Book Review

Theory Meets Practice: A Deeper Understanding of Collusion

Robert C. Marshall and Leslie M. Marx

The Economics of Collusion—Cartels and Bidding Rings

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Reviewed by William E. Kovacic

No trend in modern antitrust law is more striking than the global acceptance of a norm that condemns cartels as the market's most dangerous competitive vice. As the 1990s began, only the United States and a few other jurisdictions actively challenged horizontal price fixing, bid rigging, and market allocations. By the decade's end, lysine, leniency, and vitamins had changed all of that. Today, more and more antitrust systems treat cartels as serious offenses, and many single out cartels as the preeminent focus of enforcement.[1]

Expanded prosecution of cartels with increasingly powerful sanctions has inspired an abundance of excellent books about collusion. Superb volumes from recent years include collections of essays on the operation, detection, and punishment of cartels.[2] With *The Economics of Collusion*, Robert Marshall and Leslie Marx have surpassed a formidable field.[3] *Economics of Collusion* is the best single volume yet written about the formation and operation of cartels and bidding rings. As described below, five features of the book stand out.

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Integration of Theory and Enforcement Experience

In examining how cartels function, Marshall and Marx combine a state-of-the-art distillation of economic theory with a comprehensive reading of publicly available accounts of prosecuted cartels, especially the cartel decisions of the European Commission.[4] The book begins with an overview

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1 These trends are documented in Organization for Economic Cooperation and Development, *Hard Core Cartels—Third Report on the Implementation of the 1998 Recommendation* (2005); Organization for Economic Cooperation and Development, *Cartels: Sanctions Against Individuals*, OECD J. Comp. L. & Pol'y, Vol. 9, Issue 3, at 7 (2007).

2 Examples include Criminalising Cartels (Caron Beaton-Wells & Ariel Ezrachi eds., 2011); John Connor, Global Price Fixing (2d ed. 2008); Criminalization of Competition Law Enforcement—Economic and Legal Implications for the EU Member States (Katalin J. Cseres, Maarten Pieter Schinkel & Floris O.W. Vogelaar eds., 2006); Handbook of Procurement (Nicola Dmitri, Gustavo Piga & Giancarlo Spagnolo eds., 2006); European Competition Law Annual 2006: Enforcement of Prohibition of Cartels (Claus Dieter Ehlermann & Isabela Atanasiu eds., 2007); How Cartels Endure and How They Fail (Peter Z. Grossman ed., 2004).

3 In offering this opinion, I am not an entirely disinterested observer. I have co-authored papers with Marshall and Marx and have worked with them on various academic research projects involving antitrust law, collusion, and procurement policy.

4 *Economics of Collusion* will serve as a useful reference tool with citations to over 160 books and articles and useful data on many cartel cases. In studying experience with cartels, Marshall and Marx supplement their own examination of published decisions by drawing upon earlier classic studies of cartels, e.g., George W. Stocking & Myron W. Watkins, Cartels in Action (Twentieth Century Fund 1946), as well as recent contributions that seek to derive lessons about cartel formation and management from modern cases, e.g., Margaret C. Levenstein & Valerie Y. Suslow, *What Determines Cartel Success?*, 44 J. Econ. Lit. 43 (2006).

that frames the analysis of collusion by setting out the distinction between tacit and explicit collusion, discussing the lingering effects of explicit collusion, and emphasizing the importance of the role of monitoring in enforcing collusive agreements.[5] Marshall and Marx then examine the formation and operation of cartels with a series of first-person narratives. Chapter 2, "The Narrative of a Cartel," is told from the perspective of a fictional business manager who instructs managers from rival companies about the best ways to design and implement collusive schemes.[6] The narrative in Chapter 3 explores the inner workings of conspiratorial bidding rings.[7] By setting out the gains that conspirators can realize, the narrative underscores why firms strive (and will continue to strive) to invent coordination mechanisms that can counteract enhancements in anti-cartel enforcement. A separate narrative in Chapter 4 portrays coordination problems and their solutions, the dangers of detection, and the forms of economic circumstantial evidence that might support an inference of agreement in the litigation of antitrust claims.[8]

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The joining up of theory with actual experience has a number of applications. It provides insights that can improve the application of antitrust laws by courts and enforcement agencies. Antitrust counsel also will find the scenarios useful in designing antitrust compliance programs and for detecting possible violations. Not surprisingly, because the narratives vividly map out what cartels must do to succeed, the narratives also could serve to instruct prospective cartel participants in how to orchestrate their behavior.

The narratives also offer a larger lesson beyond their informative examination of how cartels are formed and function. Marshall and Marx underscore the adaptability and ingenuity of business managers in responding to ever more severe public enforcement campaigns against collusion. The authors emphasize a crucial point for enforcement agencies: the private gains from collusion create strong, enduring incentives for firms to devise counter-measures to blunt the impact of enforcement advances in detection and punishment. With illustrations from published cartel

5 *Economics of Collusion* at 1–26.

6 *Id.* at 29–54.

7 *Id.* at 55–70.

8 *Id.* at 71–80.

cases, Marshall and Marx document the evolution of increasingly sophisticated methods to overcome resistance by buyers, disguise true-ups, and punish deviations.

Cartelization may pose difficult challenges, but the rewards for success provide strong inspiration to surmount them. The pedagogical narratives demonstrate that business managers will press to find means of coordination that are more likely to escape prosecution. Nobody should underestimate their ingenuity and skill in doing so. "Given the creativity and flexibility of successful cartels in crafting solutions to problems," the authors write, "we expect changes to their operating environment to be greeted with quick and effective adjustments to the collusive structures."[9] This observation suggests caution in assuming that any specific improvement in enforcement (e.g., leniency, incarceration for culpable individuals) will cause prospective cartel members to abandon hope.

Not only must the cartel cope with cheating and defections within its own ranks, it must neutralize challenges posed by entrants, suppliers, customers, substitute products, and rivals which chose not to join the conspiracy.

Keys to Effective Collusion

A second valuable feature of *Economics of Collusion* is a path-breaking analysis of what cartels and bidding rings must do to succeed. Marshall and Marx model cartels as two-stage mechanisms whose effectiveness often requires the application of collusive *and* exclusionary tactics.[10] In the first stage participants reach a consensus about how they will restrict output or, in the case of a bidding ring, depress the price to be offered at an auction. In an important contribution to the literature, Marshall and Marx illuminate what happens next. Not only must the cartel cope with cheating and defections within its own ranks, it must neutralize challenges posed by entrants, suppliers, customers, substitute products, and rivals which chose not to join the conspiracy.

Marshall and Marx adapt Michael Porter's "five forces" model to identify the external threats to the cartel and to examine how successful cartels cope with them.[11] In many instances, cartels address stage-two threats with exclusionary tactics that individual dominant firms use to chasten rivals. Among other means of exclusion, cartels engage in predatory pricing, file vexatious patent infringement suits, form exclusive dealing contracts with upstream suppliers, and take advantage of public policies (such as anti-dumping statutes and environmental regulations that raise costs for new firms but grandfather existing production facilities[12]) that suppress entry.[13] By analyzing cartels as two-stage mechanisms, Marshall and Marx show how successful collusion often requires recourse to exclusionary behavior, as well.

Identification and Interpretation of Cartel Structures

Building on George Stigler's 1964 article, *A Theory of Oligopoly*,[14] Marshall and Marx identify and explain the structures needed by a cartel or bidding ring to avert cheating by members, and the consequent trail of economic circumstantial evidence that is left in their wake.[15] Pricing, allocation, and enforcement structures are all needed for collusion to be profitable, but each implies a con-

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9 *Id.* at 138.

10 *Id.* at 105–59.

11 Michael E. Porter, Competitive Strategy: Techniques for Analyzing Industries and Competitors (1980).

12 *Economics of Collusion* at 154–55.

13 Marshall and Marx also discuss how the Webb-Pomerene Act, which allows rivals to coordinate behavior for export markets, can assist the formation and operation of cartels that sell in the U.S. market. *Id.* at 156–59.

14 George J. Stigler, *A Theory of Oligopoly*, 72 J. Pol. Econ. 44 (1964).

15 *Economics of Collusion* at 104–42, 186–98.

duct or outcome that can lead to the inference of collusion. The authors provide a framework for assessing the relative strength of this economic circumstantial evidence for inferring collusion. Specifically, Marshall and Marx propose a reformulation of the assessment of "plus factors" as tools to distinguish concerted action from unilateral behavior.[16] They identify a category of "super plus factors" entitled to special weight based upon their importance to the operation of a cartel. These include certain forms of price announcements, internal shifts in incentive mechanisms for sales personnel, and interfirm transfers. Among other applications, antitrust counselors are likely to find this discussion helpful in identifying suspicious activity on the part of their clients and in designing compliance training programs.

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Applications to Horizontal Mergers

In a fourth important contribution, this volume draws upon experience with cartels to suggest refinements in the approaches that antitrust law uses to analyze horizontal mergers.[17] Specifically, Marshall and Marx propose that the economic models that are typically built to analyze the unilateral effects of mergers be extended in a simple way to assess potential future coordinated effects. The authors also describe how the close study of past cartels (especially the vitamins cartel) provides lessons for the analysis of possible coordinated effects from a horizontal merger.

Coordination in Auctions and Procurement

The fifth notable feature of the volume is its focus upon auctions and procurement. Marshall and Marx provide practical, insightful guidance about how auctions and procurements can be designed to avert collusion by bidders. The authors note that public procurement policy typically has strived to increase transparency—from mandates that require the registration of bids to the use of ex post disclosure of all bids submitted.[18] The authors underscore that transparency is an ally of bidding rings, for it provides the kind of monitoring opportunities that cartel members need to collude effectively.

Conclusion: Possible Future Enhancements

Economics of Collusion is destined to become an indispensable text for enforcement officials, academics, business procurement officials, corporate compliance officers, and practitioners in law firms and economic consultancies. Two refinements in future editions would make a great book even better. The volume might benefit from a broader review of case studies that have recounted the story of notable individual cartels. These include popular and scholarly accounts of the electrical equipment cartel[19] and the international petroleum cartel.[20] Among other applications, these accounts would provide useful material to elaborate the Marshall and Marx narratives on cartels and bidding rings.

The authors also might add a concluding chapter to drive home more expressly and completely the interconnections among cartels, dominant firm misconduct, and mergers. Doing so would crystalize a larger point about the future of antitrust analysis. The examination of cartels as two-

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[16] *Id.* at 213–55.

[17] *Id.* at 257–63.

[18] *Id.* at 187–210.

[19] *See, e.g.*, John G. Fuller, The Gentleman Conspirators (1962).

[20] *See, e.g.*, Burton I. Kaufman, The Oil Cartel Case (1978).

stage mechanisms and the application of cartel experience to the treatment of coordinated effects in merger enforcement cast doubt upon the traditional practice of studying cartels, mergers, and single-firm conduct in separate, airtight compartments. In *Economics of Collusion*, Marshall and Marx advance a modern scholarship that emphasizes vital conceptual links across formerly discrete areas of analysis.[21] They show that the understanding of cartels requires attention to the role that exclusion often plays in the success of a collusive scheme. To treat exclusion as a concern secondary to collusion ignores what makes many collusive schemes effective. A final chapter that summarized these interconnections would improve the understanding not only of collusion but also would help foster a new synthesis of thinking about competition law. ●

21 *See, e.g.*, Jonathan B. Baker, *Exclusion as a Core Competition Concern*, 78 ANTITRUST L.J. (forthcoming 2012).