

economists incorporated Economists Ink

a brief analysis of policy and litigation
spring 2007

In This Issue

Bundled Discounts and the Antitrust Modernization Commission Recommendations

Robert D. Stoner discusses a test, suggested by the Antitrust Modernization Commission, for determining whether a bundled discount will be anticompetitive. While the test represents a clear step forward, it does not include a method of measuring welfare effects. A key indicator of welfare effects is likely to be the relationship of the pre-bundle price of the monopoly good to its post-bundle standalone price.

Fraud in an (Inefficient) Market: Behavioral Finance and Securities Lawsuits

Plaintiffs in class action and other securities fraud cases often rely on the "fraud on the market" theory, which in turn is based on the efficient markets hypothesis. Sudip X. Gupta reviews recent research that casts doubt on the efficient markets hypothesis. Research in behavioral finance has challenged that hypothesis by casting doubt on its underlying assumption that a riskless arbitrage opportunity is associated with any incorrectly priced asset and by arguing that traders' inherent biases may allow incorrect pricing to persist.

Imports and Geographic Market Definition

The antitrust agencies often must determine whether a relevant geographic market is larger than the United States. Laura A. Malowane and Philip B. Nelson find that whether the agencies include foreign firms in the market rarely seems to hinge on the specific international factors that are identified in the Guidelines: exchange rates, quotas, and coordination by foreign competitors. The antitrust authorities take a cautious approach to expanding the market beyond the United States and are skeptical about the ability of importers to discipline post-merger price increases.

Bundled Discounts and the Antitrust Modernization Commission Recommendations

By Robert D. Stoner

Bundled discounts may raise serious antitrust concerns. These concerns arise when a firm gives rebates on a product over which it arguably has monopoly power (the "monopoly product") to encourage consumers to increase their purchases of that firm's competitively supplied product or products (the "competitive product(s)"). The central issue relates to the effects of such bundling on the viability of an equally efficient single-product producer of the competitive product and, ultimately, on overall consumer welfare. There is a strong consensus that bundling is a ubiquitous phenomenon and that most instances of bundled discounts are either competitively neutral or pro-competitive. Nonetheless, bundled pricing arrangements may harm consumer welfare if they exclude single-product competitors so that prices of the competitive product increase.

There has been considerable turmoil regarding the proper antitrust response to bundled discounts since the *LePage's v. 3M* decision in 2003. In that decision, the Third Circuit appeared to condemn bundled rebates adopted by a firm with market power without evaluating under what conditions these practices could represent competition on the merits that increased consumer welfare. This decision was followed by a spate of academic and policy-related articles that attempted to define a more cogent standard.

Recently, the Antitrust Modernization Commission (AMC) has suggested a three-part test to evaluate whether bundled discounts are likely to be anticompetitive. This test is very similar to the framework laid out in *Ortho Diagnostic v. Abbott Labs*, which viewed bundled discounts under a predation model. First, a bundle would be presumptively legal if, after allocating all rebates available through the bundle to the competitive product, the defendant sold the competitive product above incremental costs. Second, even where such allocation resulted in a finding of below-cost pricing, unless the defendant is likely to recoup these short-run losses after it forces competitors from the industry, the bundle would still be judged competitively benign. Bundled discounts that meet either of the first two parts of this test may be viewed as being in a safe harbor. Third, for bundles not in the safe harbor, one needs to consider the broader question of whether the bundle is likely to harm competition (and, implicitly, economic welfare), rather than just competitors.

The AMC specifically rejected a more lenient standard that would allow bundles whenever the defendant's total revenues derived from the entire bundle were greater than the average variable cost of the entire bundle. The majority rejected this standard because it did not properly emphasize the effect of bundling on the single-product competitor. They also felt that defendants would rarely fail to meet this standard.

The AMC's predation-based single product test appears to be useful in defining a safe harbor for bundled discounts that are unlikely to harm competition. Some bundled offers may make competitive entry unprofitable (i.e., the bundle fails the first prong of the AMC test), but nevertheless improve consumer welfare. That, however, is the nature of a safe harbor. More important, as the AMC notes, the approach does not fully come to terms with aspects

Fraud in an (Inefficient) Market: Behavioral Finance and Securities Lawsuits

By Sudip X. Gupta

The fraud on the market (FOM) theory, which plaintiffs in class action and other securities fraud cases often rely on, is based on the "semi-strong" version of the efficient markets hypothesis. Plaintiffs using the FOM theory generally argue that alleged public misrepresentations by defendants caused them to engage in securities transactions that resulted in their incurring losses. Recent decisions that relied on both the FOM theory and the efficient markets hypothesis include *Dura Pharmaceuticals v. Broudo and Merrill Lynch & Co. Research Reports Securities Litigation*. The semi-strong efficient markets hypothesis shows the link between the alleged misrepresentations and distortions of securities prices. According to that hypothesis, securities prices will quickly come to reflect all relevant publicly available information. Recent research in behavioral finance, however, has led some to question the efficient markets hypothesis and may complicate findings of liability and estimates of damages in securities fraud cases.

The semi-strong efficient markets hypothesis assumes that most investors are rational and that even if some investors are irrational, arbitrage will ensure that securities prices reflect all available information. For example, suppose a share of company A is really worth \$40, but irrational investors who are excessively pessimistic sell so many shares that they depress the price to \$35. The efficient markets hypothesis argues that rational traders will buy the securities at the depressed price. The risk inherent in taking a large position in the stock will not deter traders from such purchases because they can hedge that risk by selling a close substitute security short. Therefore, rational investors will continue to buy the stock until they have driven its price back to its fundamental value of \$40.

The efficient markets hypothesis is based on the view that if securities are incorrectly priced, traders will have an opportunity to engage in profitable arbitrage with little or no risk and that they will take advantage of that opportunity. Recently, however, behavioral finance research has

challenged the efficient markets hypothesis in two ways: i) by questioning whether there is really a riskless arbitrage opportunity associated with any incorrectly priced asset and ii) by arguing that even the most experienced and intelligent traders frequently have inherent psychological biases that may allow the incorrect pricing to persist.

Research has found securities that are incorrectly priced for significant lengths of time. Arbitrage did not rapidly eliminate these anomalies perhaps because imperfect information about future securities prices and transaction costs made arbitrage costly and risky. The form, and even the very existence, of an arbitrage opportunity is often uncertain. That uncertainty exposes the arbitrageur to substantial risks. Moreover, arbitrage may involve financing risks, because the length of time it will take securities prices to come back into line is uncertain, and the arbitrageur may be unable to finance its position over that period. For example, the arbitrageur may face a margin call that will force it to liquidate its position prematurely if it cannot post additional collateral. If the arbitrageur must liquidate, it may incur substantial transaction costs without having a chance to profit from the arbitrage.

There are famous examples where arbitrage did not eliminate pricing anomalies. One well-known example involved 3 Com and its subsidiary Palm. 3 Com announced that in 9 months, it would spin off its 95% ownership in Palm by giving its shareholders 1.5 shares of Palm for each share of 3 Com that they held. Because Palm's share price was \$95, 3 Com's share price should have been at least \$142.50, the value of 1.5 shares of Palm. Nonetheless, the price of 3 Com was \$81, \$61.50 less than the value of the promised shares of Palm. An arbitrageur apparently could buy shares of 3 Com, sell Palm short, and collect a large profit after the spin off. Nonetheless, the prices of 3 Com and Palm did not realign—the value of a share of 3 Com remained far below the value of 1.5 shares of Palm.

Behavioral financial economists also argue that the efficient markets hypothesis

ignores the extensive psychological literature on inherent biases of individuals. They contend that biases like overconfidence, sample selection, and loss aversion consistently affect the judgments of even the most experienced individuals. Markets have sometimes reacted to information in ways that seem to be inconsistent with the efficient markets hypothesis and instead seem to reflect traders' biases. For example, in one case a bio-tech stock's price shot up about 600% in response to a newspaper article that merely reported information that had been readily available in a widely-read scientific journal five months earlier. Prices of other bio-tech stocks also rose in response to the article. As the article reported no new information, the efficient markets hypothesis indicates that it should not have had the price effect that it did. The fact that prices did not respond to the scientific journal's report but did respond to the newspaper article repeating it indicates that investors had a bias affecting how they responded to information from different sources.

The behavioral finance literature poses new challenges to the FOM and the efficient markets hypothesis. Many well-documented examples in the literature support the basic tenets of behavioral finance. Often the observed price is still undisputedly the best estimate of the fundamental value of the relevant security. Nonetheless, actual market performance may differ from the predictions of the efficient markets hypothesis because of transaction costs and risks associated with arbitrage and because some investors have biases that are irrational but strong and consistent. This literature may make it harder for courts to draw conclusions concerning liability and damages in securities fraud cases.



Besides his work at EI, Sudip X. Gupta is an Assistant Professor of Finance at the Indian School of Business. His area of expertise includes IPO and securities pricing, auctions and mergers and acquisitions.

Imports and Geographic Market Definition

By Laura A. Malowane and Philip B. Nelson

The antitrust agencies often must determine whether a relevant geographic market is larger than the United States. The Horizontal Merger Guidelines assume that the role that foreign firms play in geographic market definition is substantially the same as that of domestic firms. Nonetheless, the Guidelines also recognize that foreign firms may face competitive constraints that differ from those that domestic firms face. A review of the agencies' public statements and of recent merger cases indicates how the agencies weigh the competitive significance of foreign firms when defining markets.

The Guidelines state that market shares "will be assigned to foreign competitors in the same way in which they are assigned to domestic competitors," subject to three qualifications. First, if exchange rates fluctuate significantly, the Department may use a period longer than one year to measure market shares. Second, if foreign firms are subject to a quota, the market shares assigned to the firms will not exceed the amount of shipments that they are allowed under the quota. And finally, if firms in one or more countries act in coordination, a single market share may be assigned to the relevant country or countries. (§1.43)

The FTC's 1996 report, *Anticipating the 21st Century: Competition Policy in the New High Tech, Global Marketplace*, elaborated on the approach to market definition described in the Guidelines. The report explained that "foreign based firms can differ from their domestic rivals in their competitive impact, often for uniquely international reasons." The Report indicated that while the presence or absence of current sales does not determine whether the FTC staff will include a foreign firm in the relevant geographic market, the staff will not include a firm that would be unlikely to enter the U.S. market "because of difficul-

ties in achieving product acceptance or distribution." It also indicated that the FTC staff will assess whether there are "unrecoverable costs," such as marketing costs, that may preclude a timely (within one year) and likely (profitable) entry by foreign firms. In addition, the Report pointed to a variety of strategic considerations faced by foreign firms that may limit their willingness to expand U.S. sales (such as the threat of U.S. dumping duties and the fear of losing foreign government subsidies). The report, however, also suggested that foreign firms sometimes may be particularly well-positioned to expand U.S. sales, since they may have know-how or other assets that U.S. firms do not have.

The agencies remain skeptical about the ability of importers to discipline post-merger price increases absent evidence to the contrary.

A review of a large number of merger cases between 2001 and 2006 suggests that the antitrust agencies have followed a traditional Guidelines approach when analyzing whether and how foreign competitors should be included in the relevant geographic market. In particular, in most of

the recent merger cases, discussions of geographic markets focused on the SSNIP test, whether a hypothetical domestic monopolist could profitably impose a small but significant and non-transitory increase in price, and related considerations.

For the seven mergers where the agencies limited the relevant market to the United States, the following reasons were mentioned for not choosing a wider geographic market: imports flunked the SSNIP test (6 times), transportation and other cost disadvantages (6 times), quality and reliability problems (3 times), limited imports or import/export regulations (3 times), and the need for a local distribution and service presence (2 times). (The complaint or accompanying consent papers did not always discuss the rationale for the identified geographic market.)

The agencies did define geographic markets larger than the United States in many

EI News and Notes

Class Certification in American Seed Company, Inc. v. Monsanto Company

In *American Seed Company, Inc. v. Monsanto Company*, putative classes of growers and dealers alleged unlawful monopolization of four genetically modified corn seed markets. William C. Myslinski submitted extensive expert analysis in opposition to class certification on behalf of defendant Monsanto. Dr. Myslinski has previously testified in a number of class certification matters including *Sample v. Monsanto Company*. Dr. Myslinski was assisted by Kent W Mikkelsen and Allison M. Holt. Monsanto was represented by Howrey LLP. The U.S. District Court for Delaware denied class certification.

WPS Resources and Peoples Energy obtain FERC Merger Approval

Testimony by John R. Morris helped WPS Resources Corporation and Peoples Energy Corporation obtain Federal Energy Regulatory Commission Merger Approval under Section 203 of the Federal Power Act. WPS owns electric generation facilities and natural gas distribution facilities in eastern Wisconsin, and Peoples owns natural gas transmission, storage, and distribution facilities in Illinois. Dr. Morris provided studies showing either that the relevant upstream natural gas markets are not highly concentrated or the two companies do not compete in the same market.

Copyright Industries Report Released

"Copyright Industries in the U.S. Economy: The 2006 Report" was recently released by the International Intellectual Property Alliance (IIPA). The full report is available at www.iipa.com. The report was written by Stephen E. Siwek and updates a series of earlier reports that he has written for the IIPA. Mr. Siwek has also been advising the World Intellectual Property Organization (WIPO) and the governments of Jamaica and Ukraine in studies of the economic contributions made by the copyright industries in those countries.

of bundled discounts that are more like tying (encouraging consumption of the competitive good through discounts on the monopoly good) than predatory pricing. These anticompetitive effects may not require short-run profit sacrifice or a period of recoupment. The economics literature discusses situations where bundled discounts may generate anticompetitive effects by giving consumers a choice between a discounted bundle price and unattractive standalone prices, all above cost.

The first and second prongs of the AMC test are predicated on only attacking bundled discounts where an equally efficient competitor could be foreclosed from competing. But such foreclosure effects are not explicitly tied to consumer welfare outcomes, which are encompassed in the third prong of the test. A number of discussions of bundling in the recent economics literature attempt to tie bundling rules more closely to economic welfare consequences. Welfare effects of bundled discounts are ambiguous because the mechanism for foreclosure, a discount on the monopoly good, by itself increases welfare. Thus, in measuring the welfare effects of bundling, one should assess whether the effective price of the monopoly good purchased as part of the bundle is higher or lower than the stand-alone monopoly price under a pre-existing, non-bundled pricing regime. If the stand-alone price is simply the pre-existing monopoly price (so the

bundled price of the monopoly good is necessarily lower than the monopoly price), then bundling likely increases welfare. By contrast, if the stand-alone price is higher than the pre-existing monopoly price, then the bundle more likely reduces welfare. The third prong of the AMC test could arguably be reached directly through such an assessment, without the need to analyze the first two prongs.

In sum, the three-part test proposed by the AMC represents a clear step forward in the antitrust analysis of bundled discounts, and such discounts that pass either of the first two parts of the test should be viewed as being in a safe harbor. However, the AMC test does not include a method of measuring welfare effects to ensure a third part of this test is met. A key indicator of welfare effects is likely to be the relationship of the pre-bundle price of the monopoly good to its post-bundle stand-alone price.



Robert D. Stoner has worked on a number of recent litigations that involve bundling.

Imports and Geographic Market Definition

cases. Eleven complaints alleged either a U.S.-Canada geographic market or a North American geographic market. These complaints came in a wide variety of industries. An additional 9 complaints defined a world market, including 4 cases involving the chemical industry, 3 involving equipment and parts, and 2 involving computer software.

Whether the agencies include foreign firms in the market apparently depends on fundamental market characteristics. In particular, the antitrust authorities are more likely to discount the competitive threat of importers that are not already well-established competitors if products are differentiated and require substantial domestic promotion or technical support. That may be because in those markets generally it is harder to win customer acceptance and sunk costs of entry are higher. Few of the complaints or accompanying consent papers even mention the specific international factors that are identified in the Guidelines: exchange rates, quotas, and coordination by foreign competitors.

The antitrust authorities rely heavily on what customers say about

their willingness to turn to imports if domestic prices increase. If customers identify specific competitive foreign sources of supply to which they would turn if domestic prices increased by a SSNIP, the antitrust authorities are very likely to expand the market to include these foreign sources of supply. Similarly, the antitrust authorities are likely to explore "natural experiments," such as a surge in demand or a sharp decrease in domestic supplies, to determine if imports quickly responded and restrained the related U.S. price shock. Before broadening the market to include foreign producers based on such an experiment, the antitrust agencies are likely to require evidence of both an increase in imports and resulting stable U.S. prices.

Both a review of the public materials available concerning recent mergers and experience working on a significant number of mergers that involved imports indicate that the antitrust authorities still take a cautious approach to expanding the market beyond the United States. The agencies remain skeptical about the ability of importers to discipline post-merger price increases absent evidence to the contrary.



Laura A. Malowane and Philip B. Nelson have extensive experience in antitrust analysis of foreign competition arguments. A longer version of this article originally appeared in the Spring 2007 edition of *The Threshold*, the newsletter of the American Bar Association Antitrust Section's Mergers and Acquisitions Committee.

Economists
INCORPORATED

Suite 400 1200 New Hampshire Ave. Washington, DC 20036 Phone: (202) 223-4700 Fax: (202) 296-7138	Suite 250 5980 Horton Street Emeryville, CA 94608 (510) 547-6910 (510) 547-5162
--	---

Website: www.ei.com

President, Jonathan L. Walker; Editor, Henry B. McFarland
Layout, Gregory E. Wurz
In affiliation with The Allen Consulting Group in Australia