflicts between antitrust law and the patent system should be resolved in favor of the patent system. Although both arguments warrant serious consideration, ultimately, neither justifies foregoing the potential improvements in consumer welfare that a more lenient treatment of such conspiracies in the intellectual property setting promotes.

1. Should Price Efficiencies from Joint Action Go Unrecognized?

Part I identified several circumstances in which inherently suspect conduct received rule of reason rather than per se treatment. Those circumstances do not, however, include the price efficiencies associated with buyer price-fixing in the presence of a flat supply curve. Although such buyer conspiracies regarding intellectual property pricing may harm innovative efficiency, that harm cannot justify nonrecognition of price efficiencies because innovative efficiency harm need not always outweigh the price efficiency benefit. Hence, the argument for ignoring price efficiencies must rely upon disqualifying those efficiencies from consideration rather than upon some dominant net efficiency calculus. This section argues that no such basis for disregarding price efficiencies arises from the core values of antitrust law.

In recent years, antitrust law has continued to demonstrate an increased willingness to entertain various efficiency-based defenses.\[111\]

\[111\] See discussion infra ¶¶ 93–95; see also Andrew I. Gavil, A First Look at the Powell Papers: Sylvia and the Process of Change in the Supreme Court, 17 ANTITRUST 8, 8 (2002) (discussing the historical origins of how antitrust’s
This willingness has manifested itself in a reduction in the types of conduct receiving *per se* treatment and a concomitant increase in the conduct evaluated under a rule of reason. Though the courts have not fully engaged the specific type of efficiency argument this iBrief advocates, two lines of reasoning could be advanced for why the courts should not be receptive to it. The first reason, as discussed previously, is the overly simplistic appeal of the argument (exacerbated by vaguely worded case law) that buyer and seller price-fixing warrant similar treatment.\(^1\) A second reason, addressed here, is the ostensible hostility of American antitrust law to countervailing power arguments, which, in effect, would potentially legitimate otherwise competitively suspect conduct mitigating market power elsewhere in the market. The depth and wisdom of that hostility is questioned here.

\(^90\) The source of the potentially procompetitive effects of buyer price-fixing within this context stems from the ability of buyers to exercise countervailing power against the seller. Towards that end, it is important to understand why the exercise of countervailing power through the otherwise clearly suspect—if not illegal—conduct of such buyer price-fixing conspiracies should nonetheless be countenanced in limited circumstances. To demonstrate a prominent example wherein the U.S. government directly supports price-fixing as a mechanism of countervailing power, this iBrief notes the long-standing American policy supporting price-fixing among U.S. exporters. It then explores the numerous ways in which the courts and government already incorporate countervailing power into antitrust analysis as an offset to otherwise competitively suspect circumstances within the merger context. Finally, it briefly discusses arguments by commentators for relaxing certain antitrust prohibitions against limited forms of conduct that provide countervailing forces against firms that exercise market power.

\(^91\) The U.S. federal government has a long-standing policy of expressly accepting, indeed encouraging, price-fixing conspiracies that provide countervailing power against foreign market power. As one commentator has observed:

> America's tolerance for its own export cartels is almost as old as its antitrust laws. The 1918 Webb-Pomerene Act was avowedly a license for U.S. exporters to band together to exercise their collective bargaining power in foreign markets. The justification at

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\(^*\)Increasing reliance on *per se* rules gave way to a decidedly more economic analytical model, one that has proven to be . . . far more receptive to defendants asserting defenses based on ‘efficiency.’\(^{112}\).

\(^112\) See discussion *supra* Part II.A.
the time was that small U.S. firms needed mutual support to counter

192 This policy has received a more recent imprimatur in the form of the 1982 Export Trading Company (ETC) Act, which grants certificates permitting some actions that might otherwise be illegal. A recent study found that from the ETC Act’s inception in 1982 through 2004, “almost three-quarters of all ETC Certificates grant permission to fix export prices.”\footnote{Margaret C. Levenstein & Valerie Y. Suslow, The Economic Impact of the U.S. Export Trading Company Act, 74 Antitrust L.J. 343, 362 (2007); see also Spencer Weber Waller, The Failure of the Export Trading Company Program, 17 N.C. J. Int’l L. & Com. Reg. 239, 252 (1992) (“[Analysis of ETC Certificates from 1982 through 1990 revealed that more than half sought] the full range of price setting, production restriction, and policing powers normally associated with cartel behavior.”).} No small amount of commerce is affected given that, “exports by firms covered by ETC Certificates of Review . . . have averaged over $10 billion per year since 2001.”\footnote{Levenstein & Suslow, supra note 114, at 344.}

193 Consideration of price-fixing within a domestic context also provides instructive precedent. Not long ago, vertical price-fixing was condemned as per se illegal, but this principle no longer holds true. Ten years ago, in \textit{State Oil Co. v. Khan}, the Supreme Court overruled existing precedent, and vertical maximum price fixing became subject to a rule of reason, rather than a per se illegal, standard of review.\footnote{522 U.S. 3 (1997).} The Court reaffirmed its reluctance to apply per se rules to restraints “where the economic impact of certain practices [was] not immediately obvious.”\footnote{Id. at 10.} In \textit{Khan}, the Court noted that the precedent it was overruling had “expressed concern that maximum prices may be set too low for dealers to offer consumers essential or desired services.”\footnote{Id. at 17.} \textit{Khan} rejected this earlier concern noting that “such conduct, by driving away consumers, would seem likely to harm manufacturers as well as dealers and consumers, making it unlikely that a supplier would set such a price as a matter of business judgment.”\footnote{Id.} \textit{Khan} noted that it was not holding “all vertical maximum price-fixing [to be] per se lawful. Instead, vertical maximum price-fixing, like the majority of commercial arrangements subject to the antitrust laws, should be evaluated under the rule of reason . . . . [R]ule-of-reason analysis will effectively identify those situations
The debate between the majority and the dissent in *Leegin* illustrates the diversity of opinion that exists regarding the competitive effects of vertical minimum price fixing. The majority acknowledged that “each side of the debate can find sources to support its position.” 125 Although noting the “limited” amount of empirical evidence available, the majority concluded that the evidence “does not suggest efficient uses of the agreements are infrequent or hypothetical.” 126 The dissent, citing Robert Pitofsky, William Comanor, and Frederic M. Scherer, argued that the scant amount of evidence in support of efficient uses suggested that theory, more than evidence, influenced the majority. 127 Regardless of one’s estimation of these changes to vertical price-fixing law, both *Khan* and *Leegin* illustrate the trend in antitrust law away from *per se* condemnation and towards a more lenient treatment that acknowledges previously unrecognized efficiencies from ostensibly suspect conduct.

Finally, it is also important to recognize the different ways in which the courts and antitrust agencies already incorporate countervailing power considerations into their analyses. The most prominent example is found within the context of merger law. When a merger is potentially anticompetitive, the merging parties have argued
successfully in their defense that the existence of countervailing power within the marketplace in the form of “buyer power” mitigates the merged entity’s ability to engage in anticompetitive conduct.\textsuperscript{128} This buyer power argument is recognized within the context of both the DOJ Antitrust Division/Federal Trade Commission Horizontal Merger Guidelines and the National Association of Attorneys General Horizontal Merger Guidelines.\textsuperscript{129} If the courts and antitrust agencies recognize buyer power as a mitigating factor to possible anticompetitive effects when sellers seek to merge, then they also should acknowledge buyer power’s potential value, or at least lack of harm, within other contexts such as that at issue here.

A call for a broader use of countervailing powers within antitrust law has been made most forcefully by Barbara White\textsuperscript{130} and Warren Grimes.\textsuperscript{131} Both build on John Kenneth Galbraith’s seminal articulation of the countervailing powers concept\textsuperscript{132} and use this general concept to advocate specific legal reforms. In particular, both scholars argue that antitrust law may unnecessarily condemn nominally suspect conduct that exerts countervailing power against firms with market power.

White argues that “[c]ountervailing power analysis is . . . valuable because it provides a legal basis for courts to permit economic responses by exploited groups that are tailored to the anticompetitive aspects of otherwise legal behavior.”\textsuperscript{133} She would uphold the legality of such restraints in “circumscribed and well-delineated circumstances . . . even when such restraints conflict with traditional antitrust principles.”\textsuperscript{134} White, in an approach she describes as emphasizing “context rather than conduct,” would allow countervailing power restraints that function competitively.\textsuperscript{135} She also evaluates many decades of judicial precedent

\textsuperscript{128} See generally Robert W. Pratt, The “Sophisticated Buyer” Defense in Merger Litigation Gains Momentum, 6 \textit{Antitrust} 9 (1992) (delineating several clear examples wherein buyer power figured prominently in judicial analysis of challenged mergers).


\textsuperscript{132} \textit{Galbraith}, supra note 22, at 10–11; \textit{see also supra} note 22.

\textsuperscript{133} White, supra note 130 at 1049.

\textsuperscript{134} \textit{Id.}

\textsuperscript{135} \textit{Id.} at 1049–50.
Grimes thoughtfully critiques the law’s reluctance to allow weak economic actors to take collective action against firms that wield market power as frustrating the goals of the Sherman Act. He states the following:

Section 1 of the Sherman Act, because of its strong proscription on cartel conduct, stands in the path of collective action that could allow the exercise of countervailing power. Unless the small firms can establish an efficiency defense, collective action will be subject to the per se rule governing horizontal combinations. The result is “anathema to Sherman Act goals.”

Both scholars argue that their respective proposals are not only consistent with core antitrust tenets but are also essential to meaningfully effectuate those tenets. An important element of their proposals to permit previously illegal conduct, which exerts valuable countervailing forces, is that this category of conduct be carefully cabined—a priority reflected in this iBrief’s recommendation. This recommendation entails a very narrow use of countervailing power restricted to those cases wherein it is never price inefficient. Generally speaking, countervailing power is not always efficient because the effect of the countervailing force can more than offset the original force (a function of the seller’s market power) and result in price falling below the competitive price. With a flat supply curve, buyer power cannot create price inefficiency because pricing below the competitive level—marginal cost—will result in no supply at all.

2. Should the Patent System Dominate?

Patent and antitrust law operate in some tension with one another. Patents induce innovation by providing inventors exclusivity. That exclusivity, in turn, sometimes enables the patent holder to monopolize one or more markets. In contrast, a primary purpose of antitrust law is to maintain competitive markets. Antitrust law defers to the patent system by respecting the exclusivity granted by patents even when, for example, it results in supracompetitive pricing. From an economic vantage point, the difference in social welfare from allowing

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136 Id. at 1073–88.
137 Grimes, supra note 131, at 195; see also Jacobson & Dorman, supra note 33, at 155 (arguing that monopsony power wielded against monopoly power “will almost always be beneficial to downstream consumers”).
138 Grimes, supra note 131, at 195.
139 This proposal also cannot be used to endorse supplier conspiracies to counteract buyer market power. See discussion supra, Part II.B.1 and note 32.
versus disallowing a buyer price-fixing conspiracy in an intellectual
property setting is the net incremental welfare due to more efficient
pricing and the presumed decrease in innovation incentives. As
discussed previously, assessing and then balancing those two effects is
generally a very difficult task.

One response to the difficulty of balancing is to merely establish
as the default position that innovation harm is always presumed greater
than the price efficiencies engendered by buyer price-fixing. Such a
default enshrines a strong deference to the patent system that would
effectively maintain the current per se prohibition against buyer price-
fixing by always favoring the patent holder. This outcome avoids the
tough balancing issues by giving short shrift to at least two important
legal developments: the trend in antitrust law favoring more nuanced
and economically-sophisticated analyses when feasible, and the
increasing appreciation that innovation and patents are not synonymous
and that, in fact, they may at times work at cross purposes. For
example, there is increasing recognition that some patent holders
strategically deploy their rights to hold-up others who may have designed
a product without knowledge that they infringed on a patent that they
could easily have avoided without loss to the design.140 The profits that
those employing such patent litigation strategies obtain seem to arise
more from exploiting the legal system than from harnessing the value
created by the inventive activity.141

140 One example of a de facto industry standard, which was allegedly developed,
released and broadly adopted prior to the developer’s knowledge that the
standard involved patented technology, involved Compuserve’s GIF standard
for “file exchange of graphics over the Internet.” Mark A. Lemley, Intellectual
Property Rights and Standard-Setting Organizations, 90 CAL. L. REV. 1889,
1922 (2002). Compuserve released this standard in 1987 and many adopted this
standard through the early 1990s. Unisys had “obtained a patent that arguably
covered the compression algorithm used by the GIF standard” in 1986. Id.
“Unisys kept silent about the patent while the GIF standard gained market share;
whether intentionally or because they were unaware of the [GIF-Unisys patent]
overlap is unclear.” Id. In 1994, Unisys then proceeded to assert its patent
against Compuserve and those companies that used the GIF standard, “a group
that included virtually every major company on the Internet at one point in
time.” Id.

141 Much of the concern in the literature has been with patent “trolls” who buy
patents from inventors then search for potentially infringing uses. See, e.g., Carl
Shapiro, Injunctions, Hold-ups, and Patent Royalties (UC Berkeley Working
Paper, August 2006), available at
http://faculty.haas.berkeley.edu/shapiro/royalties.pdf (royalty overcharges may
occur for weak patents involving minor features of the potentially infringing
design).
Presuming that innovation harm outweighs price efficiency benefits reflects an extreme degree of deference inconsistent with that which antitrust either has or should accord the patent system. The deference of antitrust to the patent system extends only to allowing exclusivity. When exclusivity engenders monopoly power, the antitrust laws treat the patent-based monopoly in much the same manner as it would treat a monopoly with non-patent origins. If economic reasoning and reality suggest that antitrust law should permit buyer conspiracies to provide a countervailing force against a monopoly that does not depend on patent exclusivity, such analysis must likewise be applied to conspiracies that provide a force against a monopoly that does depend on patent-granted exclusivity. A law that insulated a patent-dependent monopoly but did not shield other monopolies would amount to unwarranted special treatment for patents.

Finally, it is important to recognize that the animating economic argument for more lenient treatment emerges from the flat supply curve, which characterizes intellectual property but is not solely manifested within intellectual property contexts. If other general classes of goods or services have flat supply curves, then the foregoing analysis suggests that those classes are also candidates for more lenient treatment.

CONCLUSION

In an ideal antitrust world, the costs and benefits of any suspect conduct would be readily apparent and fully quantified. Obviously, that level of insight does not exist—particularly when it comes to predicting future innovation effects. Nonetheless, given the importance of innovation to consumer welfare and to the economy, antitrust necessarily implicates dynamic effects. This iBrief advocates a more conscious treatment of those effects within the specific context of buyer price-

\[\text{\textsuperscript{142}}\text{In recent years the antitrust community has focused increasing attention on both substantive and procedural aspects of the patent-granting process and, in particular, upon the issue of improvidently-granted patents. See generally FED. TRADE COMM'N, supra note 46; Hillary Greene, Afterword: The Role of the Competition Community in the Patent Law Discourse, 69 ANTITRUST L.J. 841 (2002) (analyzing the basis for and advocating such a broad role for the antitrust/competition community).}\]

\[\text{\textsuperscript{143}}\text{See generally IP GUIDELINES, supra note 87, at \S 2.1 ("The [federal antitrust] Agencies apply the same general antitrust principles to conduct involving intellectual property that they apply to conduct involving any other form of tangible or intangible property. . . . Intellectual property is thus neither particularly free from scrutiny under the antitrust laws, nor particularly suspect under them.").}\]

\[\text{\textsuperscript{144}}\text{These same arguments hold for market power that is less than monopoly.}\]
fixing involving intellectual property. Legal engagement of this issue, along the lines proposed, constitutes a necessary first step.

106 This iBrief analyzed buyer price-fixing and determined that given a flat supply curve, buyer collusion will not result in price inefficiencies and, in fact, when deployed against sellers with market power, it will likely increase price efficiency. Such circumstances are not rare as pure intellectual property is characterized by a flat supply curve. Thus, for at least this class of property, it would seem that per se condemnation of buyer price-fixing does not have a firm economic justification even assuming potential losses to innovative efficiency.

107 The instant proposal for recognizing the price efficiencies offered by buyer conspiracies in pure intellectual property settings is narrowly circumscribed. Given the difficulty inherent in balancing current price effects against future innovation effects, it recommends a coarse screen that focuses on the existence of such effects. Where both effects can be shown to be more than de minimis and the buyer conspiracy has a not insubstantial market share, it adheres to current buyer conspiracy law by favoring innovation over price effect; however, this screen enables buyer conspiracies to survive legal challenge when the buyers show price efficiencies are passed through to consumers and the seller cannot demonstrate the requisite innovation harm. The proposed screen affects not only antitrust law, but also the rewards associated with the exclusivity patents confer. Antitrust law would no longer protect patent holder rents through per se condemnation of potentially efficient buyer price-fixing. Though this specific proposal is new, it constitutes an application of the well-established principle that rewards associated with a patent should be bounded by competition policy considerations.