Journal of Economic Perspectives—Volume 4, Number 3—Summer 1990—Pages 113–130

On the Antitrust Treatment of Production Joint Ventures

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The U.S. Congress is currently considering several bills to alter the antitrust treatment of collaborative production activities among rival firms. In their contribution to this symposium, Jorde and Teece have put forward an affirmative case for such legislative change. Their argument is based on the assertion that current antitrust law treats production collaboration too harshly, and is thereby stifling innovation and placing U.S. firms at a disadvantage vis-à-vis foreign competition. However, while Jorde and Teece elaborate the purported benefits of relaxed antitrust treatment of joint ventures, we do not believe they pay sufficient attention to the concomitant risks and costs of decreases in competition.

This paper sketches the tradeoffs involved in altering U.S. antitrust treatment of joint venture production activities among rival firms. This requires understanding the nature, benefits, difficulties and dangers to competition of production joint ventures; identifying their degrees of prevalence in the U.S. and elsewhere; summarizing the current antitrust treatment of joint ventures; and analyzing the interactions between U.S. competitiveness and antitrust treatment of production joint ventures. We discuss these topics below, after which we assess some proposed alterations to the antitrust treatment of production joint ventures.

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We conclude that current antitrust law and enforcement policy with regard to production joint ventures are working quite well and hardly can be considered a hindrance to innovation or "competitiveness." We support some modest changes in antitrust law that may serve to encourage pro-competitive joint production ventures, but we do not endorse the more sweeping legislative changes by Jorde and Teece.

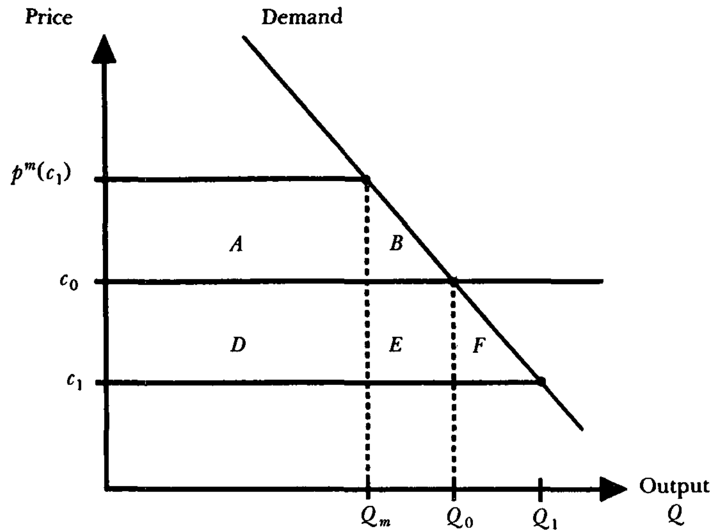
The Benefits and Dangers Associated with Joint Ventures

There is widespread agreement that collaborative activities can generate significant private benefits for the parents that correspond to genuine social benefits as well. These benefits include: (1) the sharing of risks associated with investments that serve uncertain demand or involve uncertain technology; (2) synergies arising when venturers share complementary skills or assets; and (3) the attainment of economies of scale and scope in production, procurement, or logistics. The economic theory of organization and control affirms that realizing such benefits may require closer long-term relationships than arms-length market transactions and short-term contracts can provide. The business significance of these benefits is evidenced by the fact that joint ventures are quite common, and often the accumulation of market power is an unlikely motivation, inasmuch as the parents are not horizontal competitors or the relevant market is too unconcentrated or too open to new competition for the venture to increase market power.

Naturally, joint ventures may also create business problems. Decision-making can be cumbersome or dysfunctional when the parents to the venture have differing objectives or opinions on the course of the market, and the danger that one parent will try to free ride on the other(s) always lurks in the background. For example, one parent may contribute its less able personnel or withhold its most advanced technology from the venture. The cooperation intrinsic to a production joint venture may foreclose opportunities that would otherwise arise for one venturer to expand profitably at the expense of another. For example, by assigning key personnel to a joint venture, a parent company may limit its possibility for growth in related areas. For these reasons, firms desiring to collaborate often choose to merge or to enter into a more limited contractual relationship in preference to forming a joint venture.

While the business impacts of joint ventures discussed above generally reflect social as well as private benefits and costs, the formation of a joint venture that significantly reduces competition creates private benefits that correspond to social harms. For example, consider a joint venture among directly competing firms that places a substantial portion of industry capacity under joint control. The parents could collectively decide to reduce the output produced by the venture's capacity, expecting that the resulting increase in price would outweigh the reduction in sales volume. Of course, this leads to

Figure 1
Effect of Joint Venture on Price, Output, and Efficiency.



both an increase in private profit and a loss in social welfare. Alternatively, even if the parents' production and marketing decisions remained independent, the venture could transfer its output to all the parents at a sufficiently high price to ensure that the parents would independently charge elevated prices to their customers, and the venture would be the locus for the earning of monopoly profits at the expense of the public interest. There are many other examples of possible anticompetitive effects of joint ventures, and these effects provide the rationale for antitrust scrutiny of the formation of joint ventures.

The elementary tradeoffs involved in analyzing joint ventures that create both efficiencies and market power are illustrated in Figure 1.[1] Suppose that prior to any joint venture, the industry is perfectly competitive and the firms produce with a constant marginal cost of c_0. Competition drives price down to cost, $p_0 = c_0$, and output is Q_0. What antitrust treatment should be given to a proposed industrywide consortium that is expected to lower the unit cost of production to $c_1 < c_0$?

First, suppose that joining the consortium does not hinder an individual firm's ability to produce output on its own. Then the consortium, in selling its output, will find it optimal to set a price marginally less than c_0 and capture the entire market.[2] In this case, the consortium will have no effect on prices. Its

[1]The graphical treatment given here relies heavily on Williamson's important 1968 paper. We thank Steven Salop for suggesting this approach, which he has elaborated in a unpublished teaching note, "Economic Analysis of Joint Action."
[2]If the consortium attempted to set its price above c_0, it would lose sales to individual firms offering their product at price c_0. In other words, the member firms present a perfectly elastic supply curve at price c_0. Here, for simplicity, we are making use of the assumption that the industry is unconcentrated. The analysis would run along similar but less sharp lines if the industry were initially oligopolistic.

sole effect will be to increase economic efficiency by lowering production costs. The venture increases welfare (defined as the sum of profits and consumer surplus) by $Q_0(c_0 - c_1)$, which is shown as area $(D + E)$ in Figure 1.

Alternatively, suppose that, in order for the consortium to function, the members must contribute assets, such as key personnel or production capacity, without which they cannot independently compete. Or the members may simply agree not to make independent sales. Without the competitive threat posed by the individual members, and supposing that entry into the industry by non-members is impossible, the consortium enjoys a monopoly. Denote the profit-maximizing price for a monopolist with unit cost c_1 by $p^m(c_1)$. Assuming that the cost savings created by the consortium are not too great, we have $p^m(c_1) > c_0$ as shown in Figure 1. The consortium will set its price at $p^m(c_1)$.

Under these conditions, consumers will be harmed by the higher price; their loss is given by the area $(A + B)$. The consortium will make profits equal to area $(A + D)$, however. (Prior to the consortium all firms made zero profits.) The net effect on welfare is $(D - B)$. Area D represents the cost savings from the consortium and area B represents the deadweight loss from monopoly pricing.

As Williamson (1968) showed using simple numerical examples, the unit cost savings, $(c_0 - c_1)$, can be quite small and still lead to a net welfare gain. This suggests that efficiencies should be given much weight in rule-of-reason analysis. In practice, however, it is difficult for the antitrust authorities to verify efficiencies that the parties claim will flow from their venture.

Even if the efficiencies are verifiable, antitrust authorities will question whether a less restrictive form of cooperation will enable the efficiencies to be achieved without foreclosing independent competition. As just shown, welfare is higher and consumers are better off if the consortium's market power is limited by independent competition from its members. Therefore, antitrust authorities should and do require that any restrictions on independent conduct by members be necessary for the success of the venture.

Antitrust authorities must be on the alert to detect ventures that offer the appearance but not the reality of independent action. For example, consider a consortium that produces a key input, say semiconductors, and sells this input to its members who independently set final product prices, say for personal computers. Suppose that the consortium encompasses the bulk of semiconductor manufacturing capacity and that entry into semiconductor production by non-members is very difficult. If, by joining the consortium, the members forsake the capacity to independently manufacture semiconductors, the consortium can simply raise the price it charges its members for semiconductors to a monopoly level. The fact that the members compete in selling personal computers will not then prevent prices for personal computers from rising. The members will take their monopoly profits through their ownership of the consortium.

To avoid the antitrust concern just described, a consortium may be structured to transfer its output to members at marginal cost. For research joint ventures, this structure takes the form of members receiving royalty-free licenses to all of the consortium's discoveries. In Figure 1, if the consortium sells its output to members at its marginal cost of c_1, price will fall to $p_1 = c_1$ and output will rise to Q_1. This outcome leads to the highest possible level of welfare. Antitrust authorities must exercise caution in attempting to compel a venture to transfer its output to its parents at cost, however. If the resulting intra-venture competition does not permit the parents to recoup the fixed costs of the venture, requiring it may cause the venture to collapse. In addition, it will generally be very difficult to verify whether output is indeed transferred at cost.

How Important are Production Joint Ventures in the United States?

More than 50 production joint ventures aimed at U.S. production and involving at least one U.S. firm have been formed in each of the last few years, many including large, leading firms.[3] Examples include ventures of Xerox and Dupont to develop and produce improved copying equipment; IBM and Sears to produce electronic information services; and Westinghouse and Siemans AG to manufacture factory automation equipment.

There are also many examples of production joint ventures formed by large companies who are direct competitors, including ventures of General Motors and Toyota to produce a limited class of automobiles; General Electric and Ford to develop and produce a new generation of automobile lighting systems; Merck and Johnson & Johnson to develop and market new over-the-counter medicines; Dow and Eli Lilly to construct and operate a large agricultural chemical concern; General Motors and Chrysler to produce manual transmissions for automobiles; and ABC, NBC, CBS and Cable News Network to conduct joint exit polls and pool information during national elections.

There has evidently been a decade-long trend in the distribution of joint venture formations away from their traditional focus in the energy, chemicals, and metal industries, towards the computer, electronic components, communications systems, pharmaceuticals, medical equipment, and financial services industries.[4] This finding is consistent with the view that vigorous high-technology industries require the large, high-risk investments and the combinations of

[3]The data underlying the discussion in this section were culled from the *Wall Street Journal Index* and from the *Compustat* record of corporate announcements.
[4]This was noted and documented by Harrigan (1985). Berg, Duncan, and Friedman (1982) discuss the earlier incidence of joint production venture activity in the United States.

complementary tangible and intangible assets from which the efficiencies of production joint ventures derive.

Current Antitrust Treatment of Production Joint Ventures

The current policies of the Federal Trade Commission and the U.S. Department of Justice, the agencies charged with enforcing the federal antitrust laws, are rationally hospitable to production joint ventures, even among direct competitors. These policies are founded on the rule of reason, which has been developed by the courts to assess the impact of business behavior on competition by balancing procompetitive efficiencies against anticompetitive risks. For example, in evaluating the proposal by General Motors and Toyota to jointly manufacture small cars, the Federal Trade Commission judged the efficiency benefits (primarily the likelihood that G.M. would learn from Toyota how to improve its production methods) to outweigh any anticompetitive dangers.[5]

As articulated in its 1988 *Antitrust Enforcement Guidelines for International Operations*, the Department of Justice analyzes a horizontal production joint venture by first determining whether it genuinely relates to some form of economic integration of the parties' operations, rather than merely being a label for a "naked agreement" on price or output among competitors. Genuine production joint ventures are assessed for anticompetitive potential associated with increases in concentration in relevant markets, with attention paid to entry conditions and other factors, as described in the 1984 *Department of Justice Merger Guidelines* and discussed in this *Journal* in the Fall 1987 Symposium on Horizontal Mergers and Antitrust. Actual and potential foreign competition is recognized where it exists, and full account is taken of any procompetitive efficiencies.

To the extent that the production joint venture preserves the assets, the ability and the incentives of the parents to compete independently of one another and of the production joint venture, the venture will be recognized to pose less of a threat to competition than would a full merger of the parents (and thus be given more favorable antitrust treatment than would a full merger). Ancillary restraints on independent actions of the venturers are analyzed under the rule of reason as well, with attention paid to their role in assuring the realization of the efficiencies offered by the venture.

In recent years, the courts and enforcement agencies have been applying rule of reason analysis to both mergers and joint ventures. The Section of Antitrust Law of the American Bar Association, in its "Recommendations and Report on Production Joint Venture Legislation"—henceforth, ABA Report—states that "the case law and enforcement guidelines developed over the last

[5]See Ordover and Shapiro (1985) for an economic analysis of the joint venture between General Motors and Toyota.

decade relating to production joint ventures are generally well understood and are being properly interpreted and applied."

On the other hand, uncertainty may arise because there is relatively little current case law evaluating production joint ventures, and some older Supreme Court precedents have struck down as per se illegal restraints on marketing that were ancillary to joint production arrangements involving economic integration.[6] Under the per se rule, in sharp contrast to the rule of reason, production joint ventures can be enjoined, dissolved, or held liable for the payment of treble damages to injured private plaintiffs, without consideration of actual market power or the achievement of procompetitive efficiencies. If the per se rule were applied to joint ventures, a paradoxical result would emerge: ventures would be treated more harshly than mergers, although mergers clearly have greater potential for diminishing competition.

Since the Supreme Court precedents invoking the per se rule have never been explicitly overruled, a *perception* may exist that the per se rule against horizontal conspiracies could be applied to genuine production joint ventures. The ABA Report states that "joint venture participants who do not enjoy the benefit of sophisticated antitrust counsel" may still be deterred by the perceived threat of running afoul of a per se ruling, and that "clients contemplating participation in joint ventures may not receive adequate assurances from their counsel in particular instances." In short, the possibility that an adverse court decision under the per se rule would lead to treble damages or to dissolution of a production joint venture may deter firms from forming a joint venture that could bring little anticompetitive risk and significant procompetitive efficiencies.

But since no case in the past decade has applied the per se rule to joint activities involving genuine economic integration of operations, and since so many ventures have been formed between rivals, it appears unlikely that the threat of running afoul of a per se ruling is *dramatically* chilling procompetitive collaboration.[7] This conclusion is supported by evidence from the ABA Antitrust Section (1989, p. 20), which states, "Based upon a review of the case

[6]The most recent Supreme Court opinion to this effect is now nearly 20 years old: *U.S. v. Topco*, 405 U.S. 596 (1972). In Topco, the court held that territorial restrictions on sales were per se illegal, even though they were part of a larger cooperative agreement among regional supermarket chains to develop their own private label brand. The Court came to the same conclusion in *U.S. v. Sealy*, 388 U.S. 350 (1967). See also *Arizona v. Maricopa County Medical Society*, 457 U.S. 332 (1982), where a maximum fee schedule was found to be per se unlawful even though it was part of an insurance plan which included peer review and claims administration.

[7]Such a threat is all the more remote since the Supreme Court has so significantly narrowed the range of activities that it is willing to characterize as per se violations in all categories of practices: horizontal price fixing, see *Broadcast Music v. Columbia Broadcasting System*, 441 U.S. 1 (1979); concerted refusals to deal, see *Northwest Wholesale Stationers v. Pacific Stationery & Printing Co.*, 472 U.S. 284 (1985); tying, see *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2 (1984); and resale price maintenance, see *Business Electronics Corp. v. Sharp Electronics Corp.*, 485 U.S. 717 (1988). In addition, the Supreme Court has held that all non-price vertical restraints are subject to rule of reason analysis, see *Continental T.V. v. GTE Sylvania*, 433 U.S. 36 (1977).

law, conversations with recent enforcement officials, and an informal poll of members of the private bar, the Section is aware of only one instance in which domestic firms declined to pursue a joint venture integrating production activities for reasons that would be remedied by the proposed legislation."

Current Antitrust Treatment of Research Joint Ventures

Congress has already acted to ease antitrust treatment of joint ventures formed to conduct research, as distinct from production. Responding to fears that the antitrust laws were stifling innovation by discouraging research joint ventures, Congress passed the National Cooperative Research Act of 1984 (15 USC 4301). The NCRA was intended to encourage greater cooperation among firms to conduct research by giving special antitrust treatment to "joint research and development ventures."

Joint R & D activities are natural candidates for preferred antitrust treatment, since joint research is especially likely to generate efficiencies.[8] First, research findings may be difficult to appropriate, despite intellectual property protection (Levin et al., 1987), so free riding can impose a serious drag on innovation. Joint research can help solve this free riding problem by allowing many or most of the potential users of a discovery to commit themselves to investing in its creation. Second, the economies of scale in research may far exceed those in production or marketing. The marginal cost of an additional firm using a given research finding is far less than the average cost of that discovery, so it may be wasteful for rival firms to conduct parallel research projects. Finally, the possibilities for synergies may be greater in conducting research than in conventional production activities, since the parents may bring distinct research backgrounds and skills to the venture.

However, even joint ventures whose activities are confined to research and development may have anticompetitive effects. Ordover and Willig (1985) point out that a research joint venture, by replacing competitive independent decision-making with joint decision-making, can prevent a patent race and thus decrease the pace of R&D if it does not significantly lower the cost of R&D, and if it combines the R&D activities of firms who are each others' principal competitors.[9]

The NCRA eased the antitrust treatment of cooperative research in two ways: (1) Any qualifying venture would not be "per se" illegal, but rather "shall be judged on the basis of its reasonableness," that is, using a rule of reason approach; and (2) any party to a research joint venture has available a

[8]See Grossman and Shapiro (1986) for a more extensive discussion of the antitrust treatment of joint research activities.

[9]See Katz (1986), Grossman and Shapiro (1987), and Ordover and Baumol (1988) for further analysis of cooperative research, and Shapiro (1985) for a discussion of patent licensing, one alternative to joint research.

notification procedure. If the Justice Department and the Federal Trade Commission are notified of the parties to the venture and the nature and objectives of the venture, then the research joint venture will only be subject to single, rather than treble, damages if it is later found to be in violation of the antitrust laws. Under the NCRA's notification procedure, the government publishes the participants' description of their venture in the Federal Register, so private parties as well as the government are apprised of its formation.

The NCRA's prescription that the courts apply the rule of reason standard merely codified existing practice, and the NCRA does not provide antitrust immunity to any venture. Such limited reform was appropriate, given the sparse evidence that the antitrust laws were in fact discouraging procompetitive joint research. Nonetheless, there is some limited evidence that the NCRA has indeed stimulated joint research activities. For example, reports of joint venture formations in the *Wall Street Journal Index* rose markedly at the time the NCRA was being considered in Congress. The number of new joint ventures filled under the the NCRA was 49 in 1985, 16 in 1986, 25 in 1987, and 32 in 1988.

Since the free riding and scale economies arguments are less pronounced for production activities than for R&D activities, it is far less clear that collaboration to engage in production, distribution and marketing should receive the same special antitrust treatment as has been afforded to cooperative research. Our discussion below about proposed changes in antitrust law focuses on precisely that issue.

Joint Ventures in Europe and Japan

Firms in the European and Japanese economies, major sources of competition to U.S. firms in high-technology industries, are subject to somewhat more relaxed antitrust treatment of collaboration among horizontal competitors. Jorde and Teece and others suggest that more lenient antitrust treatment of joint ventures in other countries has disadvantaged U.S. companies in worldwide competition.

In Europe the relevant mandate for competition policy is Article 85, Section 3, of the EC Treaty, which allows the Commission of the EC to sanction certain interfirm agreements on the basis of a rule of reason. In December 1984 the Commission adopted Regulation 418/85, giving a so-called "block exemption" to categories of research and development agreements. A major distinction between these block exemptions and the NCRA is that the block exemptions apply to the "joint exploitation" of R&D findings, as well as to the R&D itself. Joint exploitation is defined to include the manufacture of the joint venture product or the licensing of intellectual property rights to third parties, but not the joint marketing of the joint venture product.

To qualify for special treatment, an agreement must give all participants access to any research results and permit each party to exploit the results independently. Additionally, for joint exploitation to be exempted, the joint research must be indispensable for the manufacture of the joint venture product. Finally, the exemption is designed to be phased out if the combined market share of the parents and the venture exceeds 20 percent.

The block exemption specifically states a number of permissible ancillary restraints, including territorial division and prohibitions on independent research in the area of the venture (such prohibitions may be necessary to limit spillovers from the venture to its parents, and thus to protect the parents' return on their investment in the venture). The block exemption also indicates provisions whose presence will eliminate the exemption, including restrictions on the parties' ability to set prices independently for the product of the joint venture.

The European block exemption goes noticeably further than the NCRA in two respects.[10] First, it grants true exemption: an agreement falling within the scope of the EC regulation is immune from attack under European competition law. Second, the block exemption is not confined to purely research activities. Furthermore, cooperating firms that are not eligible for the exemption may apply to the EC Commission for exemption on a case-by-case basis (a procedure we call "certification" below).

Nonetheless, joint venture activity in the European Community seems to be roughly the same order of magnitude as in the United States. The "Report on Competition Policy" of the Commission of the European Communities counts 111 joint ventures of all kinds during 1987 and 1988, with 29 percent of those specified labeled as R&D cases. This report noted a recent trend from international (involving "extra-community" firms) to national as well as Community operations, which "might indicate a trend by EEC companies to reinforce their intra-Community operation in view of the 1992 single market." Almost half of the international joint ventures involved U.S. firms.

Japanese policy has been to promote cooperative research and development efforts, which are structured as "study groups." By and large, this interfirm cooperation ends at the R&D stage, with participant firms producing independently. The available evidence suggests that production joint ventures are not a common form of business organization among Japanese firms. However, an increasingly popular form of production joint venture couples Japanese with non-Japanese firms, including U.S. firms. For example, IBM's Japanese joint ventures increased from eight in early 1987 to 17 by the end of 1988.

Japan's Ministry of International Trade and Industry has at times urged various Japanese industries to reorganize and consolidate, and in most in-

[10]The detrebling provision of the NCRA merely brings it closer in line with European law, in which trebling is never applied.

stances the resulting consolidations have taken the form of mergers and acquisitions rather than production joint ventures. It is far from clear that the consequent horizontal combinations would have been allowed by U.S. antitrust law, and antitrust enforcement seems to be significantly more lax in Japan than in the United States. For example, according to the *New York Times* (November 24, 1989, page D1), there is "a long-established system in Japan known as 'Dango,' under which construction companies consult in secret before submitting bids and decide in advance which ones will submit the winning bids. ... it had been years since the [Japanese Fair Trade Commission] was willing to challenge the politically powerful industry on charges that it violated Japan's Anti-Monopoly Act." In contrast, criminal and civil antitrust cases are frequently brought by the U.S. Department of Justice against alleged construction bid-riggers.

In Japan, other forms of business organization may perform some of the functions of formal production joint ventures. Japan has several large business groups, each centered on a major bank, that include firms in many industries that hold one another's shares, as well as a multiproduct trading company. These groups spread and reduce risk by virtue of diversification, interlaced equity, and the lending practices of the core banks. Firms within a given business group also may share technology and complementary assets with relatively little free-riding and transactions costs due to the monitoring and transfers provided by the core bank.

However, directly competing firms are generally not in the same business group. The risk and asset sharing that are achieved are therefore analogous to the benefits of vertical and conglomerate organizations, rather than to the benefits of production joint ventures among horizontal competitors.

U.S. Competitiveness, Innovation, and Collaboration

Much of the support for easing the antitrust treatment of collaboration is couched in terms of improving the ability of U.S. firms to compete with foreign companies. Particular emphasis is given to the need for greater innovation by U.S. firms to remain competitive. Jorde and Teece are vocal examples of those emphasizing "competitiveness" and "innovation." What precisely is the relationship between foreign competition, innovation, and antitrust policy?

Certainly foreign competition is an increasingly potent threat to American companies. Consequently, it is increasingly important to account for foreign competition in evaluating the market power of U.S. firms; for example, ignoring foreign competition in the U.S. market for automobiles or semiconductors would grossly distort competitive reality. However, recognizing the legitimacy and potency of foreign competition in antitrust analysis hardly requires any legislative change. Both the courts and enforcement authorities routinely include foreign competition in their analysis. Only when trade barriers are in

place is such competition discounted, and quite appropriately so. Under the rule of reason, a joint venture among U.S. firms will be viewed favorably if they face substantial foreign competition, since the venturers' share of the relevant market will then be small.

It might be argued that U.S. antitrust laws should be relaxed in their treatment of production joint ventures because U.S. firms face strong competition from foreign firms that operate in their home nations subject to antitrust laws that are less restrictive than ours. This argument is likely to be wrong for several reasons. Although Jorde and Teece believe otherwise, we see no strong evidence that production joint ventures among horizontal competitors are significantly more important in Europe or Japan than in the United States. Nor is there evidence to support the view that U.S. antitrust policy stifles innovation by U.S. firms. Any intimate linkages between production and R&D of the kind stressed by Jorde and Teece would constitute an efficiency factor that will be considered under a rule of reason analysis, leading to more favorable antitrust treatment of a production joint venture.

In addition, we have seen no analysis suggesting that a significant relaxation of U.S. antitrust laws would serve national interests simply because other competing countries may have relaxed their own laws. Production efficiency may become more crucial for economic success as the relevant market becomes more competitive. If that were the case, it might be appropriate to place more weight on productive efficiencies relative to possible anticompetitive effects. However, such factors can be included in a rule-of-reason analysis. Where the relevant market is international in scope and highly competitive as a result, so that the above argument might be applicable, there is little risk of anticompetitive effect from the formation of U.S. production joint ventures to be balanced against the realization of efficiencies. Under these circumstances, the rule of reason would be amply permissive towards U.S. joint ventures.

Proposed Changes to the Antitrust Laws

The bills currently being considered in Congress involve in various combinations the following alterations to antitrust law: (1) An explicit statement that production joint ventures are to be judged according to a rule-of-reason standard; (2) a notification procedure for production joint ventures like that available for research joint ventures under the NCRA, by which a venture could reduce its liability to single damages; (3) a certification procedure, by which a venture could obtain antitrust immunity subsequent to its approval by an appropriate government agency.[11] In addition to supporting these three

[11]A similar certification procedure is currently available for export activities under the Export Company Trading Act, 15 U.S.C. 4301. Certification also has features in common with the European block exemption, in that immunity is granted to qualifying ventures.

changes, Jorde and Teece propose in this symposium (4) a market-power based safe harbor shielding interfirm agreements if the venturers have less than 20 or 25 percent of the relevant market, or if they would be permitted to merge, and (5) a general rule permitting plaintiffs in actions versus (uncertified) production joint ventures to recover only actual damages, with the losing party paying attorneys' fees for both sides. We now discuss each of these proposals in turn.[12]

Rule of Reason Approach

Legislation that would explicitly require the courts to adopt a rule of reason approach to production joint ventures makes sense; as noted above, this would merely codify existing practice. To the extent that such legislation would help to rationalize judicial practice and ease fears in the business community that procompetitive cooperation would be exposed to a per se ruling, it would be helpful. There may have been just such an effect from the passage of the NCRA. The only possible danger is that such legislation might lead price fixers to construct a sham venture to avoid liability under the per se rule. But sham ventures without genuine integration would remain subject to per se treatment, and the distinction between sham and genuine joint ventures is likely to be clear to both the parties and to the courts.

Extending Notification Procedures To Production Joint Ventures

The NCRA detrebles the award of damages for any research joint venture that has met the notification requirements of the Department of Justice and the Federal Trade Commission. Should such a procedure be extended to production joint ventures as well? Evaluating this notification procedure requires an understanding of the role of treble damages more generally in the antitrust laws.[13]

The awarding of treble damages to prevailing antitrust plaintiffs has been an ongoing source of controversy and debate. When Senator Sherman first introduced his antitrust bill into Congress in 1888, it provided for double damages. The treble damages rule that was finally adopted is presumed to be derived from the now-repealed English Statute of Monopolies. A variety of proposals has been offered to modify the current treble damage rules, dating back to 1897 when legislation was unsuccessfully introduced into Congress to limit plaintiffs to single damages. The proposals have included: (1) vesting in the trial judge discretion to determine the damage multiplier; (2) limiting recoveries to actual damages where the defendant could not reasonably have known it was violating the law; (3) limiting treble damage awards to damages sustained by reason of having been overcharged or underpaid; (4) making the damage multiplier vary depending upon how covert or concealed was the

[12]See the ABA Report and Brodley's article in this issue for legal analyses of the proposed legislative changes.

[13]For analyses of treble damages in antitrust law, see the American Bar Association, Section of Antitrust Law Monograph 13, *Treble-Damages Remedy*, and Easterbrook (1985).

conduct comprising the violation; and (5) awarding treble damages only for horizontal per se cases, such as horizontal price fixing, market division, and group boycotts.

A full discussion of the treble damage remedy would take us rather far afield. Economic reasoning does give some fundamental guidance, however. The basic theory of deterrence argues that multiple damages are more appropriate for violations that are less likely to be detected; there the multiple counteracts the probability that the violation would escape detection, so that the expected value of the award is actual damages. The classic reference on this topic is Becker (1968). On this basis, notification does appear to be a suitable quid pro quo for detrebling, since trebling would still apply to damages flowing from any illegal production joint venture behavior that was unlikely to be detected because it had not been covered by notification.

This argument notwithstanding, concern arises that competitors would be emboldened by detrebling to form a production joint venture for the purpose of suppressing output and raising prices in a coordinated fashion. On this view, success would bring the rewards forthcoming from heightened market power, while at worst the venturers would be liable for actual damages and have to return little more than the extra profits their illegal activities had made possible. However, this view neglects two important elements of deterrence. If the venturers do not actually integrate their operations despite having notified the government that they would do so, then the protections offered by the proposed notification procedures would not apply; such a sham joint venture would be exposed to treble damage liability. Similarly, if a venture's notification describes joint production only, then any joint marketing activity will still be exposed to treble damage liability. On the other hand, if the production joint venture did entail significant integration, then an antitrust defeat would likely cause the parents to incur significant costs to effect any required dissolution of the venture, in addition to the costs of paying actual damages and legal fees. Hence, it seems that rivals would be unwise to form an anticompetitive production joint venture in response to extension of the NCRA to production joint ventures.

The possibility of a treble damage award is a powerful spur for plaintiffs in private antitrust litigation. While suits brought by private parties can be valuable complements to governmental enforcement efforts, some such litigation can be opportunistic and deterring of procompetitive activity.[14] From this perspective, the combination of detrebling with notification appears to be a sensible tradeoff, inasmuch as the detrebling would chill opportunistic litigation, while the notification would strongly facilitate private as well as governmental efforts to enjoin the formation of an anticompetitive production joint

[14]See the Georgetown Study of Private Antitrust Litigation (1985) for evidence on the role of private enforcement of the antitrust laws,

venture before it can cause any damage. For these reasons, we support extension of the notification procedures of the NCRA to production joint ventures.[15]

Antitrust Immunity for Certified Ventures

Under the certification procedures proposed by Jorde and Teece and others, immunity from exposure to antitrust damage claims would be granted after a favorable governmental review of the proposed joint venture. We do not favor such a certification procedure.

If a grant of government antitrust immunity is not going to provide a blank check for a joint venture to engage in antitrust violations, government officials will need to monitor the venture on an ongoing basis. Such oversight will be needed to ensure that the venture stays within the bounds of its original charter, to check that additional restrictions on competition are not introduced by the venture or its parents, and so on. Further, as the activities of the production joint venture evolve for either exogenous or strategic reasons, the government is likely to be thrust into the position of recurrently renegotiating the basis for the exemption conferred by certification. Private parties cannot be relied upon to conduct this ongoing review. They will have no incentive to do so absent the ability to sue the venture for damages, and they will lack the information necessary to determine whether the venture in fact is remaining within the bounds of its certification.

Therefore, a certification procedure would necessitate ongoing regulation of joint ventures. Such regulation would inevitably be burdensome, both for the government and for the venture participants. Notification under the NCRA approach, by contrast, confers no approval and no exemption, and thus obviates ongoing government oversight and negotiation. Further, unlike certification, notification allows private parties like the venture's customers, with their valuable information about market behavior, to assist in antitrust enforcement.[16]

Market-Power Based Safe Harbor

We have no objection in principle to a market-power based safe harbor for joint ventures. Any *genuine* joint venture should almost surely be allowed if the

[15]Further research is surely needed to improve our understanding of the relationship between the probability of detection and the level of punishment for antitrust offenses, where legal uncertainty and legal error are significant and unavoidable. In particular, further analysis is required to understand the relationship between standards for antitrust liability and antitrust damage rules, where these policy instruments are set optimally to (1) deter inefficient behavior, (2) avoid stifling efficient behavior, (3) reduce legal risk, and (4) limit the expenditures of resources on the legal process itself.

[16]In our view, private plaintiffs would play no significant role in policing certified ventures, since they would be able to obtain only injunctive relief, not damages, and since they would be required to show that the venture's activities are outside the scope of the certification and in violation of the antitrust laws to obtain even the limited relief.

participants would be permitted to merge, and this would almost surely be the outcome of a rule of reason analysis. But let there be no illusions about safe harbor provisions that are included in legislation. Determining market power inevitably requires a rule-of-reason style analysis. For example, a safe harbor delineated in terms of market shares must be founded on some definition of the relevant market, and this alone requires a rather complete and sometimes complex analysis.

Legislation is an excessively rigid and confining medium for the expression of appropriate methodology for safe harbor and other rule-of-reason analyses of joint ventures. Identification and application of such appropriate methodology would be better left the responsibility of an expert agency under the case law, so that enforcement can reflect subleties of analysis, advances in knowledge and accumulation of experience.

Detrebling For "Cooperative Innovation"

We oppose detrebling of awards for all antitrust suits involving "cooperative innovation," as suggested by Jorde and Teece. As described above, little or no evidence suggests that U.S. antitrust laws are significantly stifling innovation. Absent such evidence, a broad detrebling of antitrust damages is unwarranted. Yet that is just what this proposal by Jorde and Teece would entail, since only the rare genuine production joint venture could not claim, with some credibility, to be engaged in cooperative innovation. Instead, notification should be seen as a valuable and appropriate quid pro quo for detrebling.

Shifting of Attorneys' Fees

The proposal that attorneys' fees should be awarded to the losing party is intriguing and challenging. Certainly the current law contains an asymmetry, whereby a prevailing plaintiff in an antitrust action can recover attorneys' fees, but a prevailing defendent cannot. It seems clear that the proposal would help to deter opportunistic litigation and "nuisance" suits.

We are concerned, however, that small plaintiffs would be deterred from bringing meritorious antitrust suits against large companies by fear of liability for astronomical attorneys' fees if they were to lose. We cannot endorse legislation calling for losing plaintiffs to pay the attorneys' fees of defendants without further evidence about the merit of the suits that would be deterred by such a legal change.

Conclusions

It is in vogue in some circles to blame the antitrust laws for America's lack of "competitiveness." However, there is precious little evidence that overly strict antitrust policies have stifled innovation by American firms or hindered

American firms from competing abroad.[17] Broader forces such as the low U.S. savings rate, high cost of capital, and the inevitable narrowing of America's technological lead over its trading partners are more likely culprits. Indeed, rationally firm antitrust policies are likely to promote business efficiency through the beneficial pressures of competition, and thereby enhance competitiveness in global markets.

Nonetheless, it is prudent to signal U.S. businesses that antitrust laws will not stand in the way of legitimate procompetitive collaboration, especially that involving innovation, broadly defined. Establishing a notification procedure to shield joint ventures from treble damage liability under the antitrust laws and supporting efforts to prescribe the current practice of evaluating genuine joint ventures according to a rule of reason will both help send this signal. However, broader legislative changes may undermine antitrust enforcement, and are not needed.

■ *Shapiro gratefully acknowledges financial support from the National Science Foundation under Grant SES-8821529, from the John M. Olin Foundation, and from the Alfred P. Sloan Foundation. The authors thank Matt Wright and Fred Gramlich for their assistance; Paul Denis, Thomas Jorde, and David Teece for helpful comments on an earlier draft; and seminar participants at the University of California at Berkeley and at Stanford University for their suggestions for revisions. This paper does not necessarily reflect the views of the Department of Justice or any other agency of the government of the United States.*

[17]For example, the recent demise of U.S. Memories, the planned consortium of computer and semiconductor manufacturers to produce the next generation of computer memory chips, appears to be due to the prosaic reason that anticipated demand for chips was insufficient to warrant the $1 billion planned investment, rather than any antitrust concerns.

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