Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
XM Satellite Radio Holdings Inc.,	)	
Transferor	)	MB Dkt. No. 07-57
	)	
	)	Declaration of
and	)	Steven S. Wildman
	)	
Sirius Satellite Radio Inc.,	)	
Transferee	)	
	)	
Consolidated Application for Authority to Transfer Control of XM Radio Inc. and Sirius Satellite Radio Inc.	)	

INTRODUCTION AND SUMMARY OF CONCLUSIONS

1. I have been asked by the National Association of Broadcasters (NAB) to review the application for authority to transfer control filed on March 20, 2007 by XM Radio, Inc., and

Sirius Satellite Radio, Inc. ("Merger Application").[1] Based on my review of the transaction and my knowledge of the economics of the radio industry, I conclude that the proposed merger in all likelihood would harm the public interest through its adverse effects on Satellite Digital and Audio Services (SDARS) subscribers and listeners to terrestrially-delivered local radio. Furthermore, by reducing the revenue available for local program production, the merger would diminish the ability of local stations to continue their contributions to the long-standing localism goals of U.S. communications policy.[2] In particular, the proposed merger would increase seller-side market power in the SDARS market and buyer-side market power in the markets for access to automobile dashboards, content for SDARS, and equipment and technical services purchased by SDARS providers. The effect of increased market power in the SDARS consumer market would be higher subscription fees and more programming time devoted to commercials, both of which would work to the detriment of SDARS subscribers. Local radio audiences will be hurt by the resulting increase in SDARS advertising inventory as some terrestrial radio stations will respond to lower advertising revenues by reducing their programming investments. Economic theory predicts that these effects would manifest most strongly in reduced resources for local program production, which, in turn, would harm localism and consumers who value the current quantity and quality of local programming. Because the merging parties have failed to provide compelling evidence of offsetting societal benefits the FCC should deny the Merger Application.

2. XM and Sirius compete for satellite radio customers on several dimensions, including monthly subscription fees, equipment prices, the amount of commercial time in their

1. Consolidated Application for Authority to Transfer Control of XM Radio Inc. and Sirius Satellite Radio Inc., In the Matter of XM Satellite Radio Holdings Inc., Transferor and Sirius Satellite Radio Inc., Transferee, MB Dkt No. 07-57, filed Mar. 20, 2007 [hereinafter *Merger Application*].

2. *See* PHILIP NAPOLI, FOUNDATIONS OF COMMUNICATIONS POLICY: PRINCIPLES AND PROCESS IN THE REGULATION OF ELECTRONIC MEDIA (Hampton Press, 2001). Napoli provides a discussion of the importance of localism as a core value influencing the creation of communications policy, especially for the electronic media, in the United States.

programming, exclusive content, access to automobiles, and accessories. While the proposed merger of XM and Sirius threatens to undermine competition in each of these domains, I focus here on the pricing and advertising dimensions of their competition for subscribers and the implications of the latter for the performance of the local radio industry. The harm to broadcasters would be most apparent in reductions in the resources available for producing local programs. Such a result is antithetical to the historic localism goals of U.S. communications policy. The unilateral price effect that results from reducing the number of SDARS providers from two to one is not surprising. Less appreciated is that the merger would also create an incentive to increase the amount of commercials included in the satellite services' programming. SDARS subscribers (like radio listeners generally) dislike commercial interruptions. Accordingly, the presence of a competitor constrains the amount of commercial time in a SDARS provider's programming. If XM were to increase the amount of commercials in its programming significantly, it would lose subscribers (both current and prospective) to Sirius. The same is true for Sirius. Thus, the rivalry between the firms has kept commercial time low. However, if the companies were allowed to merge, they would effectively be able to coordinate on commercial time to the detriment of SDARS subscribers.

3. It is not necessary to rely on economic theory alone to predict that the merger will increase the advertising load in SDARS programming. Securities analysts following the merger tout the potential for the merged company to increase advertising revenues. Furthermore, executives at the companies have directly stated that an increase in ad revenues will follow the merger. The only way the merged service will be able to substantially increase its current combined revenues from commercial time sales is by increasing the advertising load in its programming.

4. This increase in commercial load will not be a trivial matter to SDARS subscribers. They have purchased satellite service in large part due to their distaste for advertising. XM and Sirius boast in their marketing materials that they offer "commercial-free" service.[3] A recent survey of satellite subscribers by Wilson Research Strategies reveals that commercial free music channels are of great importance to satellite customers. Indeed, 87 percent of subscribers indicated that commercial-free music was an important factor in their decision to purchase satellite radio.[4] Subjecting satellite radio subscribers to more commercials would result in welfare losses in the SDARS market, especially given the amount of time SDARS customers listen to the radio.[5]

5. Local radio broadcasters quite naturally fear the predictable aggressive expansion of a newly-created satellite radio monopolist in the advertising market.[6] Of course, harm to local broadcasters does not by itself justify denial of the merger application, especially if that harm is merely a transfer in surplus from local broadcasters to advertisers. In pursuing the public interest, the FCC should ultimately be concerned with consumer welfare and any consequences of the

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3. Sirius Corporate Overview, *available at* http://www.sirius.com/servlet/ContentServer?pagename=Sirius/CachedPage&c=Page&cid=1065475754271 ("Operating from its corporate headquarters in New York City's Rockefeller Center, SIRIUS broadcasts over 130 digital-quality channels, including 69 channels of 100% commercial-free music, plus exclusive channels of sports, news, talk, entertainment, traffic, weather and data."); XM Fast Facts, *available at* http://www.xmradio.com/about/fast-facts/index.xmc ("The most music in satellite radio, including 69 commercial-free music channels.").

4. Craig Wilson, *Survey of Satellite Radio Subscribers Executive Summary*, WILSON RESEARCH STRATEGIES, July 8, 2007, at 1.Technically, SDARS providers offer a mix of commercial free channels and channels with small amounts of advertising. The commercial free channels predominate in both services.

5. A recent Arbitron study shows that satellite radio subscribers listen to 33 combined hours of radio per week, compared with 19 hours per week for terrestrial radio listeners. The study breaks down the 33 hours for SDARS subscribers into 14 hours of terrestrial radio, 11 hours of SDARS, and 8 hours of Internet radio. *See* Phil Rosenthal, *Satellite Deal Foes Don't Hear Message*, CHI. TRIB., Feb. 28, 2007, at 3.

6. Merger proponents incorrectly infer that NAB opposes the merger because it expects the merger to reduce satellite radio prices. *See* Thomas W. Hazlett, The Economics of the Satellite Radio Merger, June 14, 2007 at 10 [hereinafter *Hazlett Report*] ("Were the NAB to believe rivals' prices would substantially increase, it would – unless subverting the interests of its members – enthusiastically support the merger."). In fact, as a matter of economic theory, the merger would result in price increases (or the lack of price reductions that would otherwise occur) in the SDARS market. NAB's opposition goes well beyond the direct, anti-consumer price effects of the merger. *See* NAB Petition to Deny at 15 & n.47 (July 9, 2007).

merger that might weaken broadcasters' performance with respect to important noneconomic goals of communications policy, such as localism. There are two predictable anti-consumer consequences for local radio stations' programming resulting from an increase in SDARS ad time sales. These effects suggest that this is indeed a case where a competitor's self interest aligns with the public interest.

6. One predictable consequence is a reduction in the resources available for the production of the programming local radio stations deliver to their listeners. Although commonly overlooked in media policy analysis, it has been understood since at least the early 1970s that media firms' expenditures on content vary with the revenue available to them in media markets.[7] As the potential revenue gains from the additional audience that might be attracted to more expensive programming rise or fall, media firms adjust their content budgets accordingly (and in the same direction). Because sales of increased SDARS ad inventory would reduce the amount of ad revenue shared by local radio stations, the local broadcasters would respond by reducing their investments in radio programming.

7. The second predictable consequence is that these adjustments will be felt most strongly in reduced expenditures on programs stations produce for their local audiences. This response is a consequence of the fact that there are considerably larger rents incorporated in payments to programming inputs (especially talent but also rights to events such as sports contests) for programming distributed nationally than in payments for inputs to local programming, particularly talent. As revenue generated by terrestrial stations' radio ads falls due to heightened competition for ad dollars from SDARS, payments to factors earning rents from programming produced for national audiences would be adjusted downward naturally in the course of negotiations between stations and program suppliers. However, the talent, which often

7. *See infra* note 30.

receives compensation in excess of reasonable estimates of opportunity costs, will stay. On the other hand, locally produced programming is much more likely to draw on local talent, whose best alternatives will often be other jobs in the same local community. Particularly in smaller communities, salaries for radio personnel do not greatly exceed earnings in other occupations. As revenues decline, the unavoidable pressure on salaries would result in reductions in staff and elimination of programs, two trends already observable in the production and supply of local radio newscasts. This obvious threat to localism, which is amplified by the already weakened financial condition of many local stations (especially those in smaller markets), falls under the FCC's public interest standard for merger approvals and should inform the FCC's decision on the proposed merger.

QUALIFICATIONS

8. I am the James H. Quello Professor of Telecommunication Studies and Co-Director of the James H. and Mary B. Quello Center for Telecommunication Management and Law at Michigan State University. My research focuses on economics and policy for communication industries, including the broadcasting, cable television, and recording industries. In addition to numerous articles and book chapters, I have authored or edited the following books: *International Trade in Films and Television Programs* (Ballinger, 1988); *Electronic Services Networks: A Business and Public Policy Challenge* (Praeger, 1991); *Video Economics* (Harvard University Press, 1992); *Making Universal Service Policy: Enhancing the Process Through Multidisciplinary Evaluation* (Lawrence Erlbaum Associates, 1999); and *Rethinking Rights and Regulations: Institutional Responses to New Communications Technologies* (MIT Press, 2003). With Duncan J. Cameron, I am the co-author of Competition, Regulation and Sources of Market Power in the Radio Industry.

9. Before joining Michigan State in 1999, I was Associate Professor of Communication Studies and Director of the Program in Telecommunications Science, Management & Policy at Northwestern University. Earlier positions include Senior Economist with Economists Incorporated and Assistant Professor of Economics at UCLA.

10. In terms of relevant consulting experience, I have provided oral and written testimony on policies relating to communication industries for proceedings before Copyright Arbitration Royalty Panels of the Library of Congress, the Federal Communications Commission, the California Legislature, and various state Public Service Commissions.

11. I hold a Ph.D. in economics from Stanford University and a B.A. in economics from Wabash College.

I. A MERGER OF SIRIUS AND XM WOULD REDUCE THE WELFARE OF BOTH SDARS SUBSCRIBERS AND LOCAL RADIO LISTENERS AND HARM LOCALISM

12. In an expert statement supporting the merger, Professor Thomas W. Hazlett argues that broadcasters' opposition to the merger is itself evidence that the merger would be pro-competitive and therefore pro-consumer in its effects. This argument is heard quite frequently from interested parties supporting mergers under review by the competition authorities when opposition comes from a perceived rival. The basic claim is that if a proposed merger would create market power, it would also raise prices to the benefit of the merging firms' competitors. Self-interested competitors therefore should not oppose mergers within their industries unless they create more effective competitors. This attempt to claim an imputed motive as evidence of pro-competitive effect is *ad hominem* in nature. Arguments offered by opposing parties should always be judged on their own merits. In this case, it is even more important to recognize that Professor Hazlett's application of this argument to NAB's opposition betrays a serious misunderstanding of the economics of media services like SDARS that are

supported by both advertising and consumer payments. In the parlance of recent theoretical work on markets with linked demands, he has offered a one-sided analysis of a two-sided market.[8] I find that upon applying the correct theoretical framework to the market and examining the available empirical data, the evidence strongly suggests that this is a situation in which the self-interest of broadcasters – who, although they do not compete in the SDARS market, do face competition from SDARS providers in other markets -- aligns with the public interest. Furthermore, I find that a merger of XM and Sirius would create incentives for the merged firm to raise subscription fees and increase the commercial time in its programming, both of which would work to the detriment of SDARS subscribers. The most likely effect on local radio listeners would be less direct, but just as real. As local radio stations lost advertising revenue to SDARS providers, they would shift towards less expensive programming (with less audience appeal) and substitute nationally produced content for content originated locally. Thus, traditional localism goals for U.S. communications policy would be put at risk.

II. SDARS SUBSCRIBERS WILL BE HARMED BY HIGHER PRICES AND INCREASED AD TIME

A. XM and Sirius Are the Only Competitors in a Well-Defined Consumer Market

13. XM and Sirius compete with each other and with local radio broadcasters for both listeners and advertisers. However, the subscription nature of their services combined with the fact that listeners prefer programming with less commercial time allows the SDARS providers to differentiate themselves from local radio services by offering services with considerably less commercial time than local radio stations. XM and Sirius generate the bulk of their revenues

8. See, e.g., Ulrich Kaiser and Julian Wright, *Price Structure in Two-Sided Markets: Evidence from the Magazine Industry*, INTERNATIONAL JOURNAL OF INDUSTRIAL ORGANIZATION, VOL. 24, June 30, 2005, 1-28. Kaiser and Wright list a number of the more important contributions to the larger literature on two-sided markets and develop an application of the framework for the magazine industry.

from subscriber fees.[9] Indeed, only about four percent of XM's revenues come from advertising.[10] For Sirius, advertising represents five percent of total revenue.[11]

14. The subscription character of these services also creates an incentive for the SDARS providers to differentiate themselves from traditional radio by offering programming targeted to a variety of niche interests for which terrestrial radio stations either do not provide programming or provide in minimal amounts. These formats include classical music, blues and jazz, which have retail value but are not commonly played on broadcast radio because they do not draw sufficiently large audiences. In fact, XM claims to have 74 music channels devoted to formats that are not currently broadcast in many local broadcast markets.[12]

15. That subscription services would provide niche oriented content ignored by ad-supported terrestrial broadcasters is consistent with a large body of literature on the economics of broadcast programming with origins dating to a seminal paper by Peter O. Steiner in 1952.[13] Because broadcasters supported by advertising revenues sell audiences to advertisers, their revenues vary to a large degree with audience size. Therefore, when certain types of programming attract large fractions of the radio audience, both economic theory and empirical

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9. Sirius Corporate Overview, *available at* http://www.sirius.com/servlet/ContentServer?pagename=Sirius/CachedPage&c=Page&cid=1065475754271 ("Operating from its corporate headquarters in New York City's Rockefeller Center, SIRIUS broadcasts over 130 digital-quality channels, including 69 channels of 100% commercial-free music, plus exclusive channels of sports, news, talk, entertainment, traffic, weather and data."); XM Fast Facts, *available at* http://www.xmradio.com/about/fast-facts/index.xmc ("The most music in satellite radio, including 69 commercial-free music channels.").

10. XM 2006 Annual Report, *available at* http://www.sec.gov/Archives/edgar/data/1091530/000119312507044379/d10k.htm

11. Sirius 2006 Annual Report, *available at* http://www.sec.gov/Archives/edgar/data/908937/000093041307001865/c47044_10k.htm.

12. *See* the XM 2006 Annual Report, at 2, *available at* http://www.sec.gov/Archives/edgar/data/1091530/000119312507044379/d10k.htm.

13. Peter O. Steiner, *Program Patterns and Preferences, and the Workability of Competition in Radio Broadcasting*, QUARTERLY JOURNAL OF ECONOMICS, VOL 66, 194-223, 1952. This literature is also reviewed through 1992. *See* BRUCE M. OWEN AND STEVEN S. WILDMAN, VIDEO ECONOMICS (Harvard University Press, 1992) [Hereinafter *Video Economics*]. *See also* David Waterman, *The Economics of Media Programming, in* HANDBOOK OF MEDIA MANAGEMENT AND ECONOMICS (Alan B. Albarran, Sylvia M. Chan-Olmsted and Michael O. Wirth eds., LEA 2006).

evidence suggest local radio stations compete to offer more channels with similar content. This duplication of programming strategies persists until the audiences for the most popular content are divided into sufficiently small shares that it becomes more profitable to offer content targeted to less mainstream tastes. Because viewers with more diversified tastes are willing to pay for access to the types of content that are undersupplied by terrestrial broadcasters, subscription radio services have a financial incentive to supply it.

16. In addition, the regulatory status of XM and Sirius enables them to provide adult-oriented content that would be cause for fines or even loss of license for local radio stations. In fact, Sirius features programming by performers who elicited major fines from the FCC for the radio services that once employed them.[14]

17. While the SDARS providers do compete with local radio stations for listeners at some level (although not with respect to the SDARS market itself), it is patently obvious that they could not charge their subscribers over $150 per year in addition to their substantial equipment and installation fees if they were not seen by their customers as being substantially differentiated from the terrestrial alternatives. Merger proponents argue that XM and Sirius are small players in a market for audio content that includes virtually any device or service capable of delivering audio content to listeners. To justify this assertion merger advocates contend there is little if any content available through XM and Sirius that cannot also be acquired from another

14. In recent years the FCC has increased indecency enforcement. Between 1993 and 2003 the amount of the NALs was between $4,000 and $674,500 (for radio and television). In 2004 alone, the NALs amounted to $7,928,080. *See* Indecency Complaints and NALs: 1993-2006, available at http://www.fcc.gov/eb/oip/Stats.html. Among these were a $755,000 NAL again against Clear Channel for a broadcast by radio host "Bubba the Love Sponge", and a $495,000 NAL against Clear Channel Communications for an episode of the "Howard Stern Show." *See* Sarah McBride, *Clear Channel Dumps Stern After Big Fine,* WALL ST. J., Apr. 9, 2004, at B1. The SDARS are not subject to indecency legislation and both of these performers are now featured on Sirius. *See* In the Matter of Satellite CD Radio, Inc., Memorandum Opinion and Order, FCC Dkt. No. 01-335, 16 F.C.C.R. 21458, 21460 (2001).

source.[15] However, such claims are analogous to an argument that a merger between McDonalds and Burger King should not be a matter of concern to antitrust authorities because every ingredient in a Big Mac or Whopper can be purchased through any of thousands of local supermarkets. Just as people are willing to pay substantial multiples of the cost of ingredients for the convenience of a ready made burger compared to the do-it-yourself alternative, so are they willing to pay for pre-assembled programming. While other alternatives may emerge in the future, today only traditional radio broadcasters and the two SDARS providers offer easily accessible pre-programmed audio services that are ubiquitously and continuously available to both mobile and fixed receivers When viewed in this context, the substantial differences in the programming and commercial time strategies of the SDARS providers and their free terrestrial alternatives become of paramount importance to market definition. In light of these differences and absent compelling empirical evidence to the contrary, the default presumption guiding the investigation of this merger should be that XM and Sirius are the only firms currently serving the market for multi-channel subscription audio services for mobile and fixed use.

B. The Economic Incentive for a Merged SDARS Provider to Raise Price and Increase Commercial Time

18. Most mergers take place in non-media industries where marginal revenue is a simple function of output. It is in this context that *ad hominem* arguments of merger opponents as evidence in favor of claimed pro-competitive effects for a merger are most frequently heard and most relevant. If such arguments are to be given any credence at all, it is when they are applied to mergers in industries for which, unlike most media, the merging parties do not

15. *Hazlett Report*, *supra* note 6, at 12 ("This analysis claims that the market is not sufficiently competitive to support the merger. On the contrary, Sirius CEO Mel Karmazin argues that there is abundant choice available to listeners, including terrestrial radio, new HD stations, iPods, CDs, Internet radio stations, and services delivered via mobile handsets."). *See* Harold Furchgott-Roth, *An Economic Review of the Proposed Merger of XM and Sirius*, June, 2007, at 13. ("XM and Sirius have little programming that consumers cannot obtain elsewhere from other mobile communications service providers.") [hereinafter *HFR Report*].

compete in the supply of two or more goods and services with interdependent demands. This is emphatically not the case for XM and Sirius, or for local radio broadcasters. Both local broadcasters and the SDARS providers offer audio services to consumers and sell access to the audiences attracted by their content to advertisers. It is generally understood that radio and satellite service listeners do not like commercial interruptions,[16] and because this is the case, the size of the audience an audio service can sell to advertisers can be expected to vary inversely with the amount of commercial time included in its programming, other things equal.[17] Therefore, the market in which XM and Sirius sell commercial time is intimately linked to the market in which they supply audio content through the negative effect of an increase in commercial time on the demand for their content.

19. While the SDARS providers are differentiated from terrestrial radio in the ways discussed above, even with their various exclusive content agreements the service offerings of XM and Sirius are still much more similar to each other's than they are to what is supplied by local radio stations. We can therefore safely conclude that SDARS subscribers (and prospective subscribers) view XM and Sirius as the closest available substitutes for each other. As a result, each cannot help but be significantly affected by the pricing and advertising strategies employed by the other. Thus, it is not surprising that they would look favorably on an opportunity to merge their operations and coordinate for their mutual benefit their strategies with regard to both price and advertising. To show why this coordination would be harmful to SDARS subscribers, I explain how the proposed merger would alter the logic of SDARS profit maximization with

16. Both SDARS providers have heavily promoted commercial-free channels and low commercial loads overall in their marketing efforts.

17. The other things equal caveat is important. If competing audio services coordinate to increase advertising time in a concerted fashion, or merge to accomplish the same objective, the loss of audience diverted to competitors who do not increase their advertising time can be avoided, which can make audience size much less responsive to changes in the amount of ad time as is more fully explained below.

respect to subscription fees and the amount of commercial time embedded in satellite radio programming.

20. Profit maximization with respect to most strategic variables is a balancing act, and this is certainly the case for advertising and consumer prices for SDARS. Consider the problem of selecting the optimal price. Unless demand is perfectly inelastic, some customers will drop the service when the price is raised, with an attendant loss of revenue. On the plus side, revenue contributions will increase from those customers who remain and pay the higher price. Depending on the nature of the product, there may or may not be savings on costs previously incurred to deliver the product to lost customers, a matter I will ignore here both for simplicity and because the marginal cost of delivering service is typically either extremely low or zero for electronically delivered media services. As price is increased from some initial low level, losses due to departing customers will begin to grow relative to the higher payments from those who remain. Eventually, the losses from departing customers will exceed the gain from those who remain. The profit maximizing price is found by increasing price as long as the increased payments by customers retained exceed the losses due to those who leave and stopping when a further increase would generate larger revenue losses from departing customers than the increase in payments from retained customers.

21. This description of setting a profit-maximizing price applies to any firm that faces a downward sloping demand curve, whether it is a monopolist or one of many differentiated competitors serving its market.[18] A critical difference between a monopolist and a firm in a more competitive market is that a firm's choice of price affects its competitors' profits as well as its own. When a firm with competitors raises price independently, some of the lost customers may

18. A firm is not able to set its own price if serves a market with many competitors whose products are identical to its own.

quit the market entirely, while others, who otherwise might have accepted the price increase, will switch to competitors who are now seen as offering a better deal. As long as the competitors sell their products at a positive markup, their profits will increase. The possibility that this spillover effect might be internalized in ways that reduce economic welfare when competitors merge is the primary concern of merger policy.[19]

22. Turning to the SDARS market, if the price of SDARS increases, the number of SDARS subscribers will fall, which is the reason Professor Hazlett says NAB should favor the merger if they truly believe the merged firm will increase price. However, the price effects of the merger in the SDARS market, in which broadcasters do not compete, are only half the story, and it is the half regarding in the advertising markets in which SDARS and local broadcasters do compete, that is ignored by merger proponents, that is both a source of broadcaster concern[20] and a reason for policymakers to anticipate that harm to broadcasters will redound to consumers.

23. For SDARS providers, the tradeoffs to be weighed in determining the amount of in-program commercial time that maximizes profits are very similar to those described in the discussion of price setting above. Because broadcast audiences (both radio and television) dislike commercials, commercial time may be thought of as an implicit price listeners and viewers pay for access to the content that broadcasters deliver. This is true for the SDARS as well. As with a monetary price, if a SDARS provider increases the amount of program time allocated to

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19. To see why this is a significant policy concern, suppose two of the competitors, call them firms 1 and 2, merge but continue to sell both product lines. For the combined firm, the profit calculus for an increase in the price of 1's product is different than it was when 1 was a stand-alone business. The revenue gain due to increased payments by remaining firm 1 customers and the loss in firm 1 revenue due to departing customers are the same as before, but from the merged firm's perspective, the profits firm 2 realizes from sales to customers switching from firm 1 must be subtracted from the lost profit contributions of customers dropping firm 1 to determine the true balance of gains and losses from the price increase. As the loss side of this relationship has been reduced, a higher price will now be required before further price increases become unprofitable. An attempt to raise price in this fashion may be foiled by a sufficiently large increase in output by the remaining competitors, which is the predicted outcome if the pre-merger market contains a large enough number of competitors with sufficiently similar products. However, if we begin with only two close competitors, an increase in price is a foregone conclusion.

20. *See* NAB Petition to Deny at 15 & n.47.

commercials, audience members will begin to look for other alternatives, which could be the other SDARS provider, radio broadcasters, or other entirely different uses of their time. And, as with a monetary price increase, the providers of the most similar services should benefit most.

24. Also similar to the setting of a monetary price, there is a gain and a loss to be considered when assessing the profit consequences of an increase in commercial time. Some subscribers will drop the service as the commercial load is increased (or potential subscribers will choose another alternative), which reduces the size of the audience that can be sold to advertisers. On the other hand, with an increase in commercial time, each remaining subscriber will generate more ad revenue. If advertising is the sole source of revenue, the amount of commercial time sold should be increased as long as the increase in revenue per remaining subscriber more than offsets the ad revenue losses due to departing subscribers, with the optimal amount of commercial time reached when the magnitude of the ad revenue loss equals that of the ad revenue gain. Just as with a monetary price, in a market with two suppliers such as SDARS, some of the listeners lost due to an increase in commercial time will switch to the other supplier of such services, while others may turn to other pursuits entirely. And, as with the price analysis, if the only close substitutes in the market have a common owner, the advertising value of listeners diverted by an increase in commercial time from one to the other will not be counted as a loss by their common owner. Therefore a merger of the two services creates an incentive to sell more commercial time than would be profit maximizing for the services if they were independently owned and operated. Again, the losers are consumers.[21]

21. If two competing ad-supported broadcasters merge, it is theoretically possible that they will exploit increased market power by reducing the supply of ad time to charge higher prices to advertisers. This can happen only when both broadcasters offer advertisers access to the same listeners and the merger increases their market power in selling access to the common members of their audiences. This is not the case for the SDARS providers, who sell advertisers access to their largely mutually exclusive sets of subscribers.

25. This picture is somewhat more complicated when the merging parties sell commercial time and collect subscription fees from their listeners, as is the case with SDARS, as subscribers lost due to an increase in the subscription fee also take with them their value to advertisers, while subscribers lost when commercial time is increased stop their payments to the service. However, the basic logic presented with the simpler single market explanations above is unchanged. If one SDARS provider increases either its price or the amount of commercial time in its programming, it can expect to see some of its subscribers and the subscription and ad revenues they represent switch to the other provider.[22] For an independent service, this will be viewed as a part of the financial cost of a price increase, while the same shift in customers will be viewed as an internal transfer and irrelevant to the determination of the optimal price or adverting load if the service is owned in common with the service to whom these subscribers switch.

C. The Substantial Increase in Advertising Revenue Predicted for the Merged Firm Presupposes a Substantial Increase in In-Program Commercial Time

26. There is good reason to believe that if the merger is approved, the merged firm will respond to the incentives described above by significantly increasing the commercial load in its programming. In talks with investors, the SDARS companies point to a substantial increase in the contribution of advertising to profits as one of the principal benefits of the merger, an opinion

22. XM and Sirius have suggested that they would accept restraints on post-merger prices as a condition for approval of the merger. *See* Expert Declaration of J. Gregory Sidak, *Concerning the Competitive Consequences of the Proposed Merger of Sirius Satellite Radio, Inc. and XM Satellite Radio, Inc.*, March 16, 2007, at 55. The fact that the opportunity cost of a price increase includes both their subscription fees and the advertiser payments attributable to customers who decide to drop the service means that if the post merger price is artificially suppressed the opportunity cost of departing customers will also be reduced for the merged firm. Under effective price controls, the predictable increase in ad time sales made feasible by the merger would be amplified, to the further disadvantage of SDARS subscribers. In addition, we can expect the merged firm to respond to price controls by lowering the quality of programming to effectively increase the quality-adjusted price of SDARS service. In his writings on the effects of price regulation on cable television, Professor Hazlett also recognizes that the effect of binding prices controls in a media industry is an incentive to deliver lower quality content to consumers. THOMAS W. HAZLETT AND MATTHEW L. SPITZER, PUBLIC POLICY TOWARD CABLE TELEVISION: THE ECONOMICS OF RATE CONTROLS (MIT Press AEI Press, 1997) ("When binding rate controls are imposed on cable operators, …systems will tend to reduce program expenditures and offer lower-quality program services on regulated tiers.").

shared by some of the financial analysts who have written about the deal. For example, in a February 20, 2007 conference call with investors, Mel Karmazin, Chief Executive Office of Sirius, declared that "advertising line is going to contribute significantly in the future towards ARPU."[23] In a research note issued by Bernstein Research, the securities analysts write, "In their call this morning, the companies highlighted potential synergies in General and administrative; Sales and marketing; SAC; R&D; Manufacturing and inventory; Programming; Operating Infrastructure; and revenue synergies in advertising sales."[24] One of the financial analyst reports quoted by Professor Hazlett also highlights "advertising synergies" as a benefit of the merger (to the merging firms), listing it with "reductions in OEM and content costs" as providing profit contributions of a higher order of magnitude than other benefits, such as "near-back office, retail incentives, and advertising savings" (presumably sales force reduction).[25] As an aside, it should be noted that benefits anticipated in this same report from "reductions in OEM and content costs" are not attributed to increased economic efficiencies. Rather, they reflect a transfer of rents from auto manufactures and content suppliers to the combined SDARS provider due to an increase in the latter's bargaining power. The report is quite clear in identifying increased bargaining power as the source of "synergies" in dealing with the auto companies: "[T]he most valuable synergies will not likely materialize until longer-term OEMs (who won't have two entities to play off each other anymore) contracts expire."[26] Analyst reports also indicate that increased market power would lead to a transfer in rents from the stars and developers of programming to the merged firm. One analyst directly notes the potential profit gains from

23. *Id.*

24. Craig Moffet, Judah Rifkin, & Michael W. Parker, *XMSR and SIRI: Where to From Here?*, BERNSTEIN RESEARCH, February 20, 2007, at 6 [hereinafter *Bernstein Report*].

25. *See Hazlett Report supra* note 6, at 40 ("We believe that back office, retail incentives, and advertising savings are possible near-term, but only advertising synergies will likely drive the same order of magnitude in savings as reductions in OEM and content costs.").

26. *Id.*

bargaining power on the part of the SDARS, stating, "The long-term strategic synergies are far greater, however. Programming contract renewals would suddenly be uncontested."[27] Another equity researcher notes that "reduced programming expense" would be among the "main drivers" of synergies.[28]

27. With regard to the anticipated advertising revenue synergies, the only way these expectations can be met is if the combined SDARS provider substantially increases the advertising inventory in its programming after the merger. The only alternative explanation is that the transaction costs advertisers incur in dealing with two SDARS providers instead of one are so great that they would be willing to pay dramatically more to purchase the same amount of commercial time from the merged SDARS providers as they currently do from the two services individually. Absolutely no evidence has been offered to suggest that transactions costs are high, and if they were, advertisers should be among those advocating most enthusiastically for the merger. If transaction costs were truly at such exorbitant levels, virtually any merger among firms in ad-supported media businesses could be justified on efficiency grounds. Similarly, no evidence has been offered to support a claim that a reduction in the number of people selling satellite ad time post merger would be so large as to dramatically increase profits on the existing volume of ad sales. The only plausible reason to expect a substantial increase in the contribution of advertising to profits is an ability to profitably sell ad units that would have reduced the independent SDARS providers' profits due to subscriber defections in the pre-merger environment.

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27. *See Bernstein Report, supra* note 24, at 6.

28. John G. Dix, *The Die is Cast – Reaffirm Buy Ratings on Merger*, DEUTSCHE BANK RADIO & TV BROADCASTING INDUSTRY BULLETIN, Feb. 20, 2007, at 1.

III. LOCAL RADIO LISTENERS WILL BE HURT BY ECONOMIC PRESSURES ON BROADCASTERS RESULTING FROM THE CREATION OF A SATELLITE RADIO MONOPOLY

28. SDARS subscribers still spend considerable time listening to local radio stations in addition to satellite programming.[29] Because the advertising load in SDARS programming currently is light, local radio stations remain the primary audio services through which advertisers can reach SDARS subscribers. For this reason, increased SDARS subscriber counts have not had as large an impact on terrestrial radio's revenues as one might otherwise predict. This situation could change dramatically, however, if, compared to current levels, a merged SDARS provider significantly increases the amount of commercial time it sells. The amount radio stations can charge advertisers to reach the SDARS subscribers in their audiences will fall as the satellite services sell more commercial time to advertisers, and radio stations' revenues will decline as a consequence. Thus, the substantial increase in SDARS commercial time that is predicted above and is critical to the increased advertising revenues anticipated by Sirius and XM will directly affect the revenues of local broadcasters.

29. While the financial impact on local radio broadcasters of a merger-driven increase in SDARS commercial time should not be a matter of direct concern to communication policymakers, the consequences of diminished ad revenues for the quality and content of programming offered to local radio listeners should be, especially in the absence of clear efficiency benefits. Although its implications are often ignored by media policy analysts, economists who study media industries have understood for quite some time that the amount media firms are willing to spend to produce and acquire media content will vary directly with the

29. A recent Arbitron study shows that satellite radio subscribers listen to 33 combined hours of radio per week, compared with 19 hours per week for terrestrial radio listeners. The study breaks down the 33 hours for SDARS subscribers into 14 hours of terrestrial radio, 11 hours of SDARS, and 8 hours of Internet radio. *See* Phil Rosenthal, *Satellite Deal Foes Don't Hear Message*, CHI. TRIB., Feb. 28, 2007, at 3.

size of the revenues influenced by those expenditures.[30] Profit maximization with respect to programming budgets requires that budgets be increased as long as the incremental dollar spent on programming generates at least a dollar in revenue from the increase in the size of the audience attracted.[31] Because increased satellite radio advertising will reduce the price radio stations can charge advertisers for the satellite subscribers in their audiences, the return at the margin to programming dollars will fall and radio stations will begin to turn to less costly types of programs. The continuing proliferation of reality programs in the broadcast TV networks' prime time schedules can be explained as a similar switch to lower cost programming formats as cable and DBS competitors have captured annually increasing shares of the television audience and ad revenues.

30. Theory also predicts that this effect will be manifest most strongly in cuts in radio stations' expenditures on local programming. The explanation lies in the fact that there are substantial rents built into the compensation of certain production factors (particularly payments to on-air talent and fees for rights to broadcast popular events, such as sports contests) employed

30. This relationship was first identified in formal analyses by Robert Crandall and R. Edward Park in the mid 1970s. *See* Robert W. Crandall, *The Economic Case for a Fourth Commercial Television Network*, 22 PUBLIC POLICY 513-36 (1974). *See also* R. Edward Park, *New Television Networks*, THE BELL JOURNAL OF ECONOMICS, VOL. 6, NO. 2, Autumn 1975, 607-620. More recently this logic was rediscovered by researchers studying international trade in films and television programs and offered as an explanation for U.S. dominance of this trade. *See* David Waterman, *World Television Trade: The Economic Effects of Privatization and New Technology*, TELECOMMUNICATIONS POLICY VOL. 12, NO. 2, 1988, 141-152. *See also* STEVEN S. WILDMAN AND STEPHEN E. SIWEK, INTERNATIONAL TRADE IN FILMS AND TELEVISION PROGRAMS (Ballinger, 1988). Subsequent empirical work has provided strong support for the trade model. *See* Francis Lee, *Cultural Discount and Cross-Culture Predictability: Examining the Box Office Performance of American Movies in Hong Kong*, JOURNAL OF MEDIA ECONOMICS, VOL. 19, NO. 4, 259-278. David Waterman and Steven Wildman have provided more general treatments of the basic relationship between revenues and content investments for media firms. *See* David Waterman, *Diversity and Quality of Information Products in a Monopolistically Competitive Industry*, INFORMATION ECONOMICS AND POLICY, VOL. 4, 1989-1990, 291-303, *See also* Steven S. Wildman, *Trade Liberalization and Policy for Media Industries: A Theoretical Examination of Media Flows*, CANADIAN JOURNAL OF COMMUNICATION, VOL. 20, 1995, 367-388.

31. For a diagramatic depiction of this logic, see *Video Economics*, *supra* note 13, p. 42.

in producing popular national programs.[32] Should increased competition for advertisers by satellite radio reduce local radio stations' revenues, the prices broadcasters will be willing to pay for programming will fall and the payments to factors of production earning rents will be negotiated downward to accommodate the program price reductions necessary to respond to reduced demand.[33] In contrast, the local talent employed by many, if not most, stations to create programming focused on local interests is often paid at levels low enough that even modest cuts would be reason to seek employment elsewhere. As a result, attempts to cut budgets for local programs as revenues fall are likely to result in the departure of critical talent and therefore to noticeably lower quality for those programs that continue in production. Others will be cancelled after reaching a point where the affordable level of inputs cannot attract an audience large enough to cover costs.

31. The source of rents built into compensation for popular entertainers (and popular sports events) that reach a national audience and why they may be quite large are easily illustrated. Suppose for a radio market with a population of 100,000 people that the difference in the ad revenue generated by a talk show with the most popular host and a show with the second most popular host is $100 per week. In a competitive radio market, most of this difference in revenue generating power would be reflected in the compensation of the most popular host. The population of the United States is approximately 300 million, therefore for programs that achieve 100 percent coverage of the U.S. population, the difference in compensation between the two hosts should be $15.6 million per year. If there were three talk show hosts and the second most

32. The reason why compensation for the most popular on-air talent would include considerable economic rents was first explained by Sherwin Rosen in his seminal article, "The Economics of Superstars." Sherwin Rosen, *The Economics of Superstars*, THE AMERICAN ECONOMIC REVIEW, VOL. 71, NO. 5, December, 1981, at 845.

33. On the other hand, for the reasons given above, we would expect to see spending on other programming inputs complementary to those earning rents reduced. Thus, for example, a popular DJ on a nationally syndicated music program may work with younger and less experienced sound engineers, or studio equipment that is updated less frequently.

popular host's show generated $100 per week more ad revenue than the third most popular host's show, the most popular host would earn approximately $31 million more than the third most popular.

32. Although these figures are large, they are not out of line with the real world. Consider Rush Limbaugh, host of one of the more popular radio talk and call-in shows delivered to a national audience. From June 2004 through June 2005 his income from entertainment activities was estimated to be $30 million, before netting out payments to agents, attorneys and other individuals from whom he purchased business-related services.[34] Even if payments to these individuals amounted to as much as half of this $30 million, Limbaugh still would have netted $15 million during this 12 month period. It is hard to imagine that even if a reduction in radio industry advertising revenues lead to a further halving of his personal take, he would not find continuing on as host of his show for compensation of $7.5 million to be vastly more remunerative than his next best option for employment. Rush Limbaugh is a radio personality earning an extraordinarily high income and he is by no means unique. For example, according to the New York Times recently disgraced radio talk show host Don Imus earned $10 million annually up until he was fired.[35]

33. The situation is far different for the talent employed for local news programs. The following salary data for local on-air radio talent shows their wages tend to be low, and in some cases are extremely low, which suggests there is little margin for cutting salaries to reduce costs for locally-produced programming in many markets, especially the smaller ones. The Bureau of

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34. *Top 100 Celebrities: Rush Limbaugh*, FORBES.COM, 2005, available at http://www.forbes.com/lists/2005/53/YNXQ.html.

35. Bill Carter and Jacques Steinberg, *CBS Drops Imus Radio Show over Racial Remark*, NEW YORK TIMES, April 12, 2007, available at http://www.nytimes.com/2007/04/12/business/media/12cnd-imus.html?ex=1184644800&en=438b73d8e3ecde61&ei=5070. Although best known as a radio personality, Imus also has income from television appearances.

Labor Statistics (BLS) reports that the mean annual wage for those employed as radio or television announcers was $36,120 as of May 2006.[36] A publicly available Vault survey indicates that the median salary for a radio news announcer is $25,000 but can vary from $7,100 to $102,676, with salaries generally rising with the size of the market.[37]

34. The general decline in the financial performance of broadcast radio stations, especially small local stations, is quite apparent when viewed in terms of profit margins. According to Ibbotson Associates, in 2003, the average net margin for all radio stations (SIC Code 483) was -3.02 percent, while the median net margin was 0.52 percent.[38] Moreover, the radio industry exhibits significant economies of scale, as the net margin for the largest stations (4.92 percent) was significantly greater than the net margin for the smallest stations (-22.11 percent).[39]

35. Unfortunately, the declining financial position of the radio industry and the thin to negative net margins of many stations suggest that the pressure to reduce costs by cutting commitments to local programming will be intense if increased competition for ad dollars in their local markets from the SDARS providers leads to further erosion of profits. Heightened competition for advertisers' ad budgets and growing substitution from traditional media into various types of internet advertising in recent years has produced a steady decline in radio industry finances. Trends in the stock prices of 10 publicly traded radio broadcasters included in the Yahoo! Broadcasting-Radio industry listing illustrates the diminishing performance of radio broadcasters in the financial markets. Figure 1 shows trends in the normalized stock movements

36. Occupational Employment and Wages, Bureau of Labor statistics, May 2006, available at http://www.bls.gov/oes/current/oes273011.htm

37. Vault Survey, available at http://www1.excite.com/home/careers/industry_profile/0,15625,67,00.html.

38. IBBOTSON ASSOCIATES, COST OF CAPITAL 2003 YEARBOOK, at 4-19. Ibbotson relies primarily on data from Standard & Poor's CompuStat.

39. *Id.*

for the 10 radio broadcast companies with the trends for the S&P 500 and a subset of the S&P 500 companies engaged in Broadcasting and Cable TV. With the lone exception of Clear Channel, which recently has begun to trend upward, the uniform pattern for the radio stocks in the Yahoo! Broadcasting-Radio Industry listing has been a largely uninterrupted downward trend from July 8th, 2002 to July 11th, 2007.[40] Clear Channel's recent deviation from the broader radio industry trend may reflect the bidding up of its shares in anticipation of its pending sale to an investment group led by Bain Capital Partners, LLC and Thomas H. Lee Partners, L.P.[41] However as Figure 1 illustrates, in contrast with the S&P 500 index[42] and the broader S&P broadcasting and cable index[43] (which is weighed down by the inclusion of radio), even Clear Channel shares command less today than they did before the industry began its decline at least five years ago.

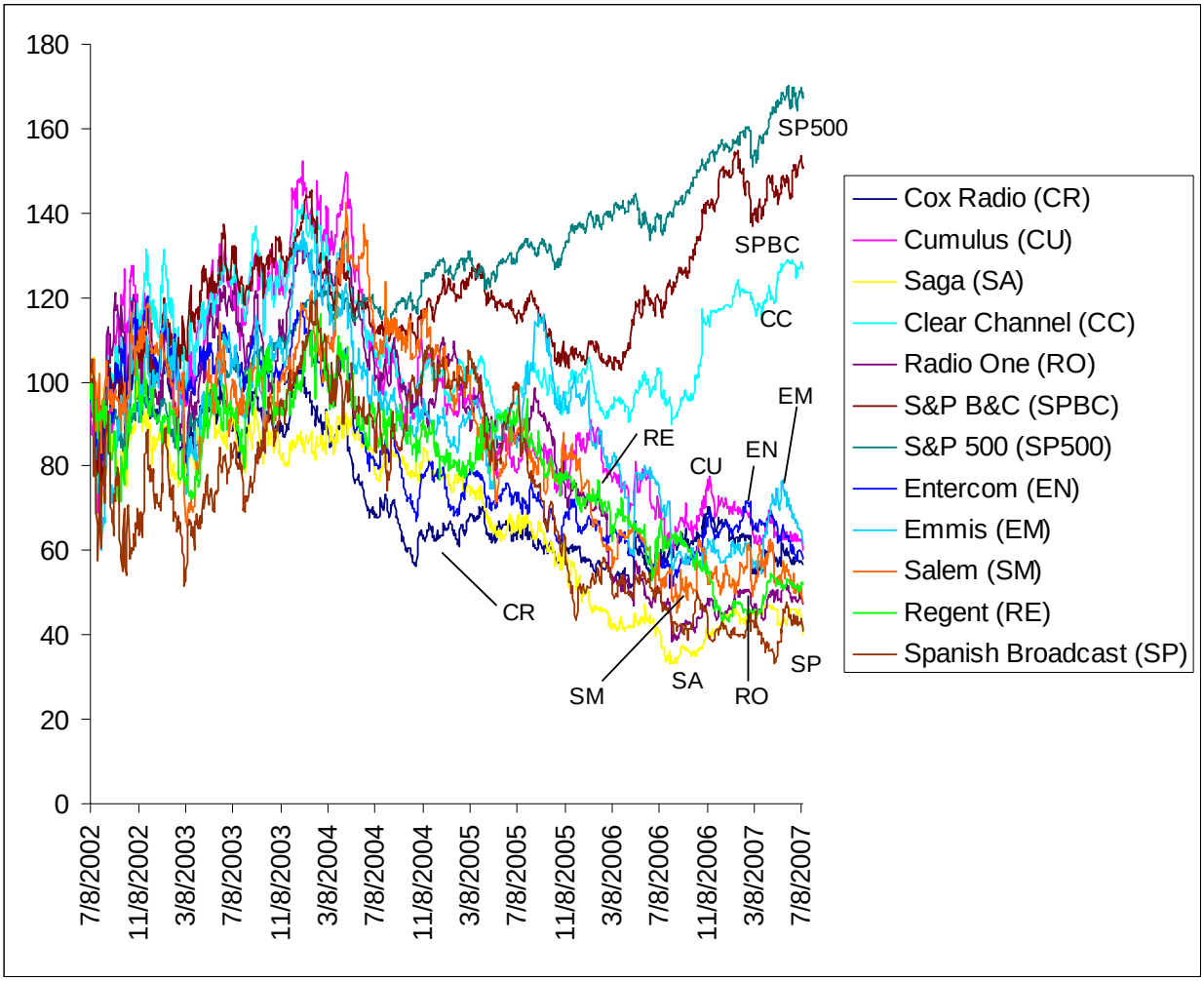
40. The radio stocks included in this analysis represent a subset of the stocks listed as part of the "Broadcasting-Radio" industry by Yahoo! Finance. The Yahoo! Finance List was filtered to meet certain criteria. Specifically, only stocks primarily operating in the United States and with continuous price data from July 8, 2002 to July 11, 2007 were included. July 8, 2002 was chosen as the starting point for the chart as this is the first date that continuous price information was available for Cumulus. All share prices reflect the normalized share price with July 8, 2002 share price set to equal 100. *See* Yahoo! Finance Available at dhttp://biz.yahoo.com/p/724mktd.html.

41. SEC Form 8-K, Clear Channel Communications, Inc. July 17, 2007.

42. Represents the performance of the S&P 500 as denoted by the SPDR (SPY) ETF. *See* Yahoo! Finance Available at http://finance.yahoo.com/q?s=SPY.

43. Data are available free on request from S&P.

FIGURE 1: TRENDS IN NORMALIZED PERCENTAGE SHARE PRICE OF YAHOO! RADIO STOCKS



Source: Yahoo! Finance, S&P.

36. Data compiled for me by Miller Kaplan, Arase & Co., LLP Certified Public Accountants ("Miller Kaplan") shows that, especially in the smaller markets, net margins are already low and often negative. The majority of local radio stations' revenue comes from sales of local advertising. For a typical broadcaster in the top 10 markets, roughly 70 percent of the revenue comes from local advertising.[44] For a smaller broadcaster this share is 80 percent.[45] The second largest part of total revenue comes from sales of national advertising through a media

44. The data is compiled by Miller Kaplan, Arase & Co., LLP Certified Public Accountants ("Miller Kaplan Data") and is available upon request.

45. *Id.*

representative. For the larger broadcaster sales of national advertising represents 25 percent of total revenues, while for the smaller broadcaster national advertising represents about 16 percent of total revenues. In addition, broadcasters get some revenue, referred to as nontraditional revenue, from other sources such as sponsorships.

37. Expenses can be divided into two categories, operating expenses and sales and administrative expenses.[46] Operating expenses represent the cost of programming and content. Broadcasters pay salaries to journalists, hosts, and other personnel involved in the production and broadcasting of radio programming. Radio stations also pay music license fees. For a typical broadcaster, operating expenses amount to about 80 percent of sales and administrative expenses.[47] The largest part of sales and administrative expenses is sales force salaries. In fact, the largest part of the total expense side of the balance sheet is personnel expenses.[48] For a typical station in the top 10 markets salaries and payroll taxes account for about 55 percent of expenses. For the average smaller radio station, personnel expenses account for 60 percent of total costs.

38. Using actual revenue and expense data provided Miller Kaplan by U.S. radio stations, I simulate changes in operating results from a decline in advertising revenues for a representative firm in two different segments of the radio broadcast market, differentiated by market size. The results show that for both types of radio stations a reduction in advertising revenue would put immense pressure on net profit margins. The first market segment I analyze

46. *See* the Clear Channel 2006 Annual Report, at 5, *available at* http://www.sec.gov/Archives/edgar/data/739708/000095013407004539/d44046e10vk.htm.

47. *Id.*

48. Alan B. Albarran, The Economics of the Contemporary Radio Industry, *in* MEDIA ECONOMICS: THEORY AND PRACTICE (Alison Alexander, James Owers, Rodney A. Carveth, C. Ann Hollifield & Albert N. Greco eds., 3d ed.TF-LEA 2003).

uses data from broadcasters in the top ten markets, ranked by population.[49] The second market segment involves data from broadcasters in markets 101 – 150. The revenue data from the top 10 markets is based on data submitted by 259 radio stations. The revenue data are compiled by Miller Kaplan and are from 2006. For the typical radio station in this category, the revenues from local advertising are $12 Million, revenues from national advertising are $4.4 Million, and nontraditional revenues (NTR), such as sponsorships, amount to $1.2 Million.[50] The revenue data for the second category are based on revenues from 248 stations in 20 local markets. For a typical station in this category, local advertising revenues are $1.1 million, while the revenues for national advertising and NTR are $222,000 and $58,000 respectively.[51]

39. The expense data come from two different sources. Data on salaries come from a salary survey conducted by Miller Kaplan in 2004. To match the revenue data the salary data have been increased at a rate of 4 percent per annum. In total 1,157 stations from both the top 150 markets and smaller markets in four Midwestern states were surveyed. Out of the stations contacted, 383 stations responded for a 33 percent response rate. Although the salary data are obtained from a subset of the stations contacted, Miller Kaplan believes that the compensation levels are representative of the overall country. Data on all non-salary expenses come from 82 radio stations audited by Miller Kaplan in 2006.

40. The Miller Kaplan data show that losses in national advertising revenues as a result of the proposed merger will not be recovered through a concomitant decrease in the cost of

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49. In the fall of 2006 the top 10 radio markets were: New York, Los Angeles, Chicago, San Francisco, Dallas-Ft.Worth, Houston-Galveston, Philadelphia, Washington, Atlanta and Detroit. *See* The 2007 Entertainment, Media & Advertising Market Research Handbook, available at http://www.researchandmarkets.com/feats/download_sample.asp?report_id=452564&file_name=2007%20Entertainment,%20Media%20And%20Advertising%20Market%20Sample%20Pages&file_ext=pdf, at 69.

50. Miller Kaplan Data.

51. *Id.*

doing business. Indeed, for both groups of broadcasters about 75 percent of any reduction in national advertising revenues would redound to the bottom line.[52]

41. Table 1 describes the effects of a 5, 10, 15, 20, 25, and 30 percent decrease in national advertising revenues as a result of the merger relative to the null case where the merger does not occur. For the sake of brevity and clarity, I present only aggregate accounting categories.

TABLE 1: EFFECT OF REDUCTION IN NATIONAL AD $ ON AVG NET MARGIN
(TOP TEN MARKETS)

Scenario	Null	5%	10%	15%	20%	25%	30%
Net Revenue	$14,029,974	$13,858,008	$13,686,042	$13,514,076	$13,342,109	$13,170,143	$12,998,177
Operating Expenses	$9,526,743	$9,520,640	$9,514,538	$9,508,436	$9,502,334	$9,496,232	$9,490,130
EBITDA	$4,503,232	$4,337,368	$4,171,503	$4,005,639	$3,839,775	$3,673,911	$3,508,047
Non-operating Expenses	$2,082,221	$2,082,221	$2,082,221	$2,082,221	$2,082,221	$2,082,221	$2,082,221
Net Margin	$2,421,011	$2,255,146	$2,089,282	$1,923,418	$1,757,554	$1,591,690	$1,425,825
Net Margin %	17.26%	16.27%	15.27%	14.23%	13.17%	12.09%	10.97%

Source: Miller Kaplan Data

42. The effect of the potential merger on smaller broadcasters is even more threatening to the continued provision of local content. Table 2 repeats the scenario analysis for a typical broadcaster in the 101-150 market segment.

52. *Id.*

TABLE 2: EFFECT OF REDUCTION IN NATIONAL AD $ ON AVG NET MARGIN (SMALL MARKETS)

Scenario	Null	5%	10%	15%	20%	25%	30%
Net Revenue	$1,416,390	$1,101,387	$1,092,806	$1,084,225	$1,075,645	$1,067,064	$1,058,483
Operating Expenses	$874,487	$874,181	$873,876	$873,570	$873,265	$872,959	$872,654
EBITDA	$235,481	$227,206	$218,930	$210,655	$202,380	$194,105	$185,830
Non-operating Expenses	$227,597	$227,597	$227,597	$227,597	$227,597	$227,597	$227,597
Net Margin	$7,884	-$391	-$8,667	-$16,942	-$25,217	-$33,492	-$41,767
Net Margin %	0.71%	-0.04%	-0.79%	-1.56%	-2.34%	-3.14%	-3.95%

Source: Miller Kaplan Data

43. Under all revenue loss scenarios, the cost of operating the representative small market radio station exceeds its revenues. Thus, a radio station facing any of these scenarios would be forced to reallocate resources, presumably away from locally-produced programming, or shut down.

44. While it is not possible to point to a systematic study of the issue, the following examples suggest that radio stations have been responding to declining returns on locally-produced programs by cutting budgets for local news programs. Further loss of advertising revenues will only make this situation worse.

- In 2000, there were only four radio stations in the entire St. Louis market that employed news staffs.[53] Of those four stations, two are university stations where operating expenses are covered by government grants, tax dollars, corporate underwriting, and listener donations rather than advertisements.[54] In addition, news department payroll can remain small because most of the news staff is made up of students.[55] Thus, those stations can afford to have news departments.

- A 2004 study of 61 FM radio stations in the Southwest United States found that 77 percent had suffered budget cuts in the last fiscal reporting period.[56] Of the 61 stations, only 34 had a news department and 28 stations had made budget cuts in the news department.[57] Due to reduced budgets, only 34 (55 percent) stations had a local morning newscast during the morning drive time

53. Frank Absher, *Radio news hit hard by budget cuts*, 30 ST. LOUIS JOURNALISM REV. 13 (2000).
54. *Id.*
55. *Id.*
56. J. Sean McCleneghan, *FM local newscasts in the Southwest: A disappearing service*, 43 SOC. SCI. J. 445, 448 (2006).
57. *Id.*

block of which only seven were longer than a minute and none longer than five minutes.[58] Only 11 (18 percent) stations held any evening drive time block newscast at all.[59] Most importantly, only 55 percent of the stations' managers felt committed to having *any* local newscast given the present financial situation of the station.[60]

- In Loudoun County, Virginia, the only radio station in the county faced such a large budget deficit that it was forced to fire its news director, afternoon host, and general manager.[61] In addition, the station eliminated almost all of its local news coverage.[62] Instead of employing a staff to cover community events and news such as the county government meetings, school board, high school sports, and weather emergencies, the station found it cheaper to replace that content with nationally syndicated content. Such content included talk shows featuring business news from the *Wall Street Journal*, conservative talk with Dennis Miller, and relationships advice from Joy Browne.[63] Residents of Loudoun County are reportedly concerned about where they will get local announcements such as school closings in winter.

- In Yankton, South Dakota, during violent thunderstorms, it was impossible for the residents there to get information on the movement of the storm or any possible tornado warnings.[64] Every local station contained music and talk radio but no local news or emergency broadcasts. To cut costs, the radio stations around Yankton cut local content and instead share programming with stations from around the country.[65] The stations pay a service with a centralized staff to send them newscasts that pertain to the region. Thus the stations have no local staff to report on community news or interrupt programming with important alerts such as sever storm warnings.

IV. A DIMINISHED CONTRIBUTION BY RADIO TO THE LOCALISM GOALS OF COMMUNICATIONS POLICY

45. Media differ from most other industries in that policy concerns with media performance extend well beyond those related to economic efficiency. The reasons are a strongly held belief that media make vital contributions to the social and cultural aspects of American society and play a central role in the political systems of modern democracies. Each of these noneconomic aspects of media contributions to society are manifest on both a national and local scale. Recent research by economists and political scientists provides significant evidence of the importance of media-supplied information to the democratic process.

58. *Id.*
59. *Id.*
60. *Id.*
61. Marc Fisher, *The News From Loudoun Goes Silent,* WASH POST, May 26, 2007.
62. *Id.*
63. *Id.*
64. Deborah Potter, *A Vast Wasteland: Local news is increasingly hard to find on commercial radio,* AM. JOURNALISM REV., Nov. 1, 2000, at 58.
65. *Id.*

46. Oberholzer-Gee and Waldfogel (2006) investigate the importance of local television news on local civic behavior using the introduction of Spanish-language local television news in the United States is used as a natural experiment to analyze the effects on local political participation. [66] The findings are that Spanish voter turnout is five to ten percent higher in markets with Spanish local television. Spillovers from local television news to voter participation exist and are significant. The authors argue that the results of their research provide a basis for the continued promotion of localism.

47. DellaVigna and Kaplan (2006) show that individuals' voting behavior is affected by media content.[67] They use Fox News' entry into local cable markets between 1996 and 2000 as a natural experiment to investigate how voters' behavior is affected by changes in media content. They find that the introduction of Fox News in local cable markets had a significant impact on local voters' behavior in the 2000 election.

48. George and Waldfogel (2006) show that local newspaper circulation among highly educated citizens' declines as the New York Times' penetration rate increases.[68] Among less educated readers, local paper circulation increases. The latter appears to be an effect of local papers repositioning themselves to offer less national and international news and instead, emphasizing coverage of local matters. George and Waldfogel argue that media provision information on local issues could have consequences for voter participation. In particular they argue that the more educated readers choose not to participate in local elections as they do not get enough information on local issues.

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66. Felix Oberholtzer-Gee and Joel Waldfogel, *Media Markets and Localism: Does Local News en Español Boost Hispanic Voter Turnout?* (NBER Working Paper No. W12317, 2006).

67. Stefano DellaVigna and Ethan Kaplan, *The Fox News Effect: Media Bias and Voting*, QUARTERLY JOURNAL OF ECONOMICS. (forthcoming 2007).

68. Lisa George and Joel Waldfogel, *The New York Times and the Market for Local Newspapers,* 96 THE AMERICAN ECONOMIC REVIEW, NO 1, 435 (2006).

49. Larcinese (2005) finds that voter turnout is affected by information.[69] Using survey data from the 1997 British General Election Study, he shows that political knowledge has a significant influence on the probability of voting, and that mass media play an important role in influencing political participation.

50. Matsusaka (1995) also shows that voter turnout can be explained by access to information.[70] Using a theoretical model he shows that as the price of information falls and knowledge increases, voter turnout will rise.

51. The findings of these papers suggest that a reduction in local radio content can have a significant negative impact on political participation. As a well informed and politically active populace is important to all, local content confers benefits to society as a whole.

CONCLUSION

52. If permitted, a merger between XM and Sirius would create a monopoly in the market for SDARS. No compelling evidence has been offered by merger proponents demonstrating that other suppliers of audio content provide services sufficiently substitutable to prevent the merged firm from enjoying the fruits of increased market power in their dealings with SDARS subscribers, advertisers, content suppliers and auto manufacturers. In fact, financial analyst reports cited in this report and in expert statements filed on behalf of the SDARS providers point quite clearly to increased market power as a major contributor to the synergies from which the merged firm is expected to benefit. The most obvious losers if these synergies are realized are SDARS subscribers who can expect to see higher subscription fees and more advertising time embedded in SDARS programming. Auto companies, equipment suppliers, and

69. Valentino Larcinese, *Does Political Knowledge Increase Turnout? Evidence from the 1997* British General Election, (November 2004). STICERD Political Economy and Public Policy Discussion Paper No. 1. Available at SSRN: http://ssrn.com/abstract=669202.

70. John G. Matsusaka, *Explaining Voter Turnout Patterns: An Information Theory*, 84 PUBLIC CHOICE, 1995, 91.

suppliers of content (and especially talent) would be made worse off as well, but to the extent these loses are merely rent transfers to the SDARS companies, these effects are less a concern to policy makers than the direct consumer losses the merger would produce.

53. Unfortunately, the welfare costs of the merger would extend well beyond the consequences for those with direct financial dealings with Sirius and XM. Listeners to terrestrial radio would also be hurt as local radio stations respond to diminished advertising revenues by cutting back on the resources committed to radio programming. Because there are substantial rents built into the payments for talent and rights to broadcast events around which national program are often developed and these rents will naturally be negotiated downward as local radio revenues fall, the adverse effects of reduced advertising revenues on terrestrial radio programming would be most evident in a reduction in the amount of resources committed to the production of local programs, where in many cases wages for talent are already so low that further reductions are not feasible. The predictable consequence is a reduction in both the numbers and production values of locally-produced programs, including those devoted to news and public affairs that localism policy in the United States has traditionally endeavored to promote.

I declare under penalty of perjury under the laws of the United States of America that to the best of my knowledge the foregoing is true and correct.

Executed on July 23, 2007.

Steve Wildman