

August 11, 1989

## HIGH-DEFINITION TELEVISION: WHAT THE FEDERAL GOVERNMENT CAN DO

### INTRODUCTION

For a generation of Americans, the television set has been the primary source of news and information. Now, instead of being simply a source of news, the television set is becoming news. The reason: a new television technology known as “high-definition television,” or “HDTV,” which promises theater quality pictures via the TV tube.

HDTV is now being developed by Japanese, West European, and American firms. Some say that the new technology will have a tremendous social and economic impact. While this conclusion may be questionable, it is clear that HDTV already is having a major political impact as a test case of how the United States will respond to challenges to its international competitiveness.

To help U.S. firms compete in this new technology, and generally in the field of electronics, some business groups and lawmakers have urged the federal government to help fund the development of HDTV by U.S. firms, thereby enabling them to catch up with international competitors that are ahead of the U.S. electronics industry.

**Unfair Handout.** This would be a serious mistake. Despite its advance billing, there is no assurance that HDTV will prove to be the technological or economic milestone that its supporters claim. It is very possible, therefore, that a heavy federal investment would squander taxpayer dollars. And if HDTV is a successful product, it likely will be highly profitable. If so, private firms should not expect an investment handout from Uncle Sam. It would be neither fair nor sensible to require the American taxpayer to support such a potentially lucrative enterprise.

While the federal government should not subsidize HDTV and other new technologies, neither should it stand in their way. Yet current antitrust laws

do just that. Through complex and ambiguous rules governing cooperation between firms, the antitrust laws constrain the ability of U.S. companies to develop new products. Joint ventures and other cooperative arrangements too often have been inhibited and prevented by these rules, although such activities often are crucial to the development of technological innovations.

**Encouraging Cooperation.** Numerous bills are pending in Congress to address this problem. Some apply only to HDTV-related activity, leaving the federal government in the position of favoring this one technology over all others. Others apply more broadly, protecting firms that notify antitrust authorities of their activities from treble damage liability in the event of an antitrust lawsuit. Such firms would, however, remain liable for actual damages. More complete protection is offered by H.R. 1024, sponsored in the House of Representatives by "Rick" Boucher, the Virginia Democrat, and Thomas Campbell, the California Republican. Essentially, their proposal would permit federal antitrust authorities to determine in advance whether proposed joint activities comply with the antitrust rules, and completely protect those activities from later damage awards. In this way, the risk of a future lawsuit for monetary damages is eliminated. The best approach may be a combination of the simple notification proposals with the Boucher-Campbell pre-clearance plan.

The new high-definition television technology is a litmus test of how Washington will act to increase the international competitiveness of U.S. industry. The "industrial policy" approach, by which Washington picks out a favored industry to subsidize, is neither fiscally nor economically sensible. Instead of providing special benefits to the private sector, Washington simply should get out of the way, removing federal impediments to the development of new products and services. In this way, taxpayers, consumers, and U.S. industry will best be served.

## HIGH-DEFINITION TELEVISION TECHNOLOGY

Since the advent of commercial television in the late 1940s, pictures have been transmitted to viewers under a set of standards formulated by the National Television System Committee (NTSC) and approved by the Federal Communications Commission (FCC). These standards, modified slightly with the introduction of color television in 1953, describe the basic technical specifications for television broadcasting in the United States. Under this standard, for instance, all television pictures consist of 525 lines per frame; the ratio between the width and height of the frame is 4:3; and broadcasts use six megahertz of spectrum to transmit.

HDTV systems would require a change in these standards to create a substantially more detailed picture. High definition television is one of a family of advanced television systems intended to improve the quality of picture available to television viewers. Some of these, such as "Improved Definition Television," which are already on the market, work within the current NTSC format. For most HDTV systems, the number of lines per

frame would more than double, to as many as 1260, and the ratio of picture width to height would be more like that of a motion picture theater. In all, each frame would contain about four times as much electronic information as provided under NTSC standards.<sup>1</sup> The result: HDTV could provide crisp, movie theater-quality pictures on a home television set.

Japan's government-owned broadcasting company, Nippon Hoso Kyokai, or NHK, has been researching this new technology since the early 1970s. Next year, it plans to begin, via satellite, the first regular television transmissions in this new format. At the same time, several major Japanese television manufacturers will begin to sell high definition television receivers to the Japanese public.

**Incompatible Systems.** American firms lag behind both the Japanese and West Europeans in this new technology, although Zenith Electronics Corporation — the only U.S.-owned television manufacturer — and several other firms are developing systems. The Japanese and West Europeans, however, may find themselves unable to take advantage of their lead to enter the U.S. market in the near future. The reason: the current systems, many of which are designed for satellite transmission, cannot be broadcast on the six megahertz channels now allocated by the FCC for television. Thus, while HDTV receivers could now receive videocassette recorder and cable television signals, HDTV television broadcasting cannot begin until the FCC approves a new set of standards — a decision not expected until at least 1992. Moreover, as currently configured, the Japanese and European systems would be incompatible with current U.S. TV sets, meaning that consumers would be forced to replace their current equipment if those systems are used. Since the FCC already has said that it would adopt no standard that would make current sets unusable, most current HDTV systems will have to be redesigned.

## THE POTENTIAL IMPACT OF HDTV

HDTV could have a significant impact on the U.S. economy, although estimates of this impact vary widely. According to a report prepared last year for the U.S. Department of Commerce, revenue from advanced television receivers and videocassette recorders could be as much as \$1 billion per year by 1997. By 2008, the report projects revenues as low as \$600 million or as high as \$16 billion per year.<sup>2</sup> By comparison, total revenue from the sale of video products in the U.S. this year is expected to be \$13 billion. All

---

1 Congressional Budget Office, "The Scope of the High-Definition Television Market and Its Implications for Competitiveness," July 1989, p. 2.

2 Larry F. Darby, *Economic Potential of Advanced Television Products*, April 7, 1988, p. 36. Adjusted to constant 1989 figures by Congressional Budget Office, *op. cit.*, pp. 8, 9.

consumer electronic sales will total about \$32 billion.<sup>3</sup> According to the Commerce Department report, HDTV promises to be directly responsible for 35,000 jobs by 2008, and contribute indirectly to 65,000 more.<sup>4</sup>

**Dubious Claims.** Many HDTV proponents also point to its potential secondary benefits. For instance, it is believed that HDTV technology will lead to the development of more advanced semiconductor chips. These are vital to many other areas of electronics, including military hardware. It is also claimed that HDTV will boost the market for these chips by increasing overall demand for chips. Thus, the development of HDTV, it is argued, could prove to be a powerful stimulus to the entire U.S. electronics industry.

These claims should be viewed with considerable skepticism. The consumer electronics landscape is littered with relics of once ballyhooed “revolutionary innovations” that flopped in the marketplace. Among such putative breakthroughs: picturephones, quadraphonic sound systems, and eight-track tape players. Even products that did succeed spawned versions that have reached a commercial dead-end. For instance, while home video equipment has been a huge success, the videodisc and Beta formats for these products were marketplace failures. On the whole, optimistic forecasts for products tend to overwhelm accurate ones — according to one study by as much as 7 to 1.<sup>5</sup>

**Not A Sure Bet.** There is good reason to believe that HDTV could also flop. For one thing, it will not be inexpensive: perhaps \$3,000 per set when it is first introduced, and dropping only to about \$600 by the year 2010.<sup>6</sup> For another, its appeal could be limited. The improved picture quality really is noticeable only on larger screens. Moreover, according to consumer surveys performed at the Massachusetts Institute of Technology, viewers shown HDTV and conventional programming had only a marginal preference for HDTV — and many actually preferred the old system.<sup>7</sup> Thus, although HDTV still may have great potential, it is by no means a sure bet — and perhaps it is a long shot. Consumers, of course, often have embarrassed experts who confidently have predicted limited markets for goods. Yet even if HDTV is better than a long shot and is a reasonable bet, the federal government should not be betting.<sup>8</sup>

---

3 Electronic Industries Association, *Consumer Electronics U.S. Sales*, June 1989, pp. 1, 2.

4 Darby, *op.cit.*, pp. 42-43.

5 Steven P. Schnaars, *Megamistakes: Forecasting and the Myth of Rapid Technological Change* (New York: The Free Press, 1989), p. 107, as cited in Congressional Budget Office, *op. cit.*, p. 11.

6 *Ibid.*, Figure 3.

7 *Ibid.*, p. 12. MIT cautions that this study suffered from some technical problems that may have increased the portion of viewers preferring conventional television.

8 *Ibid.*, p. 21. Even if the HDTV market meets the most optimistic predictions, it still may not have the secondary effects that some expect. For instance, HDTV use of semiconductors by 2010, even if the product is successful, likely will be only 1 percent of the worldwide demand for semiconductors.

## THE QUESTION OF FEDERAL SUPPORT

Because of the perceived commercial importance of HDTV, many business groups and lawmakers are urging the federal government to subsidize research and development activities. One program already is underway. In June, the Pentagon's Defense Advanced Research Projects Agency (DARPA) announced it would grant \$30 million to various firms to support advanced television research.<sup>9</sup> DARPA cited the potential military applications of HDTV and the need to advance semiconductor technology.

Some business groups argue that such defense-related grants are not enough — and that the U.S. should embark on a large-scale effort to support development of HDTV for consumer use. Under one plan developed for the American Electronics Association, the federal government would provide \$1.35 billion in aid for the advanced television industry: \$500 million in direct loans, \$500 million in loan guarantees, and \$300 million in additional DARPA subsidies for firms involved in advanced television activities. Another \$50 million would go to develop standards for advanced television.<sup>10</sup> On August 1, the Senate Commerce Committee approved a bill that would authorize \$100 million for industry consortia and small firms involved in advanced technology, including HDTV.

**Second-Guessing Consumers.** Such subsidy schemes would be neither fair nor wise. If successful, HDTV promises to be an extremely lucrative product, adding tens of billions of dollars annually to industry revenues. The market incentives for firms to pursue HDTV thus are strong. It is difficult to see why, therefore, the U.S. taxpayer should help pay for the development of this product.

Such subsidies also are a dubious use of economic resources. HDTV could turn out to be a marketplace failure and go the way of quadraphonic sound systems. Perhaps worse: federal support could keep alive an HDTV industry even if it turns out that it *should* be sent the way of quadraphonic sound. Aside from the obvious taxpayer costs of this, there would be private costs from electronics industry resources having been directed toward HDTV at the expense of other products that might have been more beneficial for the economy, and which consumers might have preferred. And even if HDTV is a marketplace success, there still would be the problem of which HDTV technology to subsidize: there is no guarantee that the government would not end up fostering the HDTV equivalent of videodiscs when consumers really may want videocassettes.<sup>11</sup>

---

9 Calvin Sims, "Five to Get U.S. Grants for Advanced TV," *The New York Times*, June 14, 1989.

10 See Pat Hill Hubbard, Vice President, American Electronics Association, testimony before the Senate Committee on Commerce, Science, and Transportation, May 9, 1989.

11 See Claude Barfield, "It's Still High-Definition Intervention," *The Wall Street Journal*, May 8, 1989.

Supporters of federal support claim that these problems can be reduced by letting private industry decide where to spend federal resources. In this way, it is said, the government bureaucrats would not have to sort out industrial winners and losers. But the government still would be designating advanced television as a favored industry. Moreover, whoever decides on the specific allocation of funds, federal support would give the “winners” an artificial edge over other advanced television technologies that consumers might prefer. And having the industry allocate those funds could favor large, established firms over more entrepreneurial newcomers. Thus, for instance, if the federal government creates an industry consortium to handle funding questions, federal money likely would flow mostly to firms affiliated with the consortium rather than to equally qualified, smaller concerns.

## COOPERATION AND ANTITRUST REGULATION

While the federal government should not subsidize this new technology, it should make sure that federal regulations do not hinder the development of HDTV or any other technology. Currently, federal rules often do just that, frustrating American firms wishing to compete in emerging new technologies. Federal antitrust rules, for instance, deter many joint ventures and other kinds of cooperative activity that could be essential to developing HDTV technology. These rules should be modified so that innovation is not hampered — whether in the area of HDTV or in any other field.

### **Benefits of Cooperation**

Cooperation among firms can be crucial in developing new technology. This notion may at first seem odd. After all, the free enterprise system relies to a great degree upon the diversity and efficiency of competing firms. Yet cooperation also has always been a vital ingredient of a market system. Beneficial activities can range from simple information exchanges or joint advertising arrangements, to joint use of assets, to the creation of new enterprises to conduct research or manufacture products.<sup>12</sup>

Cooperative activities can be particularly important in the development of new products and technologies. The reasons for this recently were outlined by law professor Thomas Jorde and business professor David Teece of the University of California at Berkeley.<sup>13</sup> Among them:

---

<sup>12</sup> See, Robert Pitofsky, “A Framework for Antitrust Analysis of Joint Ventures”, 74 *Georgetown Law Journal* 1605, 1606 (1986).

<sup>13</sup> Thomas M. Jorde and David J. Teece, “Innovation, Strategic Alliances, and Antitrust: Toward Private Industrial Policy in High Technology Activities,” unpublished draft, November 1988, and Jorde and Teece, “Innovation, Cooperation, and Antitrust: Balancing Competition and Cooperation,” 4 *High Technology Law Journal* 1 (1989).

◆ **Cost sharing.**

The costs of developing and producing a new product can be enormous. This is not only because of the cost of new plants and equipment, which can run into hundreds of millions of dollars, but also because the risk of failure often is high. By pooling resources, the cost and risk associated with development efforts is spread, making such efforts more affordable.

◆ **Access to complementary assets and information.**

Very often, no one company may possess the full range of expertise needed to develop and market a particular product. Each of several firms may have a particular expertise important for the product. Example: in a computer venture, one company may have video display technology, but lack expertise in computer chips or software; alternatively, one firm may have the relevant technological expertise, but lack the manufacturing capability or distribution network. This may be a problem in any enterprise, but it can be particularly acute with new technologies, where the relevant capabilities are less likely to be available within one firm. Such cooperation is particularly important to small firms, which otherwise may not be able to compete with larger rivals.<sup>14</sup>

◆ **Reduction of "free riding."**

Firms that invest the resources necessary to develop new products may not receive all the resulting benefits. Despite patent laws, it is often possible for other firms to benefit from a new technology or idea once it is developed. For example, the new idea may be important but insufficiently different from other products to be patentable. In addition, the first firm to develop a product assumes the risk that it will be unsuccessful. Once the product proves successful, other firms can enter the market without that risk.

The possibility of such free riding decreases the incentive for any firm to make the necessary investment in the first place. By including other firms in a cooperative project from the very beginning, the number of potential "free riders" can be reduced, increasing each firm's willingness to enter a field.

Of course, each of these problems could be solved through mergers among firms, rather than cooperative ventures between independent companies. But such mergers may not be justified when the technology being developed is only one small part of the total business of the firms involved. Moreover, cooperative ventures reduce competition to a lesser extent than mergers, since they limit rivalry between firms only in the specific areas involved, not across the whole range of their activities.

---

<sup>14</sup> See Jeanne Sadler, "Cooperative Ventures by Small Firms Sparking Interest," *The Wall Street Journal*, February 27, 1989.

## Cooperation and the Antitrust Laws

Throughout most of this century, U.S. antitrust laws have treated cooperative activity between firms very harshly. Many types of joint activities had been considered *per se* illegal, meaning they were prohibited regardless of whether consumers actually were harmed or efficiencies created. Even in cases where efficiency and consumer interest were taken into account, they usually were given little weight.<sup>15</sup>

In the 1970s, these rules began to be changed substantially. *Per se* illegal treatment became much less common, and courts and antitrust enforcement agencies began to take much greater account of potential efficiencies. By 1984, for instance, the Federal Trade Commission was able to approve conditionally a joint auto-making venture between the General Motors Corporation and the Toyota Motor Corporation. Even with the consumer benefits from this venture, it would have stood little chance of approval in earlier years.

**Risking Treble Damages.** Despite these improvements, activities involving cooperation between firms that otherwise could be competitors still create considerable risk for the firms involved. This is for two reasons. First, although fewer such activities are considered *per se* illegal, the test used to balance the harms and benefits of a particular activity, known as “the rule of reason,” is very vague and ambiguous. Thus, few joint activities run no risk of an adverse antitrust judgment. Second, even if the activity is not challenged by federal antitrust authorities, firms still face the possibility that a competitor or purchaser will sue, on its own accord, in court. If successful, the plaintiff would be eligible for treble damages — three times the amount of actual damage suffered. And if the defendant wins, the litigation still can cost millions of dollars. Even after gaining FTC approval for their venture, for instance, GM and Toyota had to fight off a costly antitrust challenge by the Chrysler Corporation.

Recognizing this problem, in 1984 Congress acted to increase the predictability of the antitrust laws regarding cooperative ventures. The resulting legislation, the National Cooperative Research Act (NCRA), provides that joint ventures for the purpose of research will be judged under a “rule of reason” standard rather than the *per se* illegal standard. In addition, if registered with the Department of Justice or Federal Trade Commission, such joint ventures are protected from treble damage liability. But should a lawsuit be brought, defendants still could be liable for single damages.

**Insufficient Relief.** This legislation has been useful in providing a degree of antitrust relief and predictability to joint research activities. Yet it does not go far enough. The process of providing new products for consumers involves

---

15 See James Langenfeld and David Scheffman, “Innovation and U.S. Competition Policy”, 43 *Aussenwirtschaft: Schweizerische Zeitschrift für internationale Wirtschaftsbeziehungen* 45 (1988).



many steps — ranging from basic research to production and marketing. The NCRA, however, provides relief only for the first step: basic research. Subsequent steps generally enjoy protection only if required for research. Thus, firms engaging in cooperative ventures to produce and distribute a product to consumers still run the risk of antitrust suits for treble damages, even if the joint venture clearly benefits the consumer.

By contrast, other nations, including Japan, recognize that the process of innovation and the need for cooperative activities does not stop at research. In fact, the Japanese language phrase for research and development, *kenkyu kaihatsu*, implicitly includes commercialization.<sup>16</sup> Thus, for instance, Japanese antitrust rules specifically recognize the need for cooperation in developing new products as a justification for joint activity. In fact, joint activity among firms whose market shares total less than 25 percent is afforded virtually complete protection. Antitrust suits by private parties, moreover, are extremely rare and treble damages are never available.<sup>17</sup>

European antitrust laws similarly are more favorable toward joint activity than those of the U.S. Joint activities by firms with market shares of 20 percent or less, for example, are completely protected, even if they involve production or sales. As in Japan, treble damages for violations are not available.<sup>18</sup>

## REDUCING BARRIERS TO COOPERATION

Many proposals have been advanced during the past year to reform the antitrust laws to reduce the risks they impose on cooperative ventures. At least eight bills are pending in Congress. In addition, antitrust reform was endorsed late last year by Attorney General Richard Thornburgh and then-Secretary of Commerce William Verity, although no specific legislation was put forward.<sup>19</sup> The Bush Administration is expected to announce its position in the near future.

### Criteria for Reform

In reviewing proposals to ease barriers to cooperative activity, policy makers should be aware that not all antitrust reforms are alike. If a proposal

---

16 Jordan and Teece, *High Technology Law Journal*, op. cit., p. 55, fn. 148.

17 *Ibid.*, pp. 55-56.

18 *Ibid.*, pp. 56, 58.

19 Dick Thornburgh and C. William Verity, "U.S. Firms Get Tripped in Race to the Marketplace: Grant Antitrust Exemptions . . . to Spur Cooperative Ventures", *The Wall Street Journal*, December 27, 1988 (two separate articles).

does not apply to a sufficient range of activities, or provide a sufficient level of relief, it may be of little help — or even worse than nothing at all.

To be most helpful, a reform should pass the following tests:

◆ **Relief should not be limited to any specific industry or technology.**

Several of the bills before Congress would offer antitrust relief specifically to those involved in development of high definition television. For instance, S. 952, introduced by Senator Robert Kerry, the Massachusetts Democrat, and H.R. 1267, sponsored by Representative Don Ritter, the Pennsylvania Republican, would expand the 1984 National Cooperative Research Act to protect firms engaged in the development and manufacture of HDTV technology from treble damage liability.<sup>20</sup>

Such an approach, however, faces many of the same problems as a direct subsidy of HDTV. One particular technology is singled out. Yet the federal government hardly is in the best position to predict which technologies will or will not succeed in the marketplace. At best, such an industrial policy approach would neither help nor harm the vast majority of technologies whose development is hindered by antitrust law. At worst, it could drain investment funds away from crucial projects in more promising fields and channel it into potential HDTV boondoggles.

◆ **Complete protection from antitrust liability should be available.**

Many current bills would extend NCRA protection to production or even marketing activities, regardless of the type of product involved. For instance, H.R. 2264, introduced by Representative Hamilton Fish, the New York Republican, and S. 1006, by Senator Patrick Leahy, the Vermont Democrat, simply would extend the National Cooperative Research Act to include production and manufacturing activities, respectively. H.R. 1025, sponsored by Representative Don Edwards, the California Democrat, would include marketing and production. H.R. 423, by Ron Wyden, the Oregon Democrat, is intended to provide similar protection to joint activities among small businesses.

These bills would provide important antitrust protection for beneficial cooperative activities without singling out any “favored” industries. The courts would be barred from treating such activity as *per se* illegal. And if liability were found, only single, rather than treble damages, could be assessed against firms that had registered their ventures.

**Ambiguous Rules.** Nevertheless, these reforms may not be enough to give the needed boost to U.S. competitiveness. Even without *per se* illegality, antitrust risk still can be substantial. The rules of liability are so ambiguous

---

<sup>20</sup>Other proposals, such as H.R. 2287, by Representatives Ritter and Mel Levine, the California Democrat, would go even farther and have the federal government itself create an HDTV consortium and provide relief to it. A similar consortium, known as Sematech, already has been established for the semiconductor industry.

that even activities that are not anticompetitive can lead to a lawsuit. While liability would be limited to actual damages under the bills, this can still mean the loss of a substantial portion of the profits generated by the venture. Such a risk can be a significant disincentive to entering a venture. For research, this may be less of a problem, since lawsuits tend to occur before any product is sold — so there is usually little profit at risk. The lawsuits filed thus usually are for injunctive relief — ordering an activity to stop or include more firms. But for production or marketing ventures, the profit is much more immediate, making it more likely that monetary damages will be awarded.

### **H.R. 1024: The Boucher-Campbell Proposal**

The one proposal now pending in Congress meeting both these criteria is H.R. 1024, introduced by Representatives “Rick” Boucher, the Virginia Democrat, and Tom Campbell, the California Republican who is a former antitrust law professor. Instead of merely limiting antitrust liability for joint production ventures to single damages, this proposal would provide a means of protecting such ventures from all monetary damages.

Under H.R. 1024, those firms wishing to enter into cooperative arrangements for the purpose of producing and marketing new technologies would be allowed to file for prior approval from the Federal Trade Commission or the Justice Department. The agency then would review the proposed activity, using specified guidelines very similar to those now usually applied by courts in rule of reason analyses. For activities not involving the marketing or distribution of a product, approval would be granted if the economic benefits were found to outweigh potential anticompetitive harm. For all other activities, approval would be granted only if the firms involved did not wield substantial “market power,” based primarily on measurements of their share of the market.

**Discouraging Frivolous Lawsuits.** If approval is granted, the firms involved no longer could be sued for damages for engaging in the approved activity. Courts still could provide “injunctive” relief, ordering an end to any activity found to violate the antitrust laws. In so doing, however, courts could not find the activity *per se* illegal, but would have to examine its actual economic effects. Further, in any such litigation, the losing party would be required to pay all attorney’s fees. This would discourage frivolous suits that would hinder beneficial activity.

This proposal would go far toward eliminating the problems faced by firms attempting to develop new technologies, such as HDTV. Through the prior approval process, firms would be able to avoid the uncertainty and risk created by the antitrust laws. At the same time, consumers would be amply protected: the basic antitrust rules that apply today would remain essentially the same. Firms would simply be able to find out in advance whether their plans are within those rules, rather than assuming the risk of a large damage award perhaps years later. Moreover, even after approval, courts would retain the ability to stop any activity later found to be anticompetitive.

The Boucher-Campbell bill could be improved in several ways. One problem is that, while it would provide full protection, gaining government approval could be a slow and complicated process. Thus, a simple registration procedure, such as that proposed in the Fish, Leahy, Edwards, and Wyden bills, also should be made available. Firms then would have the choice of simply notifying the government of their activity, thus receiving partial protection from damages, or pursuing the more complicated prior approval process to gain full protection.

In addition, the activities covered under the Boucher-Campbell bill could be expanded to include any cooperative activity, not just those involving new technologies. Even where innovation is not involved, cooperative activity still can be beneficial. Moreover, since the antitrust authorities in any case would have to grant their approval before full protection is available, there is little danger of harm to consumers from anticompetitive activities in these other fields.

## CONCLUSION

High definition television, or HDTV, offers a test case of how the federal government can help restore U.S. international competitiveness. Two options have been presented: 1) government subsidy, and 2) antitrust reform. The first would be a serious mistake. Not only would it be unfair to force taxpayers to foot the research bill so that private industry can reap bigger profits, but there is no guarantee that HDTV will even be successful.

Instead of subsidizing new technologies, Washington should instead reduce barriers to firms trying to develop them. Such development often requires substantial cooperation among different firms. But the vagueness and ambiguity of the antitrust laws too often discourages cooperation, even where it can bring only benefits.

**Improving U.S. Competitiveness.** A number of bills to remedy this situation are pending in Congress. Many of these, while helpful, still would leave firms engaging in joint activities vulnerable to antitrust damage awards. Only Boucher and Campbell's H.R. 1024 would provide a way for firms to clear themselves of the risk of such awards. Under its provisions, firms would not be exempted from the antitrust laws, but simply be told — in advance — whether their proposed activities are in accord with the law. Such reform would be an important step toward improving U.S. competitiveness, without engaging the federal government in the business of picking winners and losers in the marketplace.

James L. Gattuso  
McKenna Senior Policy Analyst  
in Regulatory Affairs

*All Heritage Foundation papers are now available electronically to subscribers of the "NEXIS" on-line data retrieval service. The Heritage Foundation's Reports (HFRPTS) can be found in the OMNI, CURRNT, NWLTRS, and GVT group files of the NEXIS library and in the GOVT and OMNI group files of the GOVNS library.*