Collaborative Relationships: Legal Limits and Antitrust Considerations

Gregory T. Gundlach and Jakki J. Mohr

Competitors are increasingly relying on collaborative relationships guided by intermediate forms of governance (i.e., strategic alliances, hybrids, networks) to find and maintain competitive advantages. In contrast, antitrust analysis has emphasized cartels and joint ventures as the primary modes of collaboration among competitors. This focus overlooks many intermediate forms of governance. This and other trends in antitrust have resulted in confusion over proper treatment of collaborative relationships. The authors examine these trends with the objective of developing an analytical framework that clarifies current law for horizontal collaboration. Implications for managerial practice, policy, and research are provided.

The use of the per se rule provides guidance to the business community and minimizes the burden on litigants and the judicial system [Continental TV, Inc. v. GTE Sylvania Inc. 1976].

Joint ventures, because of their substantial integration of operations and reallocation of resources, have been assumed to produce competitive benefits that outweigh their competitive harms. Traditionally, they have been evaluated on the basis of the "rule of reason." This approach balances competitive benefits against potential harms. Under the rule of reason, a court weighs all circumstances of a case, including facts peculiar to the business, its condition before and after collaboration, the nature of the collaboration and its effect, the evil believed to exist, the reason for adopting a particular remedy, and the purpose or end sought [Chicago Board of Trade v. United States 1917].

The view that collaboration typically occurs through cartels or joint ventures has resulted in confusion over the legal status and proper mode of analysis for evaluating "intermediate" forms of collaboration (i.e., neither cartel nor joint venture). Recent Supreme Court decisions indicate a judicial system uncertain as to the appropriate method. Enforcement models used by the Justice Department and the Federal Trade Commission reflect divergent views as to collaboration and political preferences. Uncertainty toward collaboration has moved antitrust law from the clear standards of the past "into a gray area where it is possible for a case to come out one way—or another" [Bock 1989, p. 10; cf. Sullivan 1987]. Confusion increases the costs for businesses contemplating collaboration [Sims 1989] and may deter competitively beneficial arrangements. Moreover, the fact that different (and often more lenient, e.g., Komiya, Okuno, and Suzumura [1988]) standards are used in other countries limits the competitiveness of U.S. firms.
The objective of our research is to examine antitrust policy toward collaboration. Focus is given to uncertainty underlying current judicial interpretation and enforcement practices. We develop an analytical framework that organizes and clarifies current law and aids decisionmakers in their analysis and choices concerning collaboration. Implications for managerial practice, policy, and research are provided.

Collaboration and Public Policy

Background
Public policy toward horizontal collaboration is based primarily on the Sherman Act (1890),2 the Clayton Act (1914),3 the Federal Trade Commission Act (1914)4 and state antitrust law.5 A variety of legislative exceptions for specific forms, industries and international cooperation also apply. For example, the National Cooperative Research Act [1984] “promotes research and development...encourage(s) innovation...and stimulate(s) trade” (U.S. Department of Justice 1989, paragraph 50121). The Act applies to R&D activities up to and including the testing of prototypes. The Act declares that R&D collaboration shall be judged under a rule of reason [Wright 1986].

Both the Department of Justice and the Federal Trade Commission (FTC) are responsible for enforcement of the federal antitrust laws addressing collaboration. State attorneys general enforce state antitrust laws. Private parties may seek restitution individually through the courts. Indeed, much of today’s antitrust enforcement relies on self-policing by the business community.

At the federal level, the Department of Justice may seek injunctions, fines, and criminal sanctions in court for violations of the Sherman and Clayton Acts. The FTC, through Section 5 of the Federal Trade Commission Act, may also seek injunctions or issue cease and desist orders for violations of these acts. Additionally, the Commission may challenge collaboration directly through Section 5—it’s organic statute designed to challenge anticompetitive practices that go beyond the “spirit of the law.”

Antitrust’s Evaluative Goals
Confusion over the legality of collaboration has been compounded by vacillation about antitrust policy as enforcement agencies and courts move toward economic efficiency as the sole goal of antitrust. This shift represents a limiting of previously held policy goals, which included fairness, diversity of choice, innovation, decentralized decisionmaking, and the economic independence of small businesses [Piraino 1991]. Proponents of efficiency-driven policy argue that competitive markets should be given a free rein because of the natural tendency of firms to be efficient. They advocate a minimalist approach in which competitive conduct should not be deemed illegal unless a plaintiff can prove, by rule of reason, an adverse impact on competition. Judicial adoption of this narrower goal has not been complete; some courts have been unwilling to discard traditional goals [Lande 1988]. Enforcement agency interpretations of this new goal have also varied. Resistance and the incomplete nature of this transition have contributed to uncertainty over the law.

Confusion in the Courts
Confusion over antitrust’s goals is apparent in recent Supreme Court decisions that address collaboration. Table 1 provides an overview of key cases. Review of these cases indicates that use of the per se approach has been both criticized and endorsed. The Court has favored a rule of reason in some cases, condemning per se treatment as overly simplistic and too broad. In other cases, the Court has rejected the rule of reason, opting for the per se rule.

Cases Favoring Rule of Reason Analysis
In National Society of Professional Engineers v. United States [1978], the Court considered an engineering society’s rules against competitive bidding. Instead of summarily condemning the arrangement under the per se rule, the Court considered justifications for the ban. This approach represented a rule of reason inquiry. The arrangement was then found to be illegal. In Broadcast Music, Inc. v. Columbia Broadcasting Systems, Inc. [1979], the Court conceded that a licensing agreement among copyright owners, BMI, and licensees constituted a price-fixing scheme “in the literal sense” [pp. 19-20]. However, it refused to apply the per se standard. Rather, the Court engaged in a lengthy inquiry of the conduct’s effect and purpose resembling a rule of reason analysis.

Similarly, in NCAA v. Board of Regents [1984], the Court admitted that horizontal price and output limitations traditionally would be found per se illegal. However, the Court refused to apply the per se precedent, choosing rather to allow NCAA to justify its conduct. Upon analysis, the Court found the alleged conduct to be unlawful. A similar approach was utilized in Northwest Wholesale Stationers, Inc. v. Pacific Stationary & Printing Co. [1985]. Here, instead of summarily condemning the plaintiff’s expulsion from a cooperative as a per se boycott, the Court considered justifications for the conduct. The Court concluded that the plaintiff did not make a threshold showing of anticompetitive effect to justify per se analysis. Finally, in Federal Trade Commission v. Indiana Federation of Dentists [1986], another boycott case, the Court refused to “resolve the case by forcing the Federation’s policy into the ‘boycott’ pigeonhole and invoking the per se rule” [p. 458]. The Court applied a rule of reason analysis, finding illegal conduct.

Cases Favoring Per Se Analysis
In Catalano Inc. v. Target Sales, Inc. [1980], the Court found that beer wholesalers that had agreed to stop extending credit to retailers committed a per se violation. The Court concluded, “[S]ince price-fixing...lack[s] any ‘redeeming virtue’ it is conclusively presumed illegal without further examination under the rule of reason” [p. 650]. In another case, Arizona v. Maricopa Medical Society [1982], a maximum-price-setting agreement among physicians (i.e., a classic price-fixing agreement) was considered. In defending their actions, the physicians argued the per se rule should not be applied because of the likely beneficial ef-
### Table 1. Horizontal Collaboration Supreme Court Cases

<table>
<thead>
<tr>
<th>Case</th>
<th>Description</th>
<th>Collaborative Issue</th>
<th>Method of Analysis</th>
<th>Held</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goldfarb v. Virginia State Bar [1975]</td>
<td>The state and county bar associations together published a minimum fee schedule setting forth what a lawyer should charge a client to perform a real property title search.</td>
<td>Price</td>
<td>Per se</td>
<td>Illegal</td>
</tr>
<tr>
<td>Broadcast Music, Inc. v. Columbia Broadcast Systems [1979]</td>
<td>Broadcast Music, Inc., an association that represented music copyright owners and provided licenses to those who wanted to play the copyright owners’ works, received and distributed fees from licensees to copyright owners.</td>
<td>Price</td>
<td>Rule of reason</td>
<td>Legal</td>
</tr>
<tr>
<td>Catalano Inc. v. Target Sales, Inc. [1980]</td>
<td>Beer wholesalers together agreed to refuse to sell to beer retailers unless a retailer agreed to provide payment in cash in advance or on delivery of products.</td>
<td>Price</td>
<td>Per se</td>
<td>Illegal</td>
</tr>
<tr>
<td>Arizona v. Maricopa County Medical Society [1982]</td>
<td>The Maricopa County Medical Society organized foundations to provide fee-for-service medicine and a competitive alternative to typical health insurance programs. The foundation established a maximum fee schedule that doctors agreed to receive as payment for services.</td>
<td>Price</td>
<td>Per se</td>
<td>Illegal</td>
</tr>
<tr>
<td>NCAA v. Board of Regents [1984]</td>
<td>The NCAA sought to reverse the ill effects of television on football game attendance by limiting the number of games a member school could have televised and required that no school could engage in a television contract except pursuant to a specific plan.</td>
<td>Price/Output</td>
<td>Rule of reason</td>
<td>Illegal</td>
</tr>
<tr>
<td>Northwest Wholesale Stationers, Inc. v. Pacific Stationary &amp; Printing Co. [1985]</td>
<td>Northwest Wholesale Stationers, a cooperative of office supply retailers acting as a wholesale purchasing and warehousing agent for its members, expelled one of its members—Pacific Stationary &amp; Printing.</td>
<td>Boycott</td>
<td>Rule of reason</td>
<td>Legal</td>
</tr>
<tr>
<td>FTC v. Indiana Federation of Dentists [1986]</td>
<td>Indiana Federation of Dentists, an association of dentists, refused to supply patient X-rays to insurance companies seeking to evaluate benefit claims.</td>
<td>Boycott</td>
<td>Rule of reason</td>
<td>Illegal</td>
</tr>
<tr>
<td>Palmer v. BRG of Georgia, Inc. [1990]</td>
<td>BRG, a competing provider of bar review courses in Georgia, agreed with another competitor to withdraw from the Georgia market in return for exclusive access to the broader U.S. market.</td>
<td>Market allocation</td>
<td>Per se</td>
<td>Illegal</td>
</tr>
<tr>
<td>Superior Court Trial Lawyers Association v. FTC [1990]</td>
<td>The Superior Court Trial Lawyer’s Association organized a strike by attorneys acting as court-appointed counsel for indigent criminal defendants.</td>
<td>Price</td>
<td>Per se</td>
<td>Illegal</td>
</tr>
</tbody>
</table>

The anticompetitive potential inherent in all price-fixing agreements justifies their facial invalidation” [p. 351].
In two more recent cases, the per se rule has been applied to invalidate collaboration. In Superior Court Trial Lawyers v. FTC [1990], the per se concept was used against a strike by court-appointed attorneys representing indigent defendants. Conduct involving both price fixing and a group boycott were involved. Similarly, in Palmer v. BRG of Georgia, Inc. (1990), the per se rule was used to strike down collaboration that divided territories between two competitors offering bar review courses. The Court characterized the arrangement as a per se violation.

The inability of the Court to chart a consistent course has evinced considerable uncertainty among practitioners of antitrust law and competitors contemplating collaboration. This confusion has not, however, been limited strictly to the courts.

Agency Enforcement Models
In addition to judicial confusion, enforcement practices and differing interpretations of antitrust’s goals by the Justice Department (JD) and the FTC have elevated uncertainty about the legality of collaboration. Though practices by these agencies recognize the benefits and harms that can result, each agency employs its own approach for evaluating collaboration.

Justice Department’s Market Power Screen
The approach used by the Justice Department is outlined in the Antitrust Enforcement Guidelines for International Operations [U.S. Department of Justice 1988a] and Merger Guidelines [U.S. Department of Justice 1988b]. Collaborative arrangements (“joint ventures” in their terminology) are defined as “...essentially any collaborative effort among firms, short of a merger, with respect to R&D, production, distribution, and/or the marketing of products or services” [U.S. Department of Justice 1988a, paragraph 3.4]. In evaluating a collaborative arrangement, a series of analyses is conducted. Figure 1 is an overview of this process and a fuller explanation follows.

1. Inquiry is first made as to whether an arrangement is a “naked agreement” in restraint of trade—an agreement designed to restrict output or raise price with no resultant efficiencies (e.g., price fixing). “Naked agreements” are deemed illegal; other arrangements are examined for their potential benefits (b).

This examination (b) focuses on competition in the affected market. If restrictions on competitors’ independent decision-making with respect to price and output are found, a market power screen (discussed shortly) is conducted; if competition is not restricted, Step 2 is conducted.

2. Spillover effects in other markets are assessed at this stage (a), and may include information exchanges and other interactions in an arrangement that might promote anticompetitive collusion in other markets. The likelihood of “spillover effects” is judged (b) from procedural and operational safeguards. For example, safeguards against the trading of sensitive business information are examined to ascertain their use and effectiveness.

Where safeguards are adequate, the inquiry moves to Step 3; if safeguards are inadequate, a market power screen is conducted.

A market power screen assesses the degree to which an arrangement creates, enhances, or facilitates a firm’s ability to raise price (j). Market definition criteria set forth in the Merger Guidelines [U.S. Department of Justice 1988b] are employed (see also discussion under Competitive Market Structure). The impact on current and prospective concentration levels in an affected market is examined. If low, the inquiry continues to Step 3.

If concentration levels will be affected, other factors are examined (ii); these include the ease of market entry and characteristics of the product or service. After this consideration of additional factors, the inquiry continues on to Step 3.

3. Here, the JD examines vertical implications of an arrangement by investigating the exclusionary and collusive potential in affected market channels. For example, an arrangement may be accompanied by exclusive dealing terms and restrictions on territories. Where significant anticompetitive effects are likely, each is examined more fully and the analysis is weighed at Step 4.

4. At this stage, a rule of reason approach is employed to weigh the cumulative evidence:

(a) Arrangements that do not have significant anticompetitive effects are not challenged.

(b) Arrangements having significant anticompetitive harms that are not outweighed by procompetitive efficiencies are challenged.

(c) Even if procompetitive benefits outweigh anticompetitive harms, further inquiry into less anticompetitive alternatives is made. If no alternatives exist, an arrangement is not challenged.

Where less restrictive alternatives do exist, the JD may either challenge the arrangement outright or require that the other alternatives be used.

Federal Trade Commission’s “Inherently Suspect” Test
The enforcement model used by the FTC is outlined in Federal Trade Commission v. Massachusetts Board of Registration in Optometry [1988]. The case involves a challenge to regulations that prohibit advertising of discounts by Massachusetts optometrists. Insight is also provided by Muris [1989], Director of the Commission’s Bureau of Competition from 1983 to 1985, who describes Massachusetts Board. Figure 2 illustrates the FTC model.

1. Inquiry is first made as to whether an arrangement appears likely, without justification, to restrict competition, raise prices, and decrease output (i.e., is “inherently suspect”). Classic examples of inherently suspect arrangements include price fixing and division of markets. If an arrangement is not inherently suspect, a rule of reason analysis is followed. If the arrangement is suspect, the inquiry moves to Step 2.

2. Plausible efficiencies are evaluated at this stage. Here “plausible” means that the validity of a justification for an arrangement cannot be rejected (i.e., can be accepted) without extensive factual inquiry. Plausible efficiencies include a reduction in production or marketing costs, creation of a new product, or improvement of the operation of a market, among others. If no plausible justifications are offered, an arrangement is condemned.

If justifications are plausible, a rule of reason analysis is
**Comparison of Enforcement Models**

A comparison of the two models reveals differences across their processes and evidentiary standards. According to one commentator, each model:

ask[s] essentially the same questions... but asks them in different order...this is by no means a trivial difference...the legality of a restraint (collaborative arrangement) may depend on the order in which these issues are addressed [Wall 1990, p. 36].

The JD inquires into the presence of market power prior to finding an arrangement unlawful. In contrast, the FTC asks whether an arrangement is "inherently suspect" on the basis of restricted competition and decreased output. If it is inherently suspect, procompetitive justifications are evaluated and market power considered only when these justifications are validly plausible. Thus, the JD considers the presence of market power early on, whereas the FTC considers it only in the latter stages of evaluation.

In comparison, the FTC adopts a stricter standard because little evidence is required for showing anticompetitive effects, whereas procompetitive benefits must be proven. The title adopted for their test—the "inherently suspect approach"—reflects this standard. Alternatively, the JD requires that both anticompetitive harms and procompetitive benefits be proven. In this sense, the FTC minimizes Type I errors (i.e., not challenging anticompetitive arrangements), while largely ignoring Type II errors (i.e., challenging procompetitive arrangements) [Coates 1989].

The different approaches of the JD and FTC have caused confusion as to how antitrust enforcement agencies will view collaboration. According to one commentator,

Expert agencies such as the FTC and the Antitrust Division are held to a high standard of clarity, and hopefully consistency. Given the unclear meaning of Mass. Board [reflecting the FTC model] and the...Justice Department's views on this subject, neither clarity nor consistency is evident at this time [Wall 1990, p. 37].
Figure 2. Federal Trade Commission's "Inherently Suspect" Test

A Framework for Legal Analysis

An analytical framework that identifies and characterizes key dimensions underlying the current law on collaboration is illustrated in Figure 3. For firms contemplating collaboration, this framework may help reduce uncertainty over their legal standing and facilitate the efficient planning of such ventures. The framework first examines the threshold level of joint action between participants that is necessary for collaboration to be found. Structural aspects of these arrangements are then examined as they relate to the law. For example, differential status has been given collaboration on the basis of its structure (i.e., horizontal vs. vertical), nature (i.e., presence of "spillover" effects, collateral terms, scope and multiplexity), and specific functional area (i.e., price, product, place, etc.). Competitive concentration in an affected market (i.e., market power) is also examined.

Collaboration as Joint Action

Collaborative arrangements require a threshold level of joint action between at least two separate entities [Fisher v. City of Berkeley 1986]. Evidence of joint conduct varies, depending on the type of collaboration. For the majority of arrangements, this evidence is provided directly. The character of joint ventures, strategic alliances, and forms that involve substantial integration provide ample documentation. These arrangements are developed and guided through use of contracts and other written documents. Interfirm correspondence and meetings reflect collaborative intensity.

Many collaborative arrangements, especially those nearer to the "market" archetype [Williamson 1975], provide little direct evidence of their existence. Proof of collaborative conduct may be found even where firms have not agreed to cooperate. For example, the FTC investigation of the airlines [Nomani 1989] found evidence of price-signaling activity in their reservation system. Though such conduct was not collaboration per se, the FTC argued that "signaling" constituted a form of collaboration.

In the absence of direct proof, courts look at other types of evidence that suggests collaborative conduct. Evidence that tends to "exclude the possibility" of unilateral action is required [Matsushita Electric Industry Co. v. Zenith Radio Corporation 1986]. Parallel or similar business behavior alone does not conclusively establish the presence of an arrangement [Theater Enterprise, Inc. v. Paramount Film Distribution Corporation 1954]. Courts require a showing of "conscious parallelism" plus other circumstantial evidence. Conscious parallelism refers to some form of corresponding behavior suggestive of a "meeting of the minds" of the participants [The Jeaney, Inc. v. James Jeans, Inc. 1988]. This often entails complex conduct difficult to envision without some accord between the parties [Sullivan 1983; e.g., Interstate Circuit, Inc. v. United States 1939]. A common course of conduct sufficient to warrant a finding of "unity of purpose or a common design" is required.
A wide variety of "plus" factors provide circumstantial evidence of collaboration [Vaska 1985]. For example, evidence of meetings or other exchanges of information is sufficient, especially in concentrated industries [United States v. Container Corp. 1969]. Conduct in contrast to reasonable self-interest-driven behavior is also adequate [Supermarket of Homes, Inc. v. San Fernando Valley Board of Realtors 1986]. An unusual pattern of parallel conduct that cannot be explained in the absence of some form of joint action may imply collaboration [Cackling Acres, Inc. v. Olson Farms, Inc. 1977].

A lack of reasonable motive for collaborative conduct bears on the permissible conclusions that can be drawn [Matsushita Electric Industry Co. v. Zenith Radio Corporation 1986]. If the conduct is consistent with noncooperative and equally plausible explanations, an inference of collaboration cannot be drawn. For example, justification that business practices are independently determined will not result in collaboration being inferred [Apex Oil Co. v. DiMauro 1987]. An argument can also be made for independent business justification of behavior in cases in which a firm in an industry matches a rival's previously announced price [Wilcox v. First National Bank of Oregon 1987].

Collaborative Structure

Collaborative arrangements can be made between competitors (i.e., horizontal arrangements), channel members (i.e., vertical arrangements), and through intermediate or "hybrid" arrangements. Our emphasis is on horizontal cooperation, or joint arrangements between competing firms, but these arrangements can have implications for vertical competition. For example, several manufacturers may undertake a joint venture for distribution of their products. They may agree to distribute exclusively through the venture to the exclusion of other systems. Such an arrangement can raise problems if, as a result, restricted access to the manufacturers effectively impairs competition [United States v. Columbia Pictures, Inc. 1980]. Collaborative research and development may also result in vertical consequences.

It is notable that the antitrust climate has recently become much more receptive to vertical collaboration. Both the courts and enforcement agencies have all but abandoned per se classification of these arrangements [Business Electronics Corporation v. Sharp Electronic Corporation 1988], with the exception of those involving price [Monsanto Corporation v. Spray-Rite Service Company 1984]. (For reviews, see Garfield [1983], and Sheffet and Scammon [1985]).

In addition to horizontal collaboration affecting vertical competition, vertical collaboration may have implications for horizontal competition. If such arrangements are anticompetitive in a horizontal sense, they may run afoul of the law. For example, a manufacturer, in order to compete rigorously with its rivals, may persuade a supplier to restrict its sales to those rivals. If the supplier's refusal to supply the rivals is a direct result of collaboration, the arrangement bears upon the horizontal relationships of the manufacturer's competitors and may be anticompetitive. Thus, even vertical collaboration, which may be examined leniently on its own merits, can cause antitrust concern if horizontal implications arise.

Nature of Collaboration

A variety of factors associated with the structure of a collaborative arrangement bear upon its evaluation under the law. As shown in Figure 3, these factors include (1) "spillover" effects, (2) collateral terms, and (3) the scope and "multiplexity" of an arrangement.

Spillover Effects

Collaboration may facilitate unlawful collusion through "spillover" effects. These effects stem from the prospect
that collaboration in one area increases the chance of collusion in another. Arrangements that are most suspect relate to current marketing and pricing of products [Silberman 1989]. Decisions relating to the marketing of one product may amount to collaboration in the pricing and marketing of other products. Mere sharing of data (e.g., sales, demand, forecasts, etc.) may be viewed as having an effect on independent decisionmaking across noncollaborative areas. Least suspect are arrangements related to research and development of future products, promotion, and/or specific phases of production [Kitch 1985].

**Collateral Terms**

Collateral terms are obligations not based on the legitimate goals of a collaborative arrangement. Some terms are plainly ancillary to an arrangement—for example, an agreement to contribute future technological developments resulting from an R&D arrangement. These terms pose little risk and are legitimate in relation to an arrangement’s goals. Other terms are less central and viewed with suspicion. For example, collateral cross-licensing and pooling arrangements have been held illegal [United States v. Singer Manufacturing Co. 1963].

Judging the ancillary nature of collateral terms is difficult. In a hypothetical sense, price-fixing and territorial-division terms, often judged anticompetitive, can be necessary to an arrangement. Consider the situation in which several small, regional manufacturers collaborate for national promotion of a product based on economies of scale. Each wants to derive its fair share of contribution from the effort. Some method is necessary to accomplish this result. One approach is to allocate benefits through granting the participants the right to exploit whatever benefits occur in their territories (e.g., territorial division). Alternatively, or in conjunction with the territorial division, the firms may agree to a specified price. It is not clear that these terms would be considered ancillary to the original arrangement. In general, a rule of thumb is that the presence of collateral terms not based on legitimate needs, and that affect competitive behavior in areas not covered by an arrangement, are illegal [Yamaha Motor Co., Ltd. v. Federal Trade Commission 1981].

**Scope and Multiplexity**

*Scope* of collaboration refers to the boundaries of an arrangement, or the number of areas across which collaboration occurs (one or many). *Multiplexity* characterizes the nature of contacts between firms and can range from shallow (i.e., between boundary-role personnel) to in-depth interaction (i.e., between multiple contact points in both organizations). Narrowly construed and shallow arrangements, even those involving larger competitors, are viewed more favorably than ones that are encompassing and multiplex. For example, when General Motors engaged in a joint venture with Toyota, the FTC, in order to grant approval, required that the arrangement be narrowly tailored in scope and duration [General Motors-Toyota v. Federal Trade Commission 1984].

**Functional Area/Purpose**

Depending on the specific functional area or purpose, some collaborative arrangements are considered more suspect than others. Limits on marketing-related collaboration include exchange of information, product development and standardization, price, market division and customer allocation, and strategic collaboration to exclude competitors (see Figure 3).

**Exchange of Information**

All collaborative arrangements necessitate exchange of information. Information exchange between competitors is not *per se* illegal [United States v. United States Gypsum Co. 1978]. However, information exchanges relating to price are considered highly suspect [United States v. Citizens of Southern National Bank 1985; Wilcox v. First National Bank of Oregon 1987]. The identification of parties and prices in sales transactions has been held illegal [American Column & Lumber Co. v. United States 1921]. Exchange of current or future price data has also been found illegal. However, exchange of past prices has been held legal [Maple Flooring Manufacturing Association v. United States 1925].

Where exchange of information involves nonprice data, its legality is determined through examination of its competitive effect. Where competitive efficiencies are enhanced, it may be legal. For example, the exchange of credit information for the purpose of assisting association members in exercising their independent judgement in granting credit is legal [Michelman v. Clark-Schwebel Fiberglass Corp. 1976]. However, where an exchange tends to limit or restrain competition, it is illegal. For example, exchange of credit information constitutes an agreement to uniform credit terms, and is illegal [Catalano Inc. v. Target Sales, Inc. 1980; United States v. Philadelphia Produce Credit & Collection Bureau 1983]. Exchanges of production [Hartford Empire Co. v. United States 1945; United States v. United Fruit Co. 1958] and confidential business information [American Column and Lumber Co. v. United States 1921; United States v. Philadelphia Savings Fund Society 1979] also have been held unlawful.

**Product Development and Standardization**

Collaborative research funded by competitors is tested under the rule of reason. The National Cooperative Research Act of 1984 dictates that research and development activities up to and including the testing of prototypes be judged under a rule of reason. Recently, the U.S. Senate passed an extension of this Act, which provides similar protection for joint production ventures [BNA 1992]. The bill is intended to “eliminate the antitrust uncertainty” surrounding joint production ventures [BNA 1992, p. 277]. Currently, agreements to standardize products are analyzed under a rule of reason [Gunter Harz Sports, Inc. v. U.S. Tennis Association, Inc. 1981; United States v. National Malleable Steel Casting Co. 1957]. (See also United States v. National Association of Broadcasters [1982] for an exception; cf. Grossman and Shapiro [1986]; and Shapiro and Willig [1990].)

**Price**

Collaboration for the purpose of raising, depressing, fixing,
Agreements between competitors that indirectly affect price are also illegal. They include collaboration in competitive bidding [National Society of Professional Engineers v. United States 1978], arrangements to limit production or supply of products [United States v. Socony-Vacuum Oil Co. 1940], purchases [National Macaroni Manufacturers Association v. Federal Trade Commission 1971], and the availability of short-term credit [Catalano Inc. v. Target Sales, Inc. 1980]. However, a recent Supreme Court decision indicates that a rule of reason may be applied to arrangements that limit production or supply (and therefore affect price) in industries where collaboration is necessary to make products available [NCAA v. Board of Regents 1984]. Though the limitation was found illegal, the importance of the case stems from its application of a rule of reason approach.

**Market Division and Customer Allocation**

Collaboration to divide markets or allocate customers is per se illegal [United States v. Sealy, Inc. 1967; United States v. Topco Associates 1972]. A trend in recent Supreme Court cases, however, indicates that per se analysis may not be appropriate for all market allocation agreements [NCAA v. Board of Regents 1984]. If substantial efficiency justifications are offered, circumstances (e.g., free-riding problems or product availability) within an industry may indicate the need for a rule of reason analysis [cf. Ashley Meadows Farm, Inc. v. American Horse Shows Association 1985; NCAA v. Board of Regents 1984]. Application of the rule of reason is also advanced in Rothery Storage & Van Co. v. Atlas Van Lines, Inc. [1987], where the Court indicated the aforementioned decisions in Sealy and Topco have been overruled by more recent cases.

**Exclusion of Competitors**

Arrangements among competitors to exclude rivals are treated as per se illegal [Fashion Originators' Guild v. Federal Trade Commission 1941]. They include "classic" boycott arrangements whereby competitors combine to exclude a rival [Larry Muko, Inc. v. Southwestern Pa. Building & Construction Trades Council 1982; Superior Court Trial Lawyers Association v. Federal Trade Commission 1990] as well as arrangements between competitors at different distribution levels to exclude rivals at one or both levels [United States v. General Motors Corp. 1966]. In addition, where two or more firms agree to provide a service or facility that is "essential" to participation in a market, it is illegal not to provide all competitors with equal access [Fishman v. Estate of Wirtz 1986].

Recent cases suggest a shift away from per se treatment of all arrangements that result in competitor exclusion. Recognition of procompetitive benefits has resulted in a rule of reason analysis being applied in some decisions. For example, in Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co. [1985, p. 297], the Court noted that "... [A] plaintiff seeking application of the per se rule must present a threshold case that the challenged activity falls into a category likely to have predominantly anticompetitive effects." Similar dictum appears in a more recent case involving a group boycott by dentists [Federal Trade Commission v. Indiana Federation of Dentists 1986]. Finally, in Rothery Storage & Van Co. v. Atlas Van Lines, Inc. [1987], the Court held that arrangements between competitors not to compete may be appropriate to prevent "free riding." In Rothery, Atlas Van lines required agent-carriers, who used the Atlas reputation, equipment, facilities and servicing, not to compete directly with them.

**Competitive Market Structure**

Some enforcement agencies and courts advocate analysis of the competitive structure in a collaborative arrangement's market to determine its legality. This approach involves assessment of each firm's "market power," or their ability, when acting in concert, to charge more than a competitive price [Easterbrook 1984]. Evaluation is also made of the ease with which firms already in the market can expand their production, as well as the ease with which new firms can enter [Landes and Posner 1981].

Proxy measures of market power are employed. Measures of market concentration such as the Herfindahl-Hirschman Index (HHI) from the Department of Justice Merger Guidelines are used [U.S. Department of Justice 1988b]. The HHI is calculated by summing the squared market shares of firms within a relevant market. For example, in a market consisting of four firms with market shares of 30%, 30%, 20%, and 20%, HHI would be $2600 (30^2 + 30^2 + 20^2 + 20^2 = 2600). HHI ranges from 10,000 in the case of a pure monopoly (i.e., $100^2 = 10,000$) to a number approaching zero in atomistic markets. Though desirable, it is not necessary to include market shares of smaller competitors because they do not add appreciably to the HHI.

In reflecting on the use of HHI, commentators have noted its deficiencies in the context of collaboration. Some argue that arrangements relating to research and development pose less competitive risk than those for marketing and sales [Kitch 1985]; a higher threshold "cutoff" is advocated for these arrangements. Others [Markovits 1984], and at least one Court [Superior Court Trial Lawyers v. Federal Trade Commission 1990], suggest that reliance on market power for assessing competitive hazards fails to recognize all risks. For reasons of market inertia and information failures, even small firms may, in concert, pose anticompetitive risks within a market. Some have argued that firms contemplating anticompetitive conduct would not enter into a collaborative arrangement unless they knew it could achieve their anticompetitive objectives [cf. Bork 1978]. Therefore, an arrangement itself suggests a level of contemplated "market power" [Wall 1990]. These issues cloud the use of market power as an effective "screen" for assessing collaboration.

**Implications and Discussion**

The lack of clarity in judicial interpretation and enforcement practices has brought about considerable uncertainty among prospective collaborators and has inhibited develop-
Current treatment of horizontal collaboration can be described as varied and uncertain. Court decisions reflect a judiciary unsure as to the proper approach for their assessment. Different evaluation procedures are employed by the two primary enforcement agencies (FTC and JD). Recent legislative initiatives indicate a more receptive attitude toward collaboration [BNA 1990a, b, 1992; Taylor 1984] despite an environment of growing concern for anticompetitive business practices [Business Week 1990]. Together, these trends portend a climate of considerable uncertainty for firms contemplating collaboration.

Uncertainty about treatment of collaboration raises the cost of such ventures, creates difficulties for planning, and may encourage suboptimal decisions. Costs are raised because of the legal complexities of collaboration. Planning is difficult because of the uncertain prospect of legal scrutiny. Suboptimal decisions may occur as firms attempting to avoid uncertainty opt for collaborative forms under which legal standards are more certain. It can be argued that the recent wave of merger activity may have been influenced by confusion in the law about less integrated forms of collaboration. Greater certainty as to legal standards and requirements for mergers versus other forms of collaboration may have prompted some firms to merge that might otherwise have engaged in collaboration while remaining independent.

Uncertainty about antitrust policy toward collaboration can be attributed, in part, to its lack of recognition of intermediate forms of collaboration. Historical focus on highly integrative (i.e., joint ventures) and minimally integrative (i.e., "cartels") forms of collaboration, and the development of separate analytical methods for each, has resulted in confusion over intermediate forms of collaboration. This confusion has been compounded by a shift to economic efficiency as the primary goal of antitrust policy. Evidence of this confusion is provided in recent Supreme Court cases. Application of both per se and rule of reason analyses reflects judicial frustration with these methods and the courts' view of a "correct" decision under current policy dicta.

We attempt to clarify recent decisions and current law on collaboration by distinguishing between FTC and JD enforcement policies and presenting an analytical framework that identifies dimensions underlying current law. Rather than focusing on the organizational form of collaboration (i.e., cartel or joint venture), we emphasize current law and the dimensions underlying different collaborative forms.

Marketing Management

For organizations contemplating collaboration, the framework provides a useful tool for assessing the attendant risks of such ventures within the current legal climate. Marketing's increasing use of collaborative relationships makes such assessment paramount. Extending from informal arrangements, involving trust and social interdependence, to more formal interorganizational and transorganizational systems [Achrol, Scheer, and Stern 1990], to joint ventures, the use of collaboration has increased dramatically in recent years. Understanding the legal terrain and pitfalls prior to engaging in such ventures should prove useful.

Review of the framework indicates a variety of critical points. First, firms should be aware that collaboration may be found in the absence of a formal agreement. Evidence of "conscious parallelism" plus other circumstantial evidence is all that is required. Second, the current distinction between vertical and horizontal collaboration becomes blurred when their indirect implications are considered (i.e., vertical collaboration with horizontal effects). Firms should be alert to these complexities and indirect results. Third, "spillover" effects, collateral terms, and the scope and multiplexity of an arrangement bear on its assessment. Each should be viewed carefully. Fourth, the specific functional area(s) in which collaboration occurs is important. Collaboration on price and customer/market allocation arrangements are considered highly suspect, if not per se illegal. Fifth, some courts and enforcement agencies find it useful to assess the competitive structure (i.e., market share) of the market in which collaboration occurs for determining its legality. This approach bears implications for firms having disproportionate market shares. Finally, firms should be aware of the different enforcement policies of the FTC and JD. Comparison indicates the FTC employs a stricter standard when assessing collaboration.

Antitrust Policy

For policymakers, development of an analytical method that embraces the complexities of intermediate forms of collaboration is needed. Per se treatment, though providing clarity and judicial efficiency, is inappropriate for more complicated arrangements. Its strict characterization ignores the multidimensional nature of such arrangements. Still, judicial sentiment, as evidenced in recent Supreme Court decisions, suggests that the approach provides a useful standard and will be employed by the courts.

Use of the rule of reason as a basis for assessing collaborative arrangements enables socially beneficial arrangements that might be deemed anticompetitive under per se treatment to survive. The nature of its full-blown inquiry, however, is costly and biased against plaintiffs, who must prove anticompetitive effects in order to prevail. Judicial sentiment and prevailing antitrust goals also suggest continued application of rule of reason analysis.

Some form of middle-ground inquiry is needed to supplement present per se and rule of reason approaches. Such an approach must be capable of carefully assessing the relevant dimensions of an arrangement in order to properly "characterize" it. This involves determining the elements that must be established before knowing that the per se rule or rule of reason (or other) should be applied. Characterization of collaborative arrangements has received little attention in the law, despite the fact that it must be considered in every case involving collaboration [Denis 1991]. As noted
in our review, courts and enforcement agencies have developed their own frameworks. Application of the framework developed here may provide some guidance for structuring antitrust inquiry. Acting as a “characterization” framework, it could aid policymakers in the identification and classification of different collaborative forms.

Researchers
Researchers in marketing can help in the development of an appropriate legal methodology for assessing collaboration through continued examination of the motivations and dimensions underlying collaborative ventures. Such inquiry requires that the current focus on dyadic exchange in marketing be expanded to embrace the broader network of stakeholders involved [cf. Iacobucci and Hopkins 1992]. Findings from such research could provide direction for policy formulation and aid in promoting efficient cooperation while restricting inefficient forms of collaboration.

Examination of the effects of these collaborative arrangements on performance would be beneficial. Though Noordewier, John, and Nevin [1990] assess performance implications of buyer-seller collaboration, the marketing literature has tended not to emphasize performance outcomes. Where performance has been addressed, the unit of analysis has been at the individual-firm level and not at the marketplace level. Marketing researchers operating at this broader level of analysis could include a more expansive set of dependent variables, including efficiency, fairness, diversity of choice, decentralized decisionmaking, and economic independence. Research of this kind would aid policymakers in their assessments of the legality of collaborative arrangements. A crucial assumption of current policy toward collaboration is that such arrangements will produce efficiencies; however, this assumption warrants empirical testing. In addition, differences in efficiencies are likely to be present across collaborative forms.

An important question still remaining is the relationship of the recent wave of merger activity to current uncertainty over alternate forms of collaboration. Did many firms choose to merge rather than face uncertain legal scrutiny for less-integrated forms of collaboration? Will a restrictive policy in this area lead to more mergers in the future?

Deregulation at both the federal and state levels, coupled with an increasingly permissive attitude toward collaboration, indicates that collaborative efforts will continue, if not increase. Infusion of foreign firms into the U.S. and globalization of U.S. businesses through foreign ventures point to an increase in collaboration both inside and outside the U.S. Though collaboration is viewed with uncertainty and hesitation here in the U.S., in many foreign countries (i.e., in Japan) such ventures have been a way of business custom and law for some time. Uncertainty in U.S. policy as it relates to collaboration adds complexity to already complicated international undertakings.

The future holds the prospect of more complicated collaborative efforts as firms gain more knowledge and experience in the benefits and costs of such efforts. Services and professions along with nonprofit organizations will increase their use of collaborative relationships. Greater understand-
Collaborative Relationships


Arndt, Johan (1979), "Toward a Concept of Domesticated Markets," *Journal of Marketing*, 43 (Fall), 69-75.


BNA (1990a), "Bush Administration Unveils Proposal to Encourage Production Joint Ventures," *Antitrust & Trade Regulation Report*, 58 (May 10), 701.

__(1990b), "House Committee Clears Measures on Joint Ventures, Board Interlocks," *Antitrust & Trade Regulation Report*, 58 (May 3), 663.


*Business Week* (1990), "Pssst! The Trust Busters are Back in Town" (June 25), 64, 67.


*Chicago Board of Trade v. United States* (1917), 246 U.S. 231.


Fishman v. Estate of Wirtz (1986), 807 F.2d 520.


*Harford Empire Co. v. United States* (1945), 323 U.S. 386.


Michelman v. Clark-Schwebel Fiberglass Corp. (1976), 534 F.2d 1036, cert. denied, 429 U.S. 885.
Narus, James and James Anderson (1987), "Distributor Contributions to Partnerships With Manufacturers," Business Horizons, 30 (September-October), 34-42.
Palmer v. BRG of Georgia, Inc. (1990), 111 S.Ct. 401.
Sheffett, Mary Jane and Debra Scammon (1985), "Resale Price Maintenance: Is It Safe to Suggest Retail Prices?" Journal of Marketing, 49 (Fall), 82-91.
Supermarket of Homes, Inc. v. San Fernando Valley Board of Realtors (1986), 786 F.2d 1400.
Theater Enterprise, Inc. v. Paramount Film Distribution Corporation (1954), 364 U.S. 537.
— (1988b), Merger Guidelines, reprinted in Antitrust & Trade Regulation Report, paragraph 13,103.
United States v. Philadelphia Produce Credit & Collection Bureau (1983), Trade Case (CCH), paragraph 65,634 (E.D. Pa.).
United States v. Philadelphia Savings Fund Society (1979), Trade Case (CCH), paragraph 62,917 (E.D. Pa.).
United States v. Socony-Vacuum Oil Co. (1940), 310 U.S. 150.
United States v. United Fruit Co. (1958), Trade Case (CCH), paragraph 68,941 (E.D. La.).


