

EXHIBIT A

**ECONOMIC ANALYSIS
OF THE COMPETITIVE HARMS OF
THE PROPOSED COMCAST-NBCU TRANSACTION***

June 21, 2010

by

William P. Rogerson**

*** Prepared for the American Cable Association.**

**** Professor of Economics, Northwestern University. FCC Chief Economist, 1998-99.**

TABLE OF CONTENTS

1.	INTRODUCTION AND SUMMARY	2
2.	THE HORIZONTAL HARM	9
A.	THE THEORY OF HARM	9
B.	EVIDENCE THAT COMBINED OWNERSHIP OF MULTIPLE BLOCKS OF MUST HAVE PROGRAMMING CAN RESULT IN SIGNIFICANT FEE INCREASES	14
C.	THE GEOGRAPHIC LOCATION OF THE HORIZONTAL HARM	18
3.	THE VERTICAL HARM	19
A.	THE THEORY OF HARM	19
B.	A SIMPLE EXAMPLE	23
C.	ESTIMATING THE MAGNITUDE OF THE VERTICAL HARM	27
4.	COMCAST’S PROPOSED CONDITIONS WILL NOT REMEDY THE HARMS	42
A.	COMCAST HAS PROPOSED NO CONDITIONS TO REMEDY THE HORIZONTAL HARM	42
B.	FOUR PROBLEMS WITH PROGRAM ACCESS RULES AS A REMEDY FOR THE VERTICAL HARM	42
C.	IMPLICATIONS FOR POTENTIAL REMEDIES TO THE VERTICAL HARM	49
5.	BINDING ARBITRATION IS NOT A COST EFFECTIVE OPTION FOR SMALL AND MEDIUM-SIZED MVPDS	51
6.	CONCLUSION	52
	TABLES	55
	APPENDIX	58

1. INTRODUCTION AND SUMMARY

The proposed transaction¹ between Comcast Corporation (“Comcast”) and NBC Universal, Inc. (“NBCU”) will affect competition in two vertically related industries - the (downstream) multichannel video programming distribution (MVPD) industry, which provides subscription TV services to consumers, and the (upstream) video programming industry, which provides MVPDs with the networks that they distribute to their subscribers. NBCU operates only in the upstream video programming industry and is a significant participant in this industry. NBCU owns two broadcast television networks, the NBC Television Network (“NBC”)² and the Telemundo Network, together with 10 NBC owned and operated (O&O) local broadcast television stations and 15 Telemundo O&Os in major metropolitan areas.³ In addition to its broadcast programming assets, NBCU owns a large number of the most popular national cable networks, including USA (1),⁴ Syfy (18), Bravo (22), MSNBC (26), mun2, Oxygen and CNBC.

¹Specifically, Comcast and General Electric Company (GE), which owns NBCU, propose to create a joint venture owned 51% by Comcast and 49% by GE, and managed by Comcast that will combine all of NBCU’s lines of business with Comcast’s programming lines of business. Comcast will retain 100% ownership of its cable business. GE has certain rights to require Comcast to purchase its share of the joint venture at specified times, and Comcast has certain rights to demand that GE sell its share of the joint venture to Comcast at specified times. Except where otherwise noted, the information about NBCU and Comcast reported in this paragraph comes from the parties’ application. *See Applications and Public Interest Statement In the Matter of Applications for Consent to Transfer of Control of Licenses, General Electric Company, Transferor, to Comcast Corporation, Transferee, (“Comcast-NBCU Transaction Application”)*, MB Docket No. 10-56, January 28, 2010.

²NBC is one of the national broadcast networks commonly referred to as the “Big 4” networks, along with CBS, ABC, and Fox. In addition to the 10 NBC O&O’s, NBC has more than 200 independently owned affiliated stations.

³An Appendix to this paper contains a complete listing of DMAs, the number of TV households per DMA and information on whether each DMA is served by an NBC O&O and/or a Comcast RSN.

⁴The Nielsen prime time ranking is reported in brackets for networks in the top 30. Rankings for

Comcast is a significant participant in both the upstream programming and downstream distribution industries. In the upstream video programming industry Comcast owns 9 regional sports networks (RSNs) located in major metropolitan areas and a number of national cable networks, including E! Entertainment (28),⁵ TV One, Versus, Style, The Golf Channel, and G4. In the downstream MVPD industry, Comcast is the largest cable operator in the country, providing service to 23.8 million customers in 39 states.

From an economic perspective, this means that the proposed transaction has both horizontal and vertical aspects and that a complete economic analysis of the potential competitive harms must consider the possibility of competitive harm arising from either of its two aspects.⁶ In this paper I will explain and describe two separate and distinct competitive harms that will result from this transaction, one arising from the horizontal component of the transaction and the other arising from the vertical component. In this paper I do not attempt to

the week of March 8-14, 2010. See Kevin Allocao, *Cable Network Rankings*, TVNEWSER, March 16, 2010, “*Cable Network Rankings (2010)*”. Available at: http://www.mediabistro.com/tvnewser/ratings/cable_network_rankings_fnc_2_msnbc_26_cnn_3_2_hln_37_in_prime_155302.asp.

⁵The Nielsen prime time ranking is reported in brackets for networks in the top 30. Rankings for the week of March 8-14, 2010 as reported in *Cable Network Rankings (2010)*.

⁶Since Comcast is only purchasing 51% of NBCU, the transaction is slightly more complicated than a simple merger of Comcast and NBCU, which would occur if Comcast purchased 100% of NBCU. However, as will be discussed in detail below, the horizontal and vertical harms of the actual transaction will be substantially the same as the harms that would arise from a simple merger. With respect to the horizontal harm, this harm occurs simply because the programming assets are under combined ownership and the particular share of the joint venture owned by Comcast or GE is irrelevant. With respect to the vertical harm, so long as the joint venture and Comcast can coordinate their actions to maximize their combined profits, the transaction will have precisely the same effect as would a simple merger. Therefore, although the actual transaction is slightly more complicated than a simple merger, most of the economic analysis of the actual transaction is actually very similar to the analysis that one would conduct for a simple merger.

provide a comprehensive analysis of whether possible remedies for these harms exist that fall short of completely disallowing the transaction. However, I briefly explain why the conditions proposed by Comcast will definitely not address the harms. I also briefly describe one problem with another type of condition that the Commission has imposed on previous transactions to remedy competitive harms - giving parties that purchase certain classes of programming from the combined entity the right to ask for binding arbitration with mandatory interim carriage in the event that a dispute over program fees cannot be resolved. The problem with this type of condition is simply that smaller MVPDs generally do not find binding arbitration to be a cost effective option. Understanding the problems with Comcast's proposed remedies and with other types of remedies that the Commission has used in the past is of course the first step in attempting to craft an effective set of remedies.

Horizontal Harm

1. Comcast and NBCU currently possess significant amounts of market power because of the video programming assets that each owns. The Commission has concluded that some of these programming assets – the signals of the NBC O&O stations and RSNs – are “must have” programming for MVPDs, that is, if this programming was withheld from an MVPD, it would have a competitively significant effect on the MVPD through a material loss of customers. Similar considerations suggest that the block of popular national cable networks owned by NBCU may confer comparable amounts of market power.
2. The horizontal harm is that combined ownership of NBCU and Comcast programming will increase the joint venture's market power over programming and allow it to charge higher programming fees. These fee increases will be substantially passed through to subscribers in the form of higher subscription prices.
3. Standard economic theory shows that, if two different programmers own two different networks (or blocks of networks) that each create market power, combined ownership of both will generally create additional market power and result in higher programming fees, so long as the networks are substitutes for one another in the weak sense that the value of one network to an MVPD is lower conditional on already carrying the other network.

4. Note that two networks (or blocks of networks) can be substitutes in the sense defined above even if subscribers have a strong preference to subscribe to an MVPD that carries both networks. Therefore the above theory explains why combined control of two networks can result in higher prices even when consumers wish to subscribe to an MVPD that carries both of the networks.
5. The best available evidence on the effect of combined ownership or control on programming fees comes from markets for retransmission consent. This is because retransmission consent markets are local and the extent to which multiple Big 4 stations in the same market are jointly owned or controlled varies from market to market. The available evidence suggests that joint ownership or control of multiple Big 4 stations in the same DMA can increase retransmission consent fees by 20% and possibly much more.
6. The greatest threat of horizontal harm from this transaction occurs in regions of the country served by an NBC O&O and a Comcast RSN. In such regions, NBCU's control over retransmission consent for the NBC signal and its control over its popular national cable networks will be combined with Comcast's control over its RSN. Approximately 12.1% of all TV households in the United States, spread over six different metropolitan areas, are located in DMAs with these characteristics.⁷
7. The transaction also threatens horizontal harm in regions of the country served by a Comcast RSN but not served by an NBC O&O. In such regions, NBCU's control over its popular national cable networks will be combined with Comcast's control over its RSN. Approximately 27.9 % of TV households are located in DMAs with these characteristics.
8. Therefore regions containing approximately 40% of all TV households are threatened with the horizontal harm from this transaction.

Vertical Harm

1. The vertical harm is that Comcast's ownership share of the joint venture combined with ownership of its MVPD business will increase the joint venture's ability to bargain for higher programming fees from MVPDs that compete with Comcast. These fee increases will be substantially passed through to subscribers in the form of higher subscription fees.
2. So long as the joint venture and Comcast are able to coordinate their actions to take advantage of opportunities to maximize their combined profits, the joint venture and Comcast will collectively make decisions to maximize their combined profits. The reason that programming fees will rise under combined profit maximization is that the

⁷As will be seen below, these six DMAs are also the DMAs that will suffer the most significant vertical harm from the transaction.

opportunity cost to the combined entity of providing NBCU programming to rivals of Comcast will be higher after the transaction. This is because the joint venture will take account of the opportunity cost created by the fact that some customers of rival MVPDs would switch to Comcast if their MVPD was unable to offer NBCU programming, and Comcast would earn profit on these switching customers.

3. Increases in opportunity cost have the same impact on programming fees as increases in direct cost. In the absence of other information, a standard and well-accepted practice in economic theory is to predict that the negotiated price between a buyer and seller will rise by half the amount of any cost increase.
4. Therefore the most direct and natural method of estimating the likely effect of the transaction on programming fees is to begin by estimating the magnitude of the opportunity cost that will be created by the transaction. It is reasonable to project that programming fees will then rise by half this amount. This is the method that the Commission used to estimate the likely vertical harm that would result from the Adelphia-TW-Comcast transaction⁸ which is the most recent significant transaction involving potential vertical harms considered by the Commission.⁹
5. The magnitude of the opportunity cost created by the transaction is determined by a simple formula that depends on the share of customers that would leave the rival MVPD if it were unable to offer the NBCU programming, the share of these customers that would switch to Comcast, and the per subscriber profit margin of Comcast.

⁸*See Memorandum Opinion and Order In the Matter of Applications for Consent to the Assignment and/or Transfer of Control of Licenses: Adelphia Communications Corporation, Assignors to Time Warner Cable Inc., Assignees; Adelphia Communications Corporation, Assignors and Transferors, to Comcast Corporation, Assignees and Transferees; Comcast Corporation, Transferor; to Time Warner Inc., Transferee; Time Warner Inc., Transferor, to Comcast Corporation, Transferee*, MB Docket No. 05-192, July 21, 2006, (“*Adelphia-TW-Comcast Order*”).

⁹The Commission used a somewhat different method to investigate the potential significance of vertical harm in its earlier analysis of the DirecTV-News Corp. transaction. (*See Memorandum Opinion and Order In the Matter of General Motors Corporation and Hughes Electronics Corporation, Transferors, and The News Corporation Limited, Transferee, For Authority to Transfer Control*, MB Docket No. 03-124, January 14, 2004, “*DirecTV-News Corp. Order*.”) In this case it calculated the stand-alone profit from permanent or temporary withholding of programming and used the rule that a transaction would be viewed as creating a significant vertical harm if the stand-alone profit from permanent or temporary withholding of programming would be positive after the transaction. As I will explain further below, this condition is a sufficient condition for prices to rise, but it is clearly not necessary. So long as a transaction significantly increases the opportunity cost of providing programming to rivals, there will generally be a significant increase in programming prices regardless of whether or not the stand-alone profit from permanent or temporary withholding becomes positive.

6. The impact of the transaction will be most significant in DMAs served by an NBC O&O where Comcast has a significant presence as the incumbent cable provider. Approximately 12.1% of all TV households in the United States, spread over six metropolitan areas are located in such DMAs.¹⁰ Under plausible parameter values, the retransmission consent fees charged by NBC O&Os will increase by approximately 100% in these DMAs.
7. The transaction may also have a significant impact on the fees that the joint venture charges for NBCU's national cable networks. Under plausible parameter values, the fees for this programming will increase by approximately 18-20%.
8. Cable overbuilders that compete with Comcast will experience higher programming fee increases to the extent that Comcast passes a greater fraction of their subscribers. Under plausible parameter values, if Comcast passes almost all of an overbuilders' customers, its retransmission consent fees will increase by over 100% and its fees for NBCU's national cable networks will increase by 44%. However, an overbuilder will still experience significant price increases even if the share of its customers passed by Comcast drops to more modest levels.

Comcast's Proposed Conditions Will Not Remedy the Harms

1. Comcast has proposed no conditions to deal with the horizontal harm of the transaction.
2. Comcast has proposed that program access rules be applied to its retransmission consent agreements, in addition to all of its other programming agreements, to deal with the vertical harm of the transaction.
3. Program access rules suffer from four major problems. Therefore, simply requiring that the combined entity's retransmission consent and other programming negotiations be subject to program access rules will not reduce the vertical harm created by the transaction.
4. The four problems are:
 - (a) Program access rules place no restrictions on quantity discounts.
 - (b) Program access rules provide no automatic right to continued carriage while a complaint is being investigated.
 - (c) It is not clear whether program access rules will be interpreted as applying to provision of online programming services.
 - (d) To the extent that the programming fees a vertically integrated firm charges itself are simply internal transfer prices that can be costlessly set at any level, program access rules provide no constraint on the programming fees that a vertically

¹⁰As already mentioned above, these six DMAs are the same DMAs that will also suffer the most significant horizontal harm from the transaction.

integrated firm charges its rivals.

5. Crafting an effective remedy for the vertical harm short of simply disallowing the transaction would require that these four problems be addressed. Possible solutions for each problem are (respectively):
 - (a) Eliminating or severely curtailing quantity discounts;
 - (b) Requiring automatic continued carriage while a complaint is being investigated;
 - (c) Explicitly requiring that non-discriminatory access provisions apply to programming used for on-line services;
 - (d) Allowing for MVPDs purchasing programming from the joint venture to request binding arbitration with mandatory interim carriage

Binding Arbitration is not a Cost Effective Option for Smaller and Medium-Sized MVPDs

1. In previous transactions with vertical competitive harms, one remedy used by the Commission has been to give parties purchasing certain classes of programming the right to ask for binding arbitration with mandatory interim carriage.
2. This type of condition also has the potential to reduce the horizontal harm created by this transaction.
3. A major problem that the Commission would need to address if it considered using this type of condition is that binding arbitration is not a cost effective option for smaller and medium-sized MVPDs.

The paper is organized as follows. Section 2 describes the horizontal harm. Section 3 describes the vertical harm. Section 4 explains why either Comcast has simply not proposed any remedies at all (in the case of the horizontal harm) or why the remedies proposed by Comcast would be ineffective (in the case of the vertical harm). Section 5 briefly explains an issue that the Commission will need to address if it considers using some type of binding arbitration condition as part of a package of remedies for harms of the transaction. This is that binding arbitration is not a cost-effective option for smaller and medium-sized MVPDs. Finally, Section 6 draws a brief conclusion.

2. THE HORIZONTAL HARM

A. THE THEORY OF HARM

Comcast and NBCU both possess significant amounts of market power because of the programming assets they own. The Commission has repeatedly concluded that the local broadcast television station signals of the Big 4 networks and RSNs are must have programming for MVPDs and that this conveys considerable market power to the owners of this programming.¹¹ Professor Michael Katz, who is one of Comcast's economic experts in this proceeding, has recently coauthored a report that has been submitted to the Commission as part of another proceeding, which cites many of these past findings of the Commission along with other economic evidence that has been previously presented to the Commission, to support its own conclusion that "local broadcasters retain their historic position as the exclusive providers of uniquely attractive network and syndicated programs in their local markets."¹² Although the Commission has never classified particular national cable networks or blocks of national cable networks as must have programming, it has clearly enunciated the principle that national cable networks of comparable popularity to the Big 4 networks and RSNs could also be classified as

¹¹ For example, in its evaluation of the DirecTV-News Corp. transaction, the Commission concluded that "News Corp. currently possesses significant market power in the DMAs in which it has the ability to negotiate retransmission consent agreements on behalf of local broadcast stations" and justified this conclusion in part by observing that "carriage of local television broadcast stations is critical to MVPD offerings." (*See DirecTV-News Corp. Order* at para. 201-202). It similarly concluded that "News Corp. currently possesses significant market power with respect to its RSNs within each of their specific geographic regions" (*See Adelphia-TW-Comcast Order* at para. 147) based on similar observations.

¹² *See* Michael L. Katz, Jonathan Orszag, and Theresa Sullivan, "An Economic Analysis of Consumer Harm From the Current Retransmission Consent Regime," November 12, 2009, ("Katz, Orszag, and Sullivan (2009)"), at pages 26-27, including footnotes 49 and 50, submitted by NCTA as part of its comments, *In the Matter of A National Broadband Plan for Our Future*, NBP Public Notice #26, GN docket Nos. 09-47, 09-51, 09-137 and *In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, MB Docket No. 07-269, December 16, 2009.

must have programming,¹³ noting in one order that ownership of a national cable network or block of national cable networks with comparable ratings to those of the Big 4 networks or RSNs would likely convey a similar level of market power.¹⁴ The sum of the prime time ratings for the top four NBCU national cable networks is 4.1,¹⁵ compared to prime time ratings for the Big 4 networks of 4.0 (CBS), 3.4 (Fox), 3.0 (ABC) and 2.8 (NBC).¹⁶ Therefore, the block of programming consisting of NBCU's top four cable networks has significantly higher prime time ratings than three of Big 4 networks, including NBC itself.

The basic theory of horizontal harm for this transaction is that combined ownership of

¹³See, for example, *First Report and Order In the Matter of Review of the Commission's Program Access Rules and Examination of Program Tying Arrangements*, MB Docket No. 06-198, January 29, 2010 at para. 34.

¹⁴“We also believe that a competitive MVPD's lack of access to popular non-RSN networks would not have a materially different impact on the MVPD's subscribership than would lack of access to an RSN. We are unaware of examples of nationally distributed programming being withheld from willing buyers as has occurred with some RSNs. Instead, we must turn to indirect evidence of the popularity of nationally distributed programming networks. A number of networks receive ratings higher than or equal to those of RSNs that are currently withheld from DBS providers. While ratings are not a perfect predictor of consumer response to the withholding of a network, they provide us with sufficient evidence to conclude that some nationally distributed networks are sufficiently valuable to viewers such that some viewers may switch to an alternative MVPD if the popular programming were not made available on their current MVPD.” (See *Report and Order and Notice of Proposed Rulemaking In the Matter of Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Development of Competition and Diversity in Video Programming Distribution: Section 628(c)(5) of the Communications Act, Sunset of Exclusive Contract Provision and Review of the Commission's Program Access Rules and Examination of Program Tying Arrangements*, MB Docket No. 07-29 and 07-198, October 1, 2007 at para. 39.)

¹⁵The prime time ratings for NBCU's four most popular national cable networks are: USA (1.9), SyFy (.8), Bravo (.8), and MSNBC (.6), which sum to 4.1. Ratings for the week of March 8-14, 2010 as reported in *Cable Network Rankings (2010)*.

¹⁶Ratings for 2009-10 season. See Bill Gorman, *It's Over! Final Broadcast Primetime Network Ratings for 2009-10 Season*, TV by the Numbers, May 28, 2010. Available at: <http://tvbythenumbers.com/category/ratings/nielsen-network-tv-ratings-season-to-date>.

these video programming assets will further increase the joint venture's bargaining (market) power and allow it to charge even higher fees for this programming. These programming fee increases will of course be largely passed through to subscribers in the form of higher subscription prices. Note also that the harm arises because programming is under the combined control of the joint venture and the precise ownership shares of Comcast and GE in the joint venture are not important. In particular, the fact that Comcast is purchasing 51% instead of 100% of NBCU is irrelevant for assessing the horizontal harm.

When a programmer and MVPD negotiate the fee that the MVPD will pay the programmer, they are essentially deciding how to split the joint economic gains created from having the MVPD carry the programming. This sort of bilateral bargaining situation has been extensively modeled in the economics literature.¹⁷ Application of the standard modeling approach used in the economics literature immediately demonstrates that a programmer selling two different networks will be able to charge more by bundling the networks together so long as the networks are substitutes in the sense that the marginal value of either of the networks to the MVPD is lower conditional on already carrying the other network.

A simple example will make this point clear. Suppose that an MVPD can carry two networks. Suppose that it would earn a profit of \$1.00 per subscriber if it carried just one of the two networks and that it would earn a profit of \$1.50 per subscriber if it carried both of the networks. Note that the marginal value of adding a network is \$1.00 if the other network is not

¹⁷For general treatments of the bargaining problem *see*, for example, John C. Harsanyi, "Bargaining," *The New Palgrave Game Theory*, W.W. Norton, 1989; Alvin Roth *Axiomatic Models of Bargaining*, Springer-Verlag, 1979; and Ariel Rubinstein, "Perfect Equilibrium in a Bargaining Model," *Econometrica*, 50, 1982, 97-109. For an extended discussion of how this modeling approach can be interpreted to apply to the case of retransmission consent negotiations, *see* Katz, Orszag, Sullivan (2009).

being carried, but is only equal to \$.50 if the other network is already being carried. The networks are thus substitutes in the sense that the marginal value to the MVPD of either network is lower conditional on already carrying the other network. Note, in particular, that the fact that networks are substitutes does not mean that the MVPD only wishes to purchase one of the two networks. The MVPD will clearly make more profit if it carries both networks. Nonetheless, the two networks are substitutes in the sense that the marginal value of carrying one of the networks is smaller conditional on the other network already being carried. To the extent that customers appreciate and are willing to pay for increases in variety at a diminishing rate as variety increases, we might expect this condition to hold in a wide variety of cases.

To keep the example as simple as possible, assume that the programmer's cost of providing the network to the MVPD is zero so the joint gain if the MVPD carries the network is simply equal to the MVPD's profit.¹⁸ Assume also that the MVPD and programmer have equal bargaining strength in the sense that they choose a price to evenly split the joint profit.¹⁹

First suppose two different programmers each own one of the two networks. Then, so long as the MVPD carries both networks in equilibrium, when the MVPD negotiates with either of the two programmers, the marginal profit of adding a network will be equal to \$.50 per subscriber and the negotiated fee will therefore be equal to half this amount or \$.25. Therefore the total fees paid for both networks will be \$.50. Now suppose that the same programmer owns both networks. In this case the joint profit of adding both networks is equal to \$1.50. Therefore,

¹⁸It is easy to see that the example described below continues to yield the same conclusion if we assume that there is a cost of delivering the programming or if the programmer earns additional advertising revenue when the MVPD shows the programming.

¹⁹It is easy to see that the example described below continues to yield the same conclusion if we assume that the programmer receives some share α of the total surplus where α is between 0 and 1.

so long as the programmer sells both networks bundled together as a single item, the negotiated fee for the bundle will be half this amount or \$.75.

Thus a single owner will be able to negotiate higher total fees than will two separate owners. The basic economic reason is simply that, when negotiations for each network occur separately, each programmer is only able to extract some share of the joint profit from adding the last network. However, when negotiations occur for a bundle of networks, the programmer is able to extract a share of the joint surplus from adding the entire bundle. So long as networks within the bundle are substitutes, the joint surplus from adding a bundle of both networks will be greater than twice the surplus from adding the last network.

Standard economic principles suggest that a significant share of any increase in programming fees will be passed through to subscribers in the form of higher subscription prices. In particular, since programming fees are levied on a per subscriber basis, they represent a marginal cost of providing service to the MVPD, and we would normally expect a substantial share any increase in marginal costs to be passed on to consumers in the form of higher prices. For example, one study of cable prices found that, in general, about 50 percent of increases in programming costs were passed through to subscribers in the form of higher subscription fees.²⁰ In its evaluation of the DirecTV-News Corp. transaction, the Commission itself concluded that higher programming fees are “passed on to consumers in the form of higher rates.”²¹ The Federal Trade Commission reached a similar conclusion in its evaluation of the Time

²⁰George S. Ford and John D. Jackson, “Horizontal Concentration and Vertical Integration in the Cable Television Industry,” *Review of Industrial Organization*, 12(4), 1997, 513-14.

²¹*See DirecTV-News Corp. Order* at para. 208.

Warner/Turner transaction.²² Finally, Professor Michael Katz has recently written a paper submitted to the Commission in another proceeding that unequivocally draws the conclusion that “retransmission fees are large and growing, and a significant percentage of these costs are passed on to consumers.”²³

B. EVIDENCE THAT COMBINED OWNERSHIP OF MULTIPLE BLOCKS OF MUST HAVE PROGRAMMING CAN RESULT IN SIGNIFICANT FEE INCREASES

In a nutshell, the horizontal theory of harm described above is that combined ownership or control of multiple blocks of must have programming can increase a programmer’s bargaining power and result in higher programming fees. Therefore, in order to test the theory we would need to gather evidence on how combined ownership or control of multiple blocks of must have programming affects programming fees. The best available evidence on this issue comes from markets for retransmission consent because retransmission consent markets are local and the extent to which multiple Big 4 stations in the same DMA are under joint ownership or control varies from DMA to DMA.²⁴ While the almost universal use of non-disclosure clauses has

²²See *Time Warner, Inc. et. al., Proposed Consent Agreement with Analysis to Aid Public Comment*, 61 Fed. Reg. 50301, 50309 (rel. September 25, 1999). “The complaint alleges . . . that substantial increases in wholesale programming costs for both cable systems and alternative providers - including direct broadcast satellite service and other forms of non-cable distribution - would lead to higher service prices.”

²³See Katz, Orszag, and Sullivan (2009) at page 30.

²⁴Although Commission rules generally prohibit common ownership of multiple Big 4 broadcasters in the same local market or DMA, there are a number of instances where common ownership has been permitted through waivers or exceptions. Furthermore, separately owned Big 4 stations in the same DMA sometimes agree to jointly negotiate retransmission consent agreements. Such arrangements are often negotiated as part of more comprehensive shared services agreements (SSAs) that transfer control of all or part of the operations of one station to the management of another station in the same DMA. I have described these arrangements in more detail in another paper written for the ACA that was submitted by the ACA to the Commission with its comments on the ongoing retransmission consent proceeding. See William

limited the amount of information available, a small number of cable operators have conducted their own studies of how the magnitude of retransmission consent fees they pay for Big 4 stations is affected by the ownership/control status of the stations, and reported the results to the Commission. For example, Suddenlink has reported the following result to the Commission in a recent filing.

“Suddenlink has examined its own retransmission consent agreements and has concluded that, where a single entity controls retransmission consent negotiations for more than one ‘Big 4’ station in a single market, the average retransmission consent fees Suddenlink pays for such entity’s ‘Big 4’ stations (in all Suddenlink markets where the entity represents one or more stations) is 21.6% higher than the average retransmission consent fees Suddenlink pays for other ‘Big 4’ stations in those same markets. This is compelling evidence that an entity combining the retransmission consent efforts of two ‘Big 4’ stations in the same market is able to secure a substantial premium by leveraging its ability to withhold programming from multiple stations.”²⁵

More recently, three cable operators, filing in the Commission’s ongoing retransmission consent proceeding, reported that retransmission consent fees are 161%, 133% and 30% higher for Big 4 broadcaster stations in the same DMA that are subject to joint control or ownership than for separately owned/controlled broadcaster stations.²⁶

P. Rogerson, “Joint Control or Ownership of Multiple Big 4 Broadcasters in the Same Market and its Effect on Retransmission Consent Fees,” submitted as part of its comments by the ACA, *In the Matter of Petition for Rulemaking to Amend the Commission’s Rules Governing Retransmission Consent*, MB Docket No. 10-71, May 18, 2010.

²⁵Suddenlink Communications, “Ex Parte Comments of Suddenlink Communication in Support of Mediacom Communications Corporation’s Retransmission Consent Complaint,” *Mediacom Communications Corp., Complainant, v. Sinclair Broadcast Group, Inc. Defendant*, (“*Mediacom-Sinclair Complaint*”), CSR No 8233-C, 8234-M at 5.

²⁶*Ex-Parte* Communication of Cable America, *In the Matter of Petition for Rulemaking to Amend the Commission’s Rules Governing Retransmission Consent*, MB Docket No. 10-71, May 28, 2010; *Ex-Parte* Communication of USA Companies, *In the Matter of Petition for Rulemaking to Amend the Commission’s Rules Governing Retransmission Consent*, MB Docket No. 10-71, May 28, 2010; and *Ex-Parte* Communication of Pioneer Telephone Cooperative, *In the Matter of Petition for Rulemaking to Amend the Commission’s Rules Governing Retransmission Consent*, MB Docket No. 10-71, June 4, 2010.

It is also worth noting that the Department of Justice (DOJ) has brought at least one anti-trust action based on the theory that combined control of retransmission consent negotiations for multiple Big 4 stations in the same market is collusion will result in anti-competitive increases in retransmission consent fees. In particular, on February 6, 1996 the DOJ filed a complaint alleging that three of the Big 4 stations in the Corpus Christi DMA had illegally colluded to raise retransmission consent fees by entering into an agreement to jointly negotiate these fees. In response the three firms entered into a settlement agreement to halt this practice and refrain from such practices in the future.²⁷

In its recent comprehensive report on retransmission consent, the Congressional Research Service describes a large number of retransmission consent disputes in detail and offers the following qualitative observation.

“In the earlier section presenting specific examples of programmer-distributor conflicts, it was striking how often the broadcaster involved in a dispute owned or controlled more than one broadcast station in a small or medium sized market. It appears that where a broadcaster owns or controls two stations that are affiliated with major networks, that potentially gives that broadcaster control over two sets of must-have programming and places a distributor, especially a relatively small cable operator, in a very weak negotiating position since it would be extremely risky to lose carriage of both signals.”²⁸

Finally, in other recent proceedings before the Commission, both Comcast itself and Professor Michael Katz have separately expressed their own serious concerns over the issue that joint ownership or control of multiple Big 4 stations in the same DMA may result in higher retransmission consent prices. Comcast expressed its concerns in a filing in the same proceeding

²⁷*United States of America v. Texas Television, Inc., Gulf Coast Broadcasting Company, and K-Six Television, Inc.*, February 2, 1996, (“*DOJ Retransmission Consent Case*”). Available at: <http://www.justice.gov/atr/cases/texast0.htm>.

²⁸*CRS Report at CRS-70.*

as the Suddenlink filing quoted from above. Comcast described Suddenlink's finding that it pays higher retransmission consent prices in markets where a single entity owns or controls multiple Big 4 stations and recommended that the Commission should further investigate this issue, stating:

“The Commission should consider in this proceeding whether the joint exercise of retransmission consent rights under the Sinclair LMAs and other arrangements are resulting in similar public interest harms and are contrary to the statutory and regulatory requirement that retransmission consent negotiations be conducted in good faith.”²⁹

Professor Michael Katz made the following statement in another recent coauthored paper which was submitted to the Commission in another proceeding:

“To the extent that broadcast stations entering into LMAs are substitutes from the perspective of MVPDs, such joint negotiations eliminate competition and raise the stations' bargaining power, which will result in consumer harm”³⁰

In summary, then, the best available evidence on the effect of combined ownership or control on program fees comes from retransmission consent markets. This is because retransmission consent markets are local and the extent to which multiple Big 4 stations in the same market are jointly owned or controlled varies from market to market. This evidence suggests that joint ownership or control of multiple Big 4 stations in the same DMA can increase retransmission consent fees by 20% and possibly much more.

C. THE GEOGRAPHIC LOCATION OF THE HORIZONTAL HARM

The horizontal harm of this transaction will be greatest in regions of the country served by an NBC O&O and a Comcast RSN. An appendix to this paper provides a complete listing of

²⁹Comments submitted by Comcast in *Mediacom-Sinclair Complaint*, November 25, 2009.

³⁰See Katz, Orszag, and Sullivan (2009) at page 27.

DMAs, the number of TV households in each DMA, and information on whether each DMA is served by an NBC O&O or Comcast RSN. Based on these data, there are 6 DMAs that are served by both an NBC O&O and a Comcast RSN. These are Chicago, Philadelphia, San Francisco, Washington DC, Miami, and Hartford-New Haven. These DMAs contain 13.8 million TV households or 12.1% of all TV households.³¹ The horizontal harm may potentially still be significant in areas of the country served by a Comcast RSN but not served by an NBC O&O to the extent that the combined entity is able to raise programming fees by bundling the Comcast RSN along with the NBCU national cable networks. Based on the data provided in the appendix, it can be seen that there are 54 DMAs that are not served by an NBC O&O but that are served by a Comcast RSN. These contain 32.1 million TV households or 27.9 % of all TV households. Therefore, in total, 45.9 million TV households or 40% of all TV households, located in 60 DMAs are threatened by the horizontal harm from this transaction.

3. THE VERTICAL HARM

A. THE THEORY OF HARM

The vertical harm is that Comcast's ownership share in the joint venture combined with its ownership of its MVPD business will increase the joint venture's ability to bargain for higher programming fees for NBCU programming from MVPD rivals of Comcast. These fee increases will be substantially passed through to subscribers in the form of higher subscription fees.

The economic reason for this result can be most simply explained through a two step process. The first step is to explain why Comcast and the joint venture will coordinate their

³¹As will be seen below in the next section, it turns out that these six DMAs are also the DMAs that will suffer the most significant vertical harm.

actions after the transaction to maximize their combined profits. The second step is then to explain why an entity attempting to maximize the combined profits of the joint venture and Comcast will be able to bargain for higher programming fees from rivals of Comcast. After describing each step of the explanation in detail, I will then close this subsection by explaining how the theory of harm leads to a simple and natural procedure for estimating the magnitude of the harm.

Step #1: Comcast and the joint venture will coordinate their actions after the transaction to maximize their combined profit.

Standard economic theories that explain why a transaction that results in combined ownership of two vertically related firms will cause competitive harm rely on the prediction that, after the transaction, the two vertically related firms will choose actions that maximize their joint profits. If the transaction is a simple merger, the transaction produces a single common owner of both firms, and it will obviously be in the direct interest of the single common owner to maximize combined profit. However, if the transaction results in partially overlapping ownership shares, as is the case in this transaction, the two firms will need to be able to redistribute profits between themselves in order for it to always be in their direct interests to maximize combined profits. Thus, in principle, one defense that the entities participating in such a transaction could offer is that the overlapping ownership shares will not be significant enough to allow the parties to cooperatively coordinate their actions to maximize their combined profits.

I believe that this is a specious argument that the Commission should reject. The reason for this is that, in general, the type of close coordination that would be required to achieve any of the claimed efficiencies that a transaction would produce is exactly the same type of

coordination that would be required for the firms to successfully engage in the anticompetitive actions that would produce vertical harms. That is, the proponents of a vertical transaction cannot have it both ways with respect to the issue of whether or not the transaction will allow the two entities to closely coordinate their actions to take advantage of profit maximizing opportunities. If the transaction will not allow close coordination, then the transaction will not produce any efficiencies and should not be approved. If the transaction will allow close coordination, then the transaction may potentially result in efficiencies but it must also necessarily result in the parties to the transaction taking advantage of opportunities to engage in coordinated anticompetitive behavior.

The Commission has previously acknowledged this point in its analysis of the DirecTV-News Corp. transaction, which involved News Corp. purchasing a 34% interest in DirecTV which could be increased to 50%. One of the scenarios which the Commission considered in evaluating foreclosure incentives was the scenario where News Corp. made decisions to maximize the combined profits of both firms. It described one of the rationales for this decision as follows:

“The proposed joint endeavors between News Corp. and DirecTV that are a basis for many of the Applicants’ claimed benefits provide ample opportunities to compensate News Corp. for the losses in programming revenue associated with foreclosure and make the strategy profitable to both firms and their stockholders.”³²

Step #2: If the joint venture and Comcast take actions to maximize their combined profits, program fees that the joint venture charges to rivals of Comcast will increase.

The economic reason for this increase in programming fees is that the joint venture will take account of the fact that some of the customers of MVPDs that compete with Comcast would

³²*Appendix D, Staff Analysis of the Likelihood of Foreclosure in the Broadcast Television*

leave their current MVPD and switch to Comcast if NBCU programming were no longer available on their current MVPD. From an economic perspective, this means that the cost to the joint venture of providing NBCU programming to rivals of Comcast will be higher after the transaction because the joint venture will take account of the opportunity cost of Comcast's forgone profits from switching customers. Increases in opportunity cost have the same impact on programming fees as increases in direct cost. That is, if the transaction increases the opportunity cost to the joint venture of providing NBCU programming to rivals of Comcast by \$x per subscriber per month, this will have the same impact on programming fees as would occur if NBCU was required to pay a tax of \$x per subscriber per month when it sold programming to rivals of Comcast, or if the cost of delivering programming to rivals of Comcast increased by \$x dollars per subscriber per month. Standard economic theory predicts that an increase in cost will result in an increase in price.

Using standard economic theory to develop a formula to estimate the magnitude of harm.

In the absence of other information, a standard and well-accepted practice in economic theory is to predict that the negotiated price between a buyer and seller will rise by half the amount of any cost increase. This predicted outcome is usually referred to as the Nash bargaining solution. Therefore the most direct and natural method of estimating the likely effect of the transaction on programming fees is to begin by estimating the magnitude of the opportunity cost that will be created by the transaction. It is reasonable to project that programming fees will then rise by half this amount.

Programming Market, See DirecTV-News Corp. Order, at para. 7.

This is the method that the Commission used to estimate the likely vertical harms that would result from the Adelphia-TW-Comcast transaction which is the most recent significant transaction involving potential vertical harms considered by the Commission.³³ The Commission used a somewhat different method to investigate the potential significance of vertical harm in its earlier analysis of the DirecTV-News Corp. transaction.³⁴ In that case, it calculated the stand-alone profit from permanent or temporary withholding of programming and used the rule that a transaction would be viewed as creating a significant vertical harm if the stand-alone profit from permanent or temporary withholding of programming would be positive after the transaction. While this condition is a sufficient condition for prices to rise, it is clearly not necessary. So long as a transaction increases the opportunity cost of providing programming to rivals, there will generally be an increase in programming fees regardless of whether or not the stand-alone profit from permanent or temporary withholding becomes positive. Therefore a finding that the stand-alone profit from permanent or temporary withholding of programming after the transaction would be negative does not provide any direct evidence on the likely

³³In its analysis of this transaction, the Commission considered the case of an RSN that was vertically integrated with an MVPD and estimated the effect of an increase in market share of the affiliated MVPD on the price that the RSN would negotiate with unaffiliated competing MVPDs. In this case, the cost of providing the programming remained constant and the factor that changed was the rival unaffiliated MVPDs' maximum willingness to pay for the RSN. The Commission calculated the effect of an increase in the affiliated MVPD's market share on the competing unaffiliated MVPDs' maximum willingness to pay and assumed that half of this change would be passed through to the negotiated price. *See Adelphia-TW-Comcast Order*, appendix D. (The statement that half the change in the maximum willingness to pay is predicted to be passed through is made in paragraph 24. "Throughout our analysis we adopt a standard solution to bargaining games by assuming that the parties split the gains from trade.") Thus, the Commission's approach in this analysis was to determine how the transaction changed parties' threat points and predict that half of the changes in the value of the threat points would be passed through to the negotiated price. As will be seen below, this is exactly the procedure that I follow in my analysis of this transaction.

³⁴*See DirecTV-News Corp. Order.*

magnitude of the programming fee increase that will be caused by the transaction. The only way to investigate this issue is to directly calculate the opportunity cost of providing programming to rivals that is created by the transaction.³⁵

B. A SIMPLE EXAMPLE

Just as was true for the case of the analysis of horizontal harm, since the negotiation between a programmer and MVPD can be viewed as a bilateral negotiation to determine how to split the joint profit that would be created if the MVPD carried the program, the economic theory of bargaining can be used to describe the outcome of these negotiations.³⁶ A simple example can, once again, be used to explain the main ideas.

Suppose that a seller can sell a single unit of one good to a buyer. Suppose that the seller can produce the good at zero cost and that the good is worth \$200 to the buyer. If the buyer had all of the bargaining power and could make a take-it-or-leave-it offer to the seller, he would offer a price slightly above zero, and the seller would accept it. Conversely, if the seller had all of the bargaining power and could make a take-it-or-leave-it offer to the buyer, he would offer a price slightly less than \$200, and the buyer would accept it. More generally, we would expect the buyer and seller to negotiate a price somewhere between \$0 and \$200, and the negotiated price would essentially determine how the buyer and seller split the joint profit of \$200 that the buyer

³⁵It should be noted that in their economic report submitted in this proceeding on March 5, 2010 on behalf of the Applicants, Drs. Israel and Katz conduct the analysis the Commission used in the *DirectTV-News Corp. Order*. However, they did not undertake the analysis conducted by the Commission in the *Adelphia-TW-Comcast Order*. Thus, as noted above, while their analysis could potentially be used to conclude that competitive harm would occur, it cannot be used to necessarily conclude that competitive harm would not occur. The analysis I undertake herein, in fact, demonstrates that competitive harm would occur.

³⁶See footnote 17.

and seller will earn if the seller provides the good to the buyer. In the absence of any particular information about the relative bargaining strength of the two parties, a well-accepted and standard practice in the economics literature is to predict that the buyer and seller will split the joint gains equally. As noted earlier, this prediction is usually referred to as the Nash bargaining solution. In the particular case of this example, economic theory would therefore predict that the buyer and seller will negotiate a price of \$100. This is halfway between the seller's cost of \$0 and the buyer's value of \$200 and results in each party earning a profit of \$100.

Now suppose instead that the seller's cost of production is \$50 instead of \$0. The same reasoning would now predict that the buyer and seller will negotiate a price of \$125. This is halfway between the seller's cost of \$50 and the buyer's value of \$200 and results in each party earning a profit of \$75. Note, in particular, then, that under the Nash bargaining solution, an increase in the seller's cost of \$ x results in a negotiated price increase of $\$x/2$. That is, under the Nash bargaining solution, half of any cost increase is passed through to the negotiated price.

Finally, consider the case where the seller's direct cost of production is \$0. However, now assume that the seller owns another business that competes with the buyer and that the seller's business will lose \$50 of profit if the seller provides the product to the buyer. This example, of course, essentially captures the effect of a vertical transaction between the seller and a firm that competes with the original buyer. The main point to notice is that, as far as the seller is concerned, the vertical transaction has exactly the same effect on his cash flows as occurred when the seller had a direct cost of production of \$50. This is because the \$50 of lost profit that the seller will now experience if he provides the original buyer with the product is essentially still a \$50 cost to the seller. Economists use the term "opportunity cost" to describe such a cost.

Since the cash flows of the buyer and seller are exactly the same regardless of whether the cost of production is a direct cost or an opportunity cost, the economic theory of bargaining predicts exactly the same outcome in either case. In particular, after the vertical transaction the buyer will negotiate a price of \$125, and each party to the transaction will earn a profit of \$75 over above what they would earn if the transaction did not occur.

Therefore, in summary, a vertical transaction between the seller and another firm that competes with the original buyer will create a new opportunity cost for the seller when he provides the good to the original buyer to the extent that providing the original buyer with the good will reduce the profits of the firm that the seller owns. Furthermore, standard economic theory suggests that a reasonable prediction of the effect of the vertical transaction on price is that price will rise by half the amount of the opportunity cost increase created by the transaction. In particular, in the example considered above, the vertical transaction resulted in an increase opportunity cost of \$50 which caused price to increase by \$25, from \$100 to \$125.

It is also illuminating to apply the stand-alone profit withdrawal test to this example. Recall that the stand-alone profit from withdrawal is defined to be the change in profit that the seller would earn if he decided not to sell the good to the buyer where the price is set equal to the pre-transaction price. In this particular example, the pre-transaction price is \$100 and the seller now loses \$50 when he sells the product to the buyer. Therefore the stand-alone profit from withdrawal is -\$50 (i.e., after the transaction the seller would lose \$50 if he withdrew the product and did not sell it). Therefore the seller would not withdraw the good even if he had to sell it at the old price of \$100. However, the critical point is that this does not imply that there will be no vertical harm. Even though it would still be profitable for the seller to sell the good for \$100

after the transaction, standard economic theory predicts that the cost increase of \$50 will cause a price increase of \$25 so that price will increase from \$100 to \$125.

Note that the vertical transaction would have to increase the seller's opportunity cost by more than \$100 before the stand-alone profit of withdrawal would become positive. For example, suppose that the seller would lose \$125 on his other business if he sold the good to the original buyer. Then the stand-alone profit from withdrawal would be \$25 and the seller would be better off by simply not selling the good to the buyer instead of selling it for \$100. Obviously if the effect of the transaction is to make it unprofitable for the seller to sell the good to the buyer at the original pre-transaction price, it necessarily must be the case that the buyer and seller will negotiate a higher price before trade occurs under any possible theory of bargaining. However, under the standard theory of bargaining generally used by economists, increases in opportunity cost will lead to increases in the negotiated price even if it would still be profitable for the seller to sell the good at the old price.³⁷

C. ESTIMATING THE MAGNITUDE OF THE VERTICAL HARM

³⁷Note that this example considers the profitability of a permanent withdrawal of the product. In its analysis of the DirecTV-News Corp. transaction, the Commission also considered the profitability of a temporary withdrawal of the product. A temporary withdrawal will generally be more profitable than a permanent withdrawal because the loss of sales in the upstream market from withdrawal is temporary, but the gain in profit from customer switching in the downstream market is more long lasting. Thus the requirement that the stand-alone profit from temporary withdrawal be non-negative after the transaction is a stronger requirement than the requirement that the stand-alone profit from permanent withdrawal be non-negative after the transaction. However, the same general point still applies. Namely, standard bargaining theory predicts that the vertical transaction will increase prices to the extent that it increases the seller's opportunity cost of selling the good to rivals of its own downstream business. The vertical harm is caused by this price increase. Therefore the most correct and direct way to estimate the magnitude of the vertical harm is to directly estimate the increased opportunity cost created by the transaction.

Introduction

In this section I will estimate the effect of the vertical component of the transaction on the programming fees that the joint venture will charge unaffiliated MVPDs for NBCU programming. The magnitude of the effect will depend both on the particular type programming being considered and the particular type of MVPD acquiring the product. Since retransmission consent for each NBC O&O is a separate good that can be priced separately, I will calculate the effect of the transaction on the retransmission consent fee for each NBC O&O separately.³⁸ I will also consider the effect of the transaction on the program fee for a bundle consisting of all of NBCU's national cable networks. Thus I will estimate the effect of the transaction on the prices of 11 different program fees - the retransmission consent fees for each of the 10 NBC O&Os and the fee for a bundle consisting of NBCU's national cable networks. It will turn out that it will be useful to distinguish between 3 different types of unaffiliated MVPDs to whom the joint venture sells programming to. These are: DBS providers and telephone companies ("telcos" which for the purposes of this paper include the two largest, AT&T and Verizon); other incumbent cable providers; and cable overbuilders.³⁹

³⁸It is also possible to use the same type of method as I use below to calculate the effect of the transaction under the assumption that there is a single common retransmission consent fee charged for all NBC O&Os. The dollar magnitude of the fee increase is intermediate between the various DMA-specific fee increases I calculate below, and yields approximately the same increase in total payments. That is, although the harm would be spread somewhat differently if a single common retransmission consent fee is charged for all NBC O&Os, the total magnitude of the harm would be approximately the same.

³⁹I include as cable overbuilders all wireline MVPDs that compete with an incumbent cable provider, except for the two large telcos, AT&T and Verizon. Such firms are sometimes also referred to as broadband service providers. The reason for excluding AT&T and Verizon from this category is simply that, because they are very large and national in scope and still growing rapidly, they are becoming more like the two large DBS providers for purposes of this analysis.

The General Formula

As explained in the previous section, a reasonable prediction of the fee increase due to this transaction is equal to half the value of the increased opportunity cost created by the transaction. It will be necessary to introduce some notation in order to describe the formula that can be used to calculate the opportunity cost. I will refer to the programmer and MVPD that are vertically integrated as the affiliated programmer and the affiliated MVPD. I will refer to the other MVPD that is not vertically integrated as the unaffiliated MVPD. The question is to calculate the per subscriber opportunity cost to the vertically integrated firm of selling its programming to the unaffiliated MVPD. Let π denote the profit per subscriber earned by the affiliated MVPD. Let d be a number between 0 and 1 denoting the share of the unaffiliated MVPD's customers that would leave the unaffiliated MVPD if it did not carry the programming and let α be a number between 0 and 1 denoting the share of the leaving customers that switch to the affiliated MVPD. Finally, let C denote the per subscriber opportunity cost to the vertically integrated firm of providing programming to the unaffiliated MVPD caused by the transaction. It is given by:

$$C = \alpha d \pi \quad (1)$$

This formula can be explained as follows. If the unaffiliated MVPD did not carry the programming, the share of the unaffiliated MVPD's customers that would leave the MVPD and go to the affiliated MVPD is equal to αd . The per subscriber opportunity cost of selling programming to subscribers of the unaffiliated MVPD is therefore equal to the share of

customers that would switch to the affiliated MVPD, αd , multiplied by the profit per subscriber that the affiliated MVPD will earn on every customer that does switch, π .

Let ΔP denote the predicted change in programming prices. As explained in the previous section, this is equal to half the opportunity cost created by the transaction.

$$\Delta P = C/2 \tag{2}$$

Substitution of equation (1) into equation (2) yields

$$\Delta P = \alpha d \pi / 2 \tag{3}$$

Therefore, in order to estimate the likely effect of the transaction on programming fees that the combined entity will charge unaffiliated MVPDs for NBCU programming, we simply need to determine plausible values for the three parameters - α , d , and π - and plug these values into equation (3). The Commission will of course want to make its own determination of the most reasonable values or ranges of values to use for each of these parameters. However, to provide some information about the rough order of magnitude of the harm and to illustrate the nature of the calculation, I will use publicly available data to determine what I believe are reasonably plausible parameter values and use to these to calculate what I would interpret as being a reasonably plausible initial estimate of the likely effect of the vertical transaction on programming fees.

Plausible Values of π and d

First consider the parameter π , which is the variable profit that Comcast earns on each of its customers. Bernstein Research has recently reported that Comcast's video direct gross profit per subscriber in 2009 was \$42.98 per subscriber per month.⁴⁰ I will use this as my estimate of π . My understanding of this figure is that it does not include profit contributions from broadband or telephone service. To the extent that customers that switch from rival MVPDs would also switch their broadband Internet and/or telephone service to Comcast, this figure should be increased. Thus the figure of \$42.98 may be somewhat conservative.

Now consider the parameter d , which is the share of the unaffiliated MVPD's customers that would leave if the programming became unavailable. Recall that we wish to consider two different types of programming - the signal of a local NBC affiliate and a bundle consisting of all of NBCU's national cable networks. First consider the effect on an MVPD of losing carriage of the local NBC affiliate. An important point to note is that, for purposes of this calculation, the correct value of d to use is the value for a permanent withdrawal of the NBC signal. Much of the available data about the effect of program withdrawal on subscriber loss is for temporary withdrawals associated with contract disputes, some lasting no more than a day or two. We would of course expect a much larger subscribership response to the permanent non-availability of a network than for a withdrawal associated with a contract dispute that most people would reasonably expect to be temporary. The GAO has gathered evidence on this subject by examining subscribership data for DBS providers during the transition period when local stations were offered by DBS providers in only some regions of the country. It reports that "in areas

⁴⁰Bernstein Research, *U.S. Cable & Satellite Broadcasting & U.S. Media: Sizing Up the "Retrans" Battle Royal*, April 4, 2010, Exhibit 38 at page 22, ("Bernstein Retransmission

where DBS subscribers can receive local broadcast channels from both DBS companies, the DBS penetration rate is approximately 32 percent higher than in areas where subscribers cannot receive local broadcast channels via satellite.”⁴¹ This means that DBS subscribership was 24% lower in regions of the country where DBS providers could not offer the signals of local TV stations.⁴² Of course this was the response to the complete non-availability of all local stations. We would expect a smaller response if only the NBC signal was not available. For purposes of my example calculation I will use a value of $d = .05$. That is, I will assume that the permanent non-availability of the local NBC signal would cause an MVPD to lose 5% of its customers.

Based on my earlier observation that the bundle consisting of all the NBCU national cable networks has comparable ratings to those of the Big 4 networks, I will use the same value of d for the case of the withdrawal of the bundle of NBCU national cable networks as I use for withdrawal of the NBC signal. That is, I will assume that the permanent non-availability of the bundle of NBCU national cable networks would cause an MVPD to lose 5% of its customers.

Substitution of Plausible Values for π and d Into the Formula

Substitution of these plausible values for π and d into equation (3) yields

$$\Delta P = \alpha \$1.07 \quad (4)$$

That is, the estimated effect of the transaction on programming fees is equal to \$1.07 per

Consent Report”).

⁴¹General Accounting Office, *Telecommunications: Issues in Providing Cable and Satellite Television Services*, GAO-03-130, October, 2002 at 3.

⁴²That is $(1.32 - 1)/1.32 = .24$.

subscriber per month multiplied by the share of customers leaving the MVPD that switch to Comcast. The explanation for this result is simple. Given that Comcast earns a profit of \$42.98 per month on each subscriber that switches to it, and given that 5% of the MVPD's subscribers will shift if the programming is withdrawn, the opportunity cost to the combined entity of providing programming to the MVPD would be $.05 \times \$42.98$ or \$2.15 per subscriber per month if all of the leaving subscribers switched to Comcast. The effect on price would be half this amount or \$1.07. The actual effect on price is proportional to the share of customers that actually will switch to Comcast. Multiplying \$1.07 by this share, α , yields formula (4).

Plausible Values of α

Now consider the parameter α , which is the share of customers leaving the MVPD that switch to Comcast. To explain the calculation of α it will be useful to introduce some additional notation. Consider any of the 11 types of programming listed above. Each type programming is sold over a well-defined region.⁴³ Assume that there are a number of incumbent cable providers in the region and that every household can be served by exactly one of the incumbent cable providers. That is, the incumbent cable providers do not compete with one another. There also may be a number of additional MVPDs capable of serving all or part of the region.

I will define the market share of an MVPD in this region to be the share of total MVPD customers in the region that are served by the particular MVPD. Let s_C denote the market share of Comcast in the region. Let s_O denote the market share of all other incumbent cable providers in the region. Then let $s_I = s_C + s_O$ denote the market share of all incumbent cable providers in the region.

It is of course obvious that if customers are leaving one of the other incumbent cable providers, that none of them will switch to Comcast because, by assumption, the incumbent cable providers have non-overlapping service areas. Therefore the real question of interest regards the value of α for some other MVPD that serves the region, which I will call the rival MVPD. Let s_R denote the market share of the rival MVPD. The other critical parameter that we will need to know in order to calculate α is the share of the rival MVPD's customers that could be served by Comcast. Let θ denote this value. The formula for α is then given by

⁴³The signal of each NBC O&O is sold over the DMA it operates in. The bundle of NBCU national cable networks is sold over the entire country.

$$\alpha = s_I \theta / (1-s_R). \quad (5)$$

This formula can be explained as follows. First consider calculating the share of customers that will switch to any of the incumbent cable providers. Of course the share $(1-s_R)$ of the customers in the region already chose some MVPD other than the rival. In the absence of any additional information about the customers that are now leaving the rival it is reasonable to assume that the additional customers that are now leaving will distribute themselves among the other MVPDs in the same manner. In particular, then the share of customers leaving the rival MVPD that will choose the incumbent cable provider is therefore equal to $s_I/(1-s_R)$. Since Comcast passes θ of these customers, θ of them will choose Comcast. This yields the formula in (5).

This formula can be rewritten in a slightly different form for the case of a DBS provider. Since a DBS provider is generally available over the entire region, it is reasonable to assume that the share of the DBS provider's customers passed by Comcast is equal to Comcast's share of the incumbent cable customers. That is, it is reasonable to assume that

$$\theta = s_C/s_I \quad (6)$$

Substitution of (6) into (5) yields the formula for α for the case of a DBS provider.

$$\alpha = s_C/(1-s_R) \quad (7)$$

Therefore formula (7) can be used to calculate the value of α for a DBS provider. Cable overbuilders often serve very small specific areas so the share of a cable overbuilder's customers passed by Comcast may bear very little relation at all to the overall share of households in the entire region passed by Comcast. Although the video deployments by the two telcos are not as widely available as the services of DBS providers, their availability is increasing rapidly, and they are much more broadly distributed than cable overbuilders. Therefore it seems likely that the value of θ for telcos, especially for national cable programming which is sold all over the country, will be fairly close to the value of θ for DBS providers. That is, especially for the nation as a whole, the share of homes that Comcast passes for the nation as a whole is likely fairly close to the share of homes that Comcast passes that are served by either of the two telcos. Therefore for purposes of interpreting my results, I will interpret the results using formula (7) as applying to both DBS providers and telcos.

The Results

The results can now be presented. Recall that I will consider two different types of programming (the signals of NBC O&Os and a bundle of the NBCU national cable networks) and three different types of MVPDs that the programming could be sold to (DBS providers/telcos, cable overbuilders, incumbent cable providers). I will now provide estimates of the effect of the transaction on programming fees for all 6 cases, some of which can be considered together.

Incumbent Cable Providers

The easiest case of course is the case of any programming sold to some other incumbent cable provider. Since Comcast does not compete with such providers, there will be no effect at all on the programming fees that Comcast charges these providers due to the vertical aspect of this transaction.

Retransmission Consent Fees Charged to DBS Providers and Telcos

Table 1 provides MVPD subscribership data for the 10 DMAs served by an NBC O&O, broken down into the following categories: Comcast, Other Cable, Total Cable, DirecTV, DISH, Verizon, AT&T, and Total. It also provides the same information for the country as a whole. Table 2 presents the same subscribership data for each type of service as a percentage of the total number of MVPD subscribers in the DMA. The DMAs are ordered from highest to lowest according to Comcast's market share. Note from Table 2 that the market shares of the two DBS providers and the two telcos vary between 0% and 28.5%. Therefore, for purposes of calculating values of α according to the formula in equation (4), we would want to consider values of s_R between 0 and .285. Note that α increases in s_R . That is, if Comcast withdraws NBC service from a DBS provider with a higher market share, it will generally obtain a higher share of the remaining customers. For purposes of calculating α , I will use a value of s_R equal to .10 which is in the middle of this range. The true value of α would be slightly higher or lower than this for the case of withdrawal from a particular MVPD depending upon whether the MVPDs market share was higher or lower than this.

Table 3 presents the values of α by DMA calculated using equation (4). It also presents the calculation of the estimated opportunity cost due to the transaction, C , and the estimated fee

increase due to the transaction, ΔP , calculating by using, respectively, equations (1) and (2). Of the 10 DMAs served by NBC O&Os, Comcast has a significant presence in 6 of these.⁴⁴ Reference to the Appendix shows that 13.8 million TV households or 12.1% of all TV households are located in these six DMAs. These are (with Comcast's market share in parentheses): Philadelphia (62.9%), Chicago (60.8%), San Francisco (57.2%), Miami (52.8%), Washington D.C. (44.8%) and Hartford-New Haven (38.9%). According to these estimates, as a result of the transaction, the opportunity cost to the combined entity of providing rival MVPDs with retransmission consent in these 6 DMAs will increase by between \$.92 per subscriber per month and \$1.50 per subscriber per month. This will cause retransmission consent fees for the NBC O&O to increase by between \$.46 per subscriber per month and \$.75 per subscriber per month. Many analysts predict that, without any further structural changes in the environment that retransmission consent fees for the Big 4 networks are likely to rise to a level between \$.50 and \$.75 over the next few years.⁴⁵ Therefore, according to this estimate, the effect of this vertical transaction in the 6 DMAs served by an NBC O&O where Comcast has a significant presence will be essentially to double retransmission consent fees charged by the NBC O&O to DBS providers and telcos.

National Cable Network Fees Charged to DBS Providers and Telcos

⁴⁴Note that these are exactly the same DMAs that would experience the most significant horizontal harm. As explained in the previous section, the DMAs that would experience the most significant horizontal harm are the DMAs with an NBC O&O and a Comcast RSN. As explained in this section, the DMAs that will experience the most significant vertical harm are the DMAs with an NBC O&O and a significant Comcast Cable presence. These groups turn out to be identical. This is simply because Comcast tends to own RSNs in the same regions that it has a significant cable presence.

⁴⁵*See Bernstein Retransmission Consent Report.*

From Table 2 Comcast's national market share is .236. I will, once again, use a value of .10 for a representative DBS/telco market share. Substituting these values into equation (7) yields a value of α of .262. Substituting this value of alpha into equation (4) yields a value of ΔP equal to \$.28 per subscriber per month. The sum of the 2009 fees charged for these networks is equal to \$1.56.⁴⁶ Thus according to this estimate the effect of the transaction would be to increase the fees that DBS providers and telcos pay for NBCU's national cable networks by about 18%. While this fee increase is smaller than the increases in retransmission consent fees that will occur in the most seriously affected DMAs, it is still significant.

The reason that the magnitude of the estimated effect is smaller is of course because the DBS providers and telcos have a national presence while Comcast is only located in some regions of the country. In particular, in regions of the country where Comcast is not located, withdrawing programming from DBS providers or telcos will result in no extra customers switching to Comcast. This lowers the estimated value of α which in turn lowers the estimated value of ΔP .

Cable Overbuilders

Equation (5) gives the value of α for a cable overbuilder conditional on the three parameters s_R , s_I , and θ . To calculate the value of α relevant for estimating the effect on retransmission fees for a particular NBC O&O, it would be appropriate to use values of these parameters for the DMA in which the NBC O&O operates. Similarly, to calculate the value of α

⁴⁶2009 per subscriber per month subscription fees for the NBCU national cable networks, were: USA - \$.55, SyFy - \$.21, Bravo - \$.19, MSNBC - \$.16, mun2 - \$.06, Oxygen - \$.10, and CNBC - \$.29, for a total of \$1.56. *Source:* Kagan data as reported in Peter Kafka, "Hate Paying for Cable? Here's Why," *All Things Digital*, <http://mediamemo.allthingsd.com/20100308/hate->

for estimating the effect on the fee for the bundle of NBCU national cable networks, it would be appropriate to use values for the nation as a whole. With reference to Table 2 it can be seen that the value of s_I does not vary significantly between DMAs and is generally close to the national value. Therefore I will simply report results using the national value, and these are also approximately correct for purposes of calculating the effect on retransmission consent prices in a particular DMA. From Table 2 the national value of s_I is .615. Generally speaking cable overbuilders are very small; the national market share of any individual cable overbuilder is certainly very close to 0, and the market share of any individual cable overbuilder in a particular DMA is also generally quite small. Therefore for purpose of my estimate, I will use a value of s_R equal to 0.⁴⁷ Substitution of these values for s_I and s_R into equation (5) yields

$$\alpha = .615 \theta \quad (8)$$

Substitution of equation (8) into equation (4) then yields the formula for calculating the dollar magnitude of the effect of the transaction.

$$\Delta P = \theta \$.66$$

That is, the effect of the transaction on the programming prices that the combined entity will charge a cable overbuilder is equal to θ multiplied by \$.66 per subscriber per month. This will be the effect both on the retransmission consent fees charged to cable overbuilders located in

paying-for-cable-heres-the-reason-why/.

⁴⁷Of course a larger value of s_R would make α larger. Thus my estimate is conservative.

DMAs served by an NBC O&O, and it will also be the effect on the fee for the bundle of NBCU programming that all cable overbuilders are charged.

Recall that θ is simply equal to the share of the overbuilder's customers that are passed by Comcast. This value can vary between 0 and 1 depending on the particular overbuilder being considered. Suppose for example, that θ was equal to .44, which is the value of θ for cable overbuilder RCN.⁴⁸ This produces a fee increase of \$.29 per subscriber per month. An increase of this magnitude would represent a 58% increase over a retransmission consent fee of \$.50 per subscriber per month and a 19% increase over a program fee of \$1.56 per subscriber per month for a bundle of the NBCU national cable networks. Thus, even relatively modest values of θ can produce significant levels of harm. Of course larger values of θ would produce correspondingly larger fee increases. If 100% of a cable overbuilder's customers were passed by Comcast, this would produce a fee increase of \$.66 per subscriber per month. An increase of this magnitude would represent more than a 100% increase over a retransmission consent fee of \$.50 and a 42% increase over a program fee of \$1.56 per subscriber per month for a bundle of the NBCU national cable networks.

⁴⁸Direct communication of RCN to ACA.

4. COMCAST'S PROPOSED CONDITIONS WILL NOT REMEDY THE HARMS

A. COMCAST HAS PROPOSED NO CONDITIONS TO REMEDY THE HORIZONTAL HARM

Comcast, at this point, has not even acknowledged the issue that the transaction may produce serious horizontal harm, and certainly has proposed no conditions that would remedy it.

B. FOUR PROBLEMS WITH PROGRAM ACCESS RULES AS A REMEDY FOR THE VERTICAL HARM

Introduction

Program access rules⁴⁹ are in a general sense intended to prevent vertically integrated programmers from discriminating against unaffiliated MVPDs. Although these rules do not apply to retransmission consent arrangements, Comcast has volunteered to accept a license transfer condition that would make its retransmission consent arrangements subject to program access rules. The main purpose of this section is to argue that simply extending the program access rules to apply to retransmission consent arrangements would not provide a remedy for the vertical harms of this transaction, because the effectiveness of the program access rules is severely limited by four critical problems. In this section I will describe these four problems. After describing the problems I will close with a brief discussion of how conditions could be crafted to avoid these problems and thus more effectively remedy the vertical harm.

The Quantity Discounts Loophole

Although the universal use of non-disclosure clauses in programming agreements

⁴⁹See *In the Matter of Review of the Commission's Program Access Rules and Examination of Program Tying Arrangements*, First Report and Order, MB Docket 07-198, January 20, 2010, for an extensive background discussion on program access rules.

between programmers and MVPDs means that no systematic publicly available information is available on this subject, I think that it is fair to say that it is an undisputed fact among industry participants and analysts that have access to these data, that programming agreements generally exhibit relatively significant quantity discounts. That is, holding all other factors constant, it is generally the case that larger MVPDs pay lower per subscriber fees for the same programming than do smaller MVPDs. Based on information provided by its membership and other industry sources, the ACA believes that small cable operators generally pay programming fees that are approximately 30% higher than the fees paid by the largest MVPDs for the same programming.⁵⁰ Although a small fraction of this differential may be explained by the differential costs of providing programming to large versus small MVPDs, the main explanation for this differential is that smaller MVPDs have considerably less bargaining strength than large MVPDs.⁵¹

The fact that there are significant quantity discounts in programming agreements, but that there is no systematic publicly available information about the magnitude of these discounts

⁵⁰Data released in a recent news report can be combined with information from Bernstein Research to provide some confirmation of this estimate. The news article ((See Mike Farrell, “Bresnan Draws Six Bidders,” Multichannel News, April 26, 2010, http://www.multichannel.com/article/451868-Bresnan_Draws_Six_Bidders.php) discusses Comcast’s potential sale of Bresnan Communications. The article states that Bresnan’s programming costs will increase by between \$10 million to \$40 million dollars per year after the sale, because Bresnan’s will lose access to Comcast’s quantity discounts. It also reports that Bresnan currently has 320,000 subscribers. According to Bernstein Research (See *Bernstein Retransmission Consent Report* at page 22) Comcast’s program cost is \$24.59 per subscriber per month. Multiplying this by 12 and then by 320,000 yields an annual program cost for Bresnan of \$94.43 million. The estimated dollar range of extra fees that a smaller cable operator would pay of between \$10 million and \$40 million therefore translates into a percentage premium of between 11% and 42%. The midpoint of this range is 26.5%.

⁵¹See William P. Rogerson, “The Economic Effects of Price Discrimination in Retransmission Consent Agreements,” submitted to the Commission by the ACA as an attachment to its comments in the ongoing retransmission consent proceeding, *In the Matter of Petition for Rulemaking to Amend The Commission’s Rules Governing Retransmission Consent*, MB Docket No. 10-71, May 18, 2010.

creates a serious enforcement problem for program access rules. The problem occurs when a vertically integrated programmer charges its affiliated MVPD a significantly lower per subscriber fee than it charges to an unaffiliated MVPD, but the affiliated MVPD is larger than the unaffiliated MVPD. The theoretically correct enforcement procedure for the Commission to follow might be to attempt to compare the difference in the fees paid by the affiliated MVPD and the unaffiliated MVPD to the difference in fees that nonintegrated programmers generally charge to MVPDs of these two different sizes. Only fee differentials over and above the “typical quantity discount” would then be viewed as discriminatory. The problem is that the Commission does not have the data to implement such a scheme. To the best of my knowledge, the Commission has never provided an explicit description of the approach that it takes to dealing with this problem when it evaluates a program access complaint. However, based on my discussions with industry participants and my own review of the existing cases, I believe that it is fair to say that the Commission has been extremely reluctant to reach a finding that anticompetitive price discrimination has occurred when a vertically integrated programmer provides its own affiliate with lower prices than an unaffiliated MVPD, but the affiliated MVPD is larger than the unaffiliated MVPD. That is, in practice program access rules appear to have placed very little, if any, restriction on the extent to which a vertically integrated programmer can charge higher fees to rival MVPDs so long as the rival MVPDs are smaller than its affiliated MVPD.

One piece of evidence in support of this is the extraordinarily small number of successful cases alleging price discrimination that have been filed with the Commission since the inception of program access rules in 1992. The ACA engaged its outside counsel, Cinnamon Mueller, to

conduct an exhaustive search of program access filings to identify cases where the Commission ruled in favor of complaints alleging price discrimination and was able to locate only two such filings, one in 1997 and one in 1998.⁵² Cinnamon Mueller found that the vast bulk of successful program access cases involve refusals to deal. Thus, I conclude that while program access rules as they are currently enforced can quite effectively deal with complete refusals to deal, it appears that they may not be able to effectively deal with price discrimination.

Since Comcast is the largest MVPD in the nation, program access rules will be particularly ineffective in preventing Comcast from charging higher prices to its rivals. More specifically, the analysis of vertical harm in Section 3 of this paper identified 6 DMAs where the potential for vertical harm was greatest. These were DMAs where there was an NBC O&O and Comcast was the incumbent cable provider over most of the region. The data in Table 1 reveals that Comcast is the largest MVPD operating in each of these six DMAs. Thus, to the extent that program access rules allow Comcast to charge higher prices to MVPDs smaller than itself, program access rules will place no restriction at all on the retransmission consent prices that Comcast will be able to charge its rivals in these six DMAs. Similarly, program access rules will place very little constraint on the fees that Comcast charges other MVPDs for national cable networks.

No Automatic Right to Continued Carriage While a Complaint is Pending

Under current program access rules, if a programmer and MVPD with an existing

⁵²Corporate Media Partners d/b/a Americast and Ameritech New Media, Inc. V. Rainbow Programming Holdings, Inc., CSR-4873-P, DA 97-2040, September 23, 1997 and Turner Vision, Inc. Satellite Receivers, Ltd, Consumer Satellite Systems, Inc., and Programmers Clearing House, Inc., v. Cable News Network, Inc., CSR-4676-P. DSR-4677-P, CSR-4678-P, CSR-4706,

agreement are unable to reach new terms and the old agreement has expired, the programmer has the right to withdraw the program even if the MVPD has filed a program access complaint with the Commission. Program access complaints typically take 6 months or more to adjudicate. Thus, even if the MVPD has a perfectly legitimate program access complaint that both itself and the programmer believe that the MVPD can win, the programmer is still able to credibly threaten to withdraw the programming in dispute for 6 months or more while any filed complaint is adjudicated. As the Commission has noted in detail in its analysis of previous vertical transactions, temporary withdrawals of programming lasting much shorter periods than six months can cause significant long-term harm to an MVPD because dissatisfied customers leave during the temporary withdrawal and, once they have signed up with a new MVPD, are highly unlikely to return when carriage is restored.

On-Line Programming

A major recent development in the MVPD industry is the introduction of so-called “TV Everywhere” type services by the major MVPDs that allow individuals who subscribe to an MVPD to have access to a wide variety of on-demand services over the Internet at no extra charge.⁵³ Smaller cable operators believe that this is going to become an attractive service to subscribers and they will have to be able to offer their own TV Everywhere-type services to be able to compete effectively for customers with MVPDs that offer such a online capabilities.

DA 98-1295, June 20, 1998.

⁵³The term “TV Everywhere” was coined by Time Warner and Comcast when they suggested this type of service as a general model that MVPDs could follow. See Charles B. Goldfarb, *The Proposed Comcast-NBC Universe Combination: How it Might Affect the Video Market*, Congressional Research Service Report 7-5700, February 3, 2010 at 13-17 for a more extensive background discussion of TV Everywhere.

Vertically integrated programmers will have the same incentives to disadvantage rival MVPDs when providing them with rights to use their programming for TV Everywhere-type online distribution services as when providing them with rights to use their programming for traditional MVPD service. The problem is that program access rules were enacted in 1992 long before any of these modern developments, and it is not clear that the language used to draft the current regulations will be interpreted as applying to on-line programming. In particular, it is not clear if program access rules will be interpreted as requiring vertically integrated programmers such as Comcast who make their own programming available to their TV Everywhere service, to make this programming available to competing MVPDs on nondiscriminatory terms and conditions for purposes of creating their own TV Everywhere-type services.

Arbitrary Transfer Prices

The final problem with program access rules arises to the extent that the programming fees that a vertically integrated firm charges itself are simply internal transfer prices that shift accounting recognition of profits from one division of the firm to another. In this case vertically integrated firms who wish to charge high discriminatory prices to rival MVPDs may be able to do so without violating program access rules simply by raising the internal transfer price they charge themselves to the same high level and then instructing their downstream divisions to continue to purchase the integrated programming at the artificially high internal transfer price.

The Commission specifically recognized this problem with program access regulations when it considered both the DirecTV-News Corp. and the Adelphia-TW-Comcast transactions and cited this potential problem with program access rules as one the rationales for imposing

additional conditions on both transactions. For example in its analysis of the DirecTV-News Corp. transaction, the Commission stated:

“in the case of ‘must have’ RSNs, the very existence of the program access non-discrimination rules may create the perverse incentive for News Corp. to charge excessive rates for RSNs to DirecTV, in order for Applicants to disguise News Corp.’s behavior towards rival MVPDs. As we have found, the *de facto* control of DirecTV by News Corp. ensures that DirecTV will accept these rates, and rather than responding by raising its prices, will act in a manner that maximizes the joint profits of the Applicants by holding its rates steady. This will enable DirecTV to take advantage of its rivals’ response to their increased costs with rate increases, and permit DirecTV to gain market share. We believe that the same close coordination between News Corp. and DirecTV necessary to obtain many of the proposed benefits of the transaction ensures that the gains from the strategy of raising rivals’ costs can be obtained and equitably distributed between the shareholders of the two firms.”⁵⁴

In its analysis of the Adelphia-TW-Comcast transaction a year later, it restated this same conclusion.

“A vertically integrated firm could disadvantage its downstream competitors by raising the price of an input to all downstream firms (including itself) to a level greater than that which would be charged by a non-vertically integrated supplier of the input. Such nondiscriminatory pricing is not prohibited by the Commission’s program access rules The vertically integrated MVPD could then enjoy a competitive advantage, because the higher price for the programming that it would pay would be an internal transfer that it could disregard when it sets its own prices.”⁵⁵

C. IMPLICATIONS FOR POTENTIAL REMEDIES TO THE VERTICAL HARM

In this paper I do not attempt to provide a comprehensive discussion of possible remedies for the horizontal and vertical harms of the transaction. However, the above discussion of the four problems with program access rules has immediate implications for the issue of remedies

⁵⁴*DirecTV-News Corp. Order* at para. 170. Although this particular passage occurs in the section of the Commission’s report discussing RSNs, it makes the same point, though in somewhat more abbreviated form, in its discussion of retransmission consent. In particular, the Commission states that “the [program access] rules will not prevent News Corp. from uniformly raising broadcast programming carriage costs to all MVPDs, including DirecTV” at para. 211.

⁵⁵*Adelphia-TW-Comcast Order* at para. 119.

for the vertical harm, because the main test for effectiveness that a set of remedies to the vertical problem should be required to pass is that it deals with these four problems. In this section I will very briefly describe one such possible set of remedies.

A set of remedies that would effectively deal with the vertical harms of the transaction would need to have two components.

The first component would be to strengthen program access rules in three ways. First, a bright enforceable line would need to be drawn with respect to the issue of the extent to which Comcast is able to charge itself lower programming prices than its smaller rivals. My recommendation would be that the Commission limit the legal differential in prices only to the cost of program delivery and then conduct a staff study to determine the general extent to which the costs of providing programming to smaller operators are higher than the costs of providing programming to larger operators, and use this to define a “safe harbor” range of price discrimination that Comcast would be allowed to engage in subject to the current standards of proof. However, for price differences outside the safe harbor, if a program access complaint was filed, then Comcast would bear the burden of proof to establish that the differences were cost justified.⁵⁶ Second, the conditions should require interim carriage at the old rates while a program access complaint is being adjudicated. Third, the conditions should explicitly state that program rules apply to making programming available for on-line TV everywhere-type services.

The second major component of an effective set of remedies for the vertical harm would be conditions which implement a mandatory binding arbitration condition similar to those that

⁵⁶One technical detail related to such a condition is the issue of penetration rates. The nondiscrimination condition should only apply when penetration rates are the same. That is, Comcast should be allowed to charge higher fees if MVPDs distribute the programming to a smaller fraction of their subscribers.

the Commission used in the DirecTV-News Corp. and Adelphia-TW-Comcast transactions. However, as discussed further in the next section, a serious problem with existing binding arbitration conditions is that they are not a cost-effective option for small and medium-sized MVPDs, and the Commission would need to find a way to address this problem.

The purpose of the first component - strengthening program access rules - would be to provide a very low cost first line of defense that would hopefully deal with the majority of problems. The key to making the first line of defense effective and low cost is to provide a bright line for price discrimination that could be enforced in a relatively simply and direct manner through the complaint process at the Commission and to require interim carriage while a complaint is being adjudicated. (The expansion of the program access rules to on-line programming would be a natural addition to consider.) The purpose of the second component would be primarily to provide a second line of defense that potentially could be used to deal with unusually complex or difficult cases and also to deal with allegations that Comcast was circumventing program access rules by artificially raising the programming fees that it charges itself. The problem with this second line of defense is that it is very costly and slow moving. This is the advantage to having a first line of defense that is much quicker and lower cost that can potentially deal with a majority of the problems.

5. BINDING ARBITRATION IS NOT A COST EFFECTIVE OPTION FOR SMALL AND MEDIUM-SIZED MVPDS

In previous transactions with vertical harms, such as the DirecTV-News Corp. and Adelphia-TW-Comcast transactions, one remedy used by the Commission has been to give parties that purchase certain classes of programming from the combined entity the right to ask

for binding arbitration with mandatory interim carriage in the event that a dispute over program fees cannot be resolved. This would be a reasonable condition for the Commission to consider adopting in this transaction as well. An additional advantage of this type of condition for this particular transaction is that it might also help address the horizontal harm. This is, such a condition might counteract to some extent the increase in horizontal market power created by the transaction.

The main purpose of this section is to highlight one problem with this type of condition that I believe the Commission should consider addressing if it decides to use this type of condition. The problem is simply that binding arbitration as it is currently implemented has not proven to be a cost effective remedy for small and medium-sized MVPDs. The costs of engaging in an arbitration are relatively fixed regardless of the number of subscribers that an MVPD has. However, the potential benefits of engaging in an arbitration - lower programming fees - are of course directly proportional to an MVPD's number of subscribers. Therefore, the incurring the cost of engaging in a full-blown arbitration proceeding becomes progressively less attractive to an MVPD as its subscribership decreases.

For example, Colleen Abdoulah, the CEO of the cable system operator WOW!, recently testified before Congress that they recently seriously considered filing a binding arbitration claim. However, when they analyzed the potential costs and benefits they determined that the arbitration would cost them approximately \$1 million and that this was very close to the value of the fee reductions they would hope to receive if the arbitration was successful. Therefore, they chose not ask for a binding arbitration proceeding. Her testimony was as follows:

“The FCC sought to tighten these loopholes in subsequent mergers between content providers and distributors, for instance, by permitting complainants to use third-party arbitration or collectively bargain for rights. But, here again, programmers affiliated with

larger cable operators quickly found how to beat the system. WOW! considered using the arbitration process imposed on Comcast in the Adelphia decision but determined the cost of the process was likely to exceed \$1 million, take one year or longer, and require key personnel to take large amounts of time from their regular jobs. In other words, the costs of using arbitration were going to be close enough to the extra price Comcast was going to charge us in the first place. Instead, we had no choice but to ‘eat’ an enormous rate increase to carry Comcast’s RSN. In effect, the program access process has essentially given us a right without a remedy. It would be a grave error to buy into the contention of Comcast and NBC Universal that these processes constitute a legitimate backstop for anticompetitive harms arising from the deal.”⁵⁷

6. CONCLUSION

In view of the fact that NBCU is a major programmer and Comcast is both a major programmer and the nation’s largest MVPD, the Comcast-NBCU transaction involves horizontal and vertical combinations of lines of businesses, and the Commission needs to carefully assess the potential harms to competition that could arise from both types of combinations. On a horizontal level, the potential harm is that Comcast-NBCU’s combined control over multiple types of must have programming will increase its ability to bargain for higher programming fees, which will be passed through to subscribers in the form of higher subscription fees. The potential for horizontal harm is greatest in regions of the country served by both an NBC O&O and a Comcast RSN, although the harm is more extensive. On a vertical level, the potential harm is that the combined entity will have both the incentive and ability to raise programming fees to MVPDs that compete with Comcast. Once again these price increases will be passed through to subscribers. Furthermore, these fee increases will damage competition at the MVPD level and allow Comcast to raise its own subscription prices. The potential for vertical harm is greatest in regions of the country that are served by an NBC O&O and where Comcast is the

⁵⁷See *Testimony of Colleen Abdoulah, President and CEO, WOW! Board Member ACA Before the Senate Subcommittee on Antitrust, Competition Policy and Consumer Rights*, February 4,

major incumbent cable provider, although again the harm is more extensive

Comcast has tended to create or purchase RSNs in regions of the country where it is already the dominant incumbent cable provider. Therefore it turns out that the regions of the country that are at greatest risk for each type of harm are identical. In particular, there are six major metropolitan areas of the United States containing 12.1% of all TV households that are at greatest risk of both horizontal and vertical harm from this transaction. These are regions of the country served by an NBC O&O and a Comcast RSN where Comcast is the dominant incumbent cable provider. They are Philadelphia, Chicago, Miami, San Francisco, Washington DC and Hartford-New Haven.

There is a theoretically correct and simple method to estimate the likely size of the vertical harm by directly calculating the extent to which the transaction will increase the opportunity cost to the combined entity of providing NBCU programming to competitors of Comcast. The Commission has already used this method to estimate the magnitude of vertical harms in its analysis of the Adelphia-TW-Comcast transaction. Application of this method to the Comcast- NBCU transaction suggests that the retransmission consent fees that NBC O&O's charge to rivals of Comcast could double because of this transaction. The program fees that the combined entity will charge for NBCU's national cable networks may also rise significantly, particularly for cable overbuilders that compete primarily with Comcast. With respect to the horizontal harm, the available evidence on the issue of how combined control of multiple Big 4 stations in the same DMA affects retransmission consent fees suggests that joint control over multiple blocks of must have programming can raise programming fees by 20% or more. Therefore the available evidence suggests that this transaction has the potential to cause

significant levels of both vertical and horizontal harm.

Simply requiring that Comcast-NBCU's retransmission consent arrangements be subject to program access rules will not remedy the vertical harm of this transaction, because the program access rules themselves suffer from four critical problems. The key to devising an effective set of conditions to remedy the vertical harm lies in creating conditions that address these four problems. I have argued above that a two-step approach of both strengthening existing program access rules and implementing a mandatory binding arbitration scheme of the sort the Commission has used as a condition in previous vertical transactions could provide such a remedy. However, as I have noted above, a serious problem with existing binding arbitration conditions is that they are not a cost-effective option for small and medium-sized MVPDs, and the Commission would need to find a way to address this problem. Strengthened program access rules would provide a relatively low cost and quick "first line of defense" that might deal with the majority of problems. Mandatory binding arbitration would provide a higher cost and slower "second line of defense" for more complex and difficult problems.

TABLE 1
MVPD SUBSCRIBERSHIP IN DMAs SERVED BY NBC O&Os
(thousands of customers as of 1st quarter of 2010)

DMA	Comcast	Other Cable	Total Cable	DirecTV	DISH	Verizon	AT&T	Total
Philadelphia, PA	1,663.4	226.1	1,889.5	291.3	154.7	309.4	0.0	2,644.9
Chicago, IL	1,886.9	141.0	2,027.9	557.4	365.1	0.0	155.5	3,105.9
San Francisco-Oakland-San Jose, CA	1,242.3	87.9	1,330.2	435.2	272.6	0.0	132.8	2,170.8
Miami-Fort Lauderdale, FL	653.9	48.6	702.5	352.5	111.4	0.0	71.5	1,237.9
Washington, DC (Hagerstown, MD)	948.6	275.5	1,224.1	394.7	222.5	278.3	0.0	2,119.6
Hartford and New Haven, CT	312.3	239.3	551.6	117.1	51.1	0.0	83.9	803.7
New York, NY	678.4	4,495.9	5,174.3	660.6	344.4	932.8	29.9	7,142.0
Los Angeles, CA	0.0	2,420.0	2,420.0	1,189.0	627.2	321.6	174.6	4,732.4
Dallas-Ft. Worth, TX	0.0	1,037.6	1,037.6	508.1	445.2	151.5	224.0	2,366.4
San Diego, CA	0.0	699.3	699.3	117.3	81.1	3.6	64.0	965.3
Total U.S.	23,477.0	37,682.6	61,159.6	18,660.0	14,337.0	3,029.0	2,295.0	99,481.0

Source: Media Business Corp.

TABLE 2
MVPD SUBSCRIBERSHIP IN DMAs SERVED BY NBC O&Os
AS A PERCENTAGE OF TOTAL MVPD SUBSCRIBERS IN EACH DMA

DMA	Comcast	Other Cable	Total Cable	DirecTV	DISH	Verizon	AT&T	Total
Philadelphia, PA	62.9%	8.5%	71.4%	11.0%	5.8%	11.7%	0.0%	100.0%
Chicago, IL	60.8%	4.5%	65.3%	17.9%	11.8%	0.0%	5.0%	100.0%
San Francisco-Oakland-San Jose, CA	57.2%	4.0%	61.3%	20.0%	12.6%	0.0%	6.1%	100.0%
Miami-Fort Lauderdale, FL	52.8%	3.9%	56.7%	28.5%	9.0%	0.0%	5.8%	100.0%
Washington, DC (Hagerstown, MD)	44.8%	13.0%	57.8%	18.6%	10.5%	13.1%	0.0%	100.0%
Hartford and New Haven, CT	38.9%	29.8%	68.6%	14.6%	6.4%	0.0%	10.4%	100.0%
New York, NY	9.5%	63.0%	72.4%	9.2%	4.8%	13.1%	0.4%	100.0%
Los Angeles, CA	0.0%	51.1%	51.1%	25.1%	13.3%	6.8%	3.7%	100.0%
Dallas-Ft. Worth, TX	0.0%	43.8%	43.8%	21.5%	18.8%	6.4%	9.5%	100.0%
San Diego, CA	0.0%	72.4%	72.4%	12.2%	8.4%	0.4%	6.6%	100.0%
Total U.S.	23.6%	37.9%	61.5%	18.8%	14.4%	3.0%	2.3%	100.0%

Source: Media Business Corp.

TABLE 3
ESTIMATED VALUES OF α , C, and ΔP BY DMA
(π , C and ΔP are measured in dollars per subscriber per month)

DMA	s_C	s_R	d	π	α	C	ΔP
Philadelphia, PA	0.629	0.10	0.05	\$42.98	0.70	\$1.50	\$0.75
Chicago, IL	0.608	0.10	0.05	\$42.98	0.68	\$1.46	\$0.73
San Francisco-Oakland-San Jose, CA	0.572	0.10	0.05	\$42.98	0.64	\$1.38	\$0.69
Miami-Fort Lauderdale, FL	0.528	0.10	0.05	\$42.98	0.59	\$1.27	\$0.64
Washington, DC (Hagerstown, MD)	0.448	0.10	0.05	\$42.98	0.50	\$1.07	\$0.54
Hartford and New Haven, CT	0.389	0.10	0.05	\$42.98	0.43	\$0.92	\$0.46
New York, NY	0.095	0.10	0.05	\$42.98	0.11	\$0.24	\$0.12
Los Angeles, CA	0.000	0.10	0.05	\$42.98	0.00	\$0.00	\$0.00
Dallas-Ft. Worth, TX	0.000	0.10	0.05	\$42.98	0.00	\$0.00	\$0.00
San Diego, CA	0.000	0.10	0.05	\$42.98	0.00	\$0.00	\$0.00

Source: Media Business Corp.

APPENDIX
DMAs SERVED BY AN NBC O&O AND/OR COMCAST RSN

RANK	DESIGNATED MARKET AREA (DMA)	NBC O&O	COMCAST RSN	TV HH
1	New York, NY	WNBC		7,493,530
2	Los Angeles, CA	KNBC		5,659,170
3	Chicago, IL	WMAQ	Ch	3,501,010
4	Philadelphia, PA	WCAU	P	2,955,190
5	Dallas-Ft. Worth, TX	KXAS		2,544,410
6	San Francisco-Oakland-San Jose, CA	KNTV	BA/Ca	2,503,400
7	Boston, MA (Manchester, NH)		NE	2,410,180
8	Atlanta, GA		SE	2,387,520
9	Washington, DC (Hagerstown, MD)	WRC	MA	2,335,040
10	Houston, TX		SW	2,123,460
11	Detroit, MI			1,890,220
12	Phoenix, AZ			1,873,930
13	Seattle-Tacoma, WA		NW	1,833,990
14	Tampa-St. Petersburg (Sarasota), FL		SE	1,805,810
15	Minneapolis-St. Paul, MN			1,732,050
16	Denver, CO			1,539,380
17	Miami-Fort Lauderdale, FL	WTVJ	SE	1,538,090
18	Cleveland-Akron (Canton), OH			1,520,750
19	Orlando-Daytona Beach-Melbourne, FL			1,455,620
20	Sacramento-Stockton-Modesto, CA		Ca/BA	1,404,580
21	St. Louis, MO			1,249,450
22	Portland, OR		NW	1,188,770
23	Pittsburgh, PA			1,154,950
24	Charlotte, NC			1,147,910
25	Indianapolis, IN			1,119,760
26	Raleigh-Durham (Fayetteville), NC			1,107,820
27	Baltimore, MD		MA	1,093,170
28	San Diego, CA	KNSD		1,073,390
29	Nashville, TN		SE	1,019,010
30	Hartford and New Haven, CT	WVIT	NE	1,010,630
31	Salt Lake City, UT			944,060
32	Kansas City, MO			941,360
33	Cincinnati, OH			918,670
34	Columbus, OH			904,030
35	Milwaukee, WI			901,790
36	Greenville-Spartanburg, SC-Asheville, NC-Anderson, SC		SE	865,810
37	San Antonio, TX			830,000
38	West Palm Beach-Ft. Pierce, FL		SE	776,080
39	Harrisburg-Lancaster-Lebanon-York, PA		P/MA	743,420
40	Birmingham (Anniston and Tuscaloosa), AL		SE	742,140
41	Grand Rapids-Kalamazoo-Battle Creek, MI			740,430
42	Las Vegas, NV			721,780

RANK	DESIGNATED MARKET AREA (DMA)	NBC O&O	COMCAST RSN	TV HH
43	Norfolk-Portsmouth-Newport News, VA			709,880
44	Albuquerque-Santa Fe, NM			694,040
45	Oklahoma City, OK			694,030
46	Greensboro-High Point-Winston Salem, NC			691,380
47	Jacksonville, FL		SE	679,120
48	Austin, TX			678,730
49	Louisville, KY			668,310
50	Memphis, TN		SE	667,660
51	New Orleans, LA			633,930
52	Buffalo, NY			633,220
53	Providence, RI-New Bedford, MA		NE	619,610
54	Wilkes Barre-Scranton, PA		P	593,480
55	Fresno-Visalia, CA		BA/Ca	579,180
56	Little Rock-Pine Bluff, AR		SE	564,490
57	Albany-Schenectady-Troy, NY		NE	554,070
58	Richmond-Petersburg, VA		MA/SE	553,950
59	Knoxville, TN		SE	552,380
60	Mobile, AL-Pensacola (Ft. Walton Beach), FL		SE	534,730
61	Tulsa, OK			528,070
62	Lexington, KY			506,340
63	Charleston-Huntington, WV			501,530
64	Ft. Myers-Naples, FL		SE	500,110
65	Dayton, OH			482,590
66	Tucson (Sierra Vista), AZ			465,100
67	Roanoke-Lynchburg, VA		MA/SE	461,220
68	Flint-Saginaw-Bay City, MI			458,020
69	Wichita-Hutchinson, KS Plus			452,710
70	Green Bay-Appleton, WI			443,420
71	Honolulu, HI			433,240
72	Des Moines-Ames, IA			432,310
73	Toledo, OH			423,100
74	Springfield, MO			422,740
75	Spokane, WA		NW	419,350
76	Omaha, NE			410,350
77	Portland-Auburn, ME		NE	408,120
78	Paducah, KY-Cape Girardeau, MO-Harrisburg, IL		SE	399,690
79	Columbia, SC			398,620
80	Rochester, NY			392,190
81	Huntsville-Decatur (Florence), AL		SE	390,900
82	Shreveport, LA			386,180
83	Syracuse, NY			385,440
84	Champaign and Springfield-Decatur, IL		Ch	384,620
85	Madison, WI			377,260
86	Chattanooga, TN		SE	365,400
87	Harlingen-Weslaco-Brownsville-McAllen, TX			354,150

RANK	DESIGNATED MARKET AREA (DMA)	NBC O&O	COMCAST RSN	TV HH
88	Cedar Rapids-Waterloo-Iowa City and Dubuque, IA			346,030
89	Waco-Temple-Bryan, TX			339,570
90	Jackson, MS		SE	336,520
91	South Bend-Elkhart, IN		Ch	336,130
92	Colorado Springs-Pueblo, CO			334,710
93	Tri-Cities, TN-VA			334,620
94	Burlington, VT-Plattsburgh, NY			330,650
95	Baton Rouge, LA			326,890
96	Savannah, GA		SE	322,030
97	Charleston, SC		SE	311,190
98	El Paso, TX			310,760
99	Davenport, IA-Rock Island-Moline, IL			308,910
100	Ft. Smith-Fayetteville-Springdale-Rogers, AR			298,330
101	Johnstown-Altoona, PA			294,350
102	Evansville, IN			291,830
103	Greenville-New Bern-Washington, NC			290,280
104	Myrtle Beach-Florence, SC		SE	287,400
105	Lincoln and Hastings-Kearney, NE			281,590
106	Tallahassee, FL-Thomasville, GA			280,710
107	Ft. Wayne, IN		Ch	273,860
108	Reno, NV			270,500
109	Tyler-Longview(Lufkin and Nacogdoches), TX			267,890
110	Youngstown, OH			266,560
111	Springfield-Holyoke, MA			262,960
112	Boise, ID			262,800
113	Sioux Falls (Mitchell), SD			261,100
114	Augusta, GA		SE	255,950
115	Lansing, MI			253,690
116	Peoria-Bloomington, IL		Ch	247,830
117	Traverse City-Cadillac, MI			245,000
118	Montgomery-Selma, AL			244,750
119	Eugene, OR		NW	241,730
120	Santa Barbara-Santa Maria-San Luis Obispo, CA			241,370
121	Fargo-Valley City, ND			240,330
122	Macon, GA			239,330
123	Lafayette, LA			230,180
124	Monterey-Salinas, CA		BA/Ca	227,390
125	Bakersfield, CA			222,910
126	Yakima-Pasco-Richland-Kennewick, WA			219,510
127	La Crosse-Eau Claire, WI			214,820
128	Columbus, GA			213,880
129	Corpus Christi, TX			199,560
130	Chico-Redding, CA		BA/Ca	197,970
131	Amarillo, TX			192,490
132	Wilmington, NC			189,950

RANK	DESIGNATED MARKET AREA (DMA)	NBC O&O	COMCAST RSN	TV HH
133	Columbus-Tupelo-West Point, MS			189,460
134	Rockford, IL		Ch	189,160
135	Wausau-Rhineland, WI			184,720
136	Topeka, KS			180,090
137	Columbia-Jefferson City, MO			178,810
138	Monroe, LA-El Dorado, AR		SE	177,200
139	Duluth, MN-Superior, WI			174,360
140	Medford-Klamath Falls, OR			172,900
141	Beaumont-Port Arthur, TX			167,330
142	Palm Springs, CA			161,110
143	Lubbock, TX			158,360
144	Salisbury, MD		MA	158,340
145	Albany, GA			156,890
146	Erie, PA			156,520
147	Joplin, MO-Pittsburg, KS			155,670
148	Sioux City, IA			154,810
149	Wichita Falls, TX-Lawton, OK			154,450
150	Anchorage, AK			151,470
151	Panama City, FL		SE	147,440
152	Terre Haute, IN			145,550
153	Rochester, MN-Mason City, IA-Austin, MN			144,300
154	Bangor, ME		NE	144,230
155	Odessa-Midland, TX			143,710
156	Bluefield-Beckley-Oak Hill, WV			142,570
157	Binghamton, NY			137,240
158	Minot-Bismarck-Dickinson(Williston), ND			136,540
159	Wheeling, WV-Steubenville, OH			133,110
160	Gainesville, FL			128,400
161	Sherman, TX-Ada, OK			127,990
162	Idaho Falls-Pocatello, ID			126,880
163	Biloxi-Gulfport, MS			122,740
164	Yuma, AZ-El Centro, CA			118,300
165	Abilene-Sweetwater, TX			116,190
166	Missoula, MT			111,940
167	Hattiesburg-Laurel, MS		SE	111,610
168	Clarksburg-Weston, WV			110,050
169	Billings, MT			107,420
170	Utica, NY			104,890
171	Quincy, IL-Hannibal, MO-Keokuk, IA			102,710
172	Dothan, AL		SE	101,840
173	Jackson, TN			98,250
174	Rapid City, SD			98,240
175	Lake Charles, LA			95,900
176	Elmira, NY			95,790
177	Watertown, NY			93,970

RANK	DESIGNATED MARKET AREA (DMA)	NBC O&O	COMCAST RSN	TV HH
178	Harrisonburg, VA		MA	93,400
179	Alexandria, LA			90,740
180	Marquette, MI			88,490
181	Jonesboro, AR			82,300
182	Bowling Green, KY			81,650
183	Charlottesville, VA		MA	75,920
184	Grand Junction-Montrose, CO			75,030
185	Meridian, MS		SE	72,180
186	Lima, OH			71,380
187	Greenwood-Greenville, MS			70,350
188	Laredo, TX			69,790
189	Bend, OR		NW	66,980
190	Butte-Bozeman, MT			66,260
191	Lafayette, IN		Ch	66,180
192	Great Falls, MT			65,000
193	Twin Falls, ID			64,740
194	Parkersburg, WV			64,060
195	Eureka, CA			61,090
196	Casper-Riverton, WY			55,620
197	Cheyenne, WY-Scottsbluff, NE			54,710
198	San Angelo, TX			54,580
199	Mankato, MN			52,230
200	Ottumwa, IA-Kirksville, MO			51,370
201	St. Joseph, MO			48,440
202	Fairbanks, AK			36,250
203	Zanesville, OH			32,350
204	Victoria, TX			31,560
205	Presque Isle, ME			31,070
206	Helena, MT			27,630
207	Juneau, AK			25,340
208	Alpena, MI			17,420
209	North Platte, NE			15,350
210	Glendive, MT			3,940
	TOTAL			114,866,380

	Color indicates Markets with Comcast RSN, NBC O&O, and NBCU National Cable Networks
	Color indicates Markets with Comcast RSN and NBCU National Cable Networks

Notes:

1. The “NBC O&O” column contains either the call sign of the NBC O&O (if there is one) or is blank (otherwise).
2. The “Comcast RSN” column contains either the name of the Comcast RSN (if there is

one) or is blank (otherwise). The following abbreviations are used for RSNs:

Ca	Comcast SportsNet California
MA	Comcast SportsNet Mid-Atlantic
NE	Comcast SportsNet New England
NW	Comcast SportsNet Northwest
P	Comcast SportsNet (Philadelphia)
SW	Comcast Sports Southwest
SE	Cable Sports Southeast
BA	Comcast SportsNet Bay Area
Ch	Comcast SportsNet Chicago

3. Source for data on TV households: TVB Research Central-Market Track - http://www.tvb.org/rcentral/markettrack/us_hh_by_dma.asp
4. Source for data on NBC O&Os: Comcast-NBCU Merger Application
5. Source for data on Comcast RSNs: ACA

EXHIBIT B

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

In the Matter of)	
)	
Applications of Comcast Corporation,)	
General Electric Company, and NBC)	MB Docket No. 10-56
Universal, Inc. to Assign and Transfer)	
Control of FCC Licenses)	

DECLARATION OF STEVE FRIEDMAN

1. My name is Steve Friedman. I am Chief Operating Officer of Wave Broadband (“Wave”). My business address is 401 Kirkland Parkplace, Suite 500, Kirkland, Washington 98033.

2. Wave is a cable, Internet and phone services company currently serving more than 171,000 customers in Washington, Oregon and California. Based in Kirkland, Washington, Wave employs more than 600 individuals. The communities Wave serves vary from urban to rural areas. Thus, in some service areas Wave’s facilities pass fewer homes per square mile than large urban service providers. This increases the cost to construct, upgrade and operate Wave’s systems in such areas.

3. I also currently serve as Chairman of the American Cable Association (“ACA”), a trade organization representing nearly 900 smaller and medium-sized independent cable companies that provide services to more than 7 million cable subscribers primarily located in rural and smaller suburban markets across the United States.

4. As a cable television service provider, Wave must contract with broadcast and cable programming providers – including both NBC Universal (“NBCU”) and Comcast – to obtain the programming its subscribers desire.

5. Certain networks distribute “must have” programming for Wave in each of its cable markets. In Wave’s view, “must have” programming is programming that, if absent from Wave’s channel line-up, would have a significant impact on Wave’s competitive position in the market and hence its subscribership levels .

6. Comcast’s Regional Sports Networks (“RSN’s”) are “must have” programming for Wave, which carries Comcast SportsNet Bay Area and Comcast SportsNet California in its San Francisco and Sacramento cable TV service areas and Comcast SportsNet Northwest in its Oregon and Washington service areas. The individuals who tune in to the games carried by these RSNs are not casual television viewers. They typically are dedicated fans who are passionate about the local games they are watching and thus demand to see them live. For them, there is no close substitute for such an experience. By way of example, the RSNs in San Francisco and Sacramento show San Francisco Giants and Oakland Athletics major league baseball games, Golden State Warriors and Sacramento Kings NBA basketball games, and San Jose Sharks hockey games along with many popular college sporting events and other live sports programming. Comcast SportsNet Northwest carries the Portland Trailblazers NBA basketball games as well as football and basketball from the University of Oregon. Should Wave fail to offer its subscribers the opportunity to view these sporting events in its cable service areas, it would lose a significant number of subscribers.

7. The local broadcast channels that are owned and operated or are affiliated with one of the Big 4 networks (CBS, Fox, ABC and NBC) in each of Wave’s cable service areas also

are “must have” programming. This is both because they carry the prime-time programming that most subscribers would not be willing to forego and because most subscribers view the local news, weather, and sports reporting done locally as essential. Hence, a significant percentage of those subscribers would not remain subscribers of Wave if they could not obtain access to this local broadcast programming.

8. In addition, several national cable networks own networks that, either individually or when combined, constitute “must have” programming for Wave. For example, NBCU’s cable networks USA, MSNBC and CNBC, Time Warner’s CNN, TBS, and TNT, and Viacom’s MTV, VH1 and Nickelodeon are cable programming that customers expect to have access to when they subscribe to Wave’s cable service.

9. Owners of national cable networks prefer to negotiate for carriage of this cable programming in bundles of affiliated networks, which when viewed in aggregate have substantial interest for subscribers. For example, NBCU prefers to negotiate pricing for a large package that includes such networks as USA, MSNBC, CNBC, CNBC World, mun2, Sleuth, Oxygen, Shop NBC, Syfy and Bravo as well as the broadcast station retransmission consent rights for each of the NBC owned and operated stations and rights to carry Olympics programming. The prices offered by NBCU for this bundle of programming are less than the prices offered for the networks should NBCU choose to make them available individually. Thus, Wave is effectively compelled to purchase the bundle and to pay for and carry all of this NBCU programming, whether or not it believes its customers desire to view and pay for the entire bundle. The bundled price ties VOD and HD carriage rights.

10. Other than foregoing the opportunity to carry programming and suffer what are sure to be catastrophic subscriber losses, Wave has no effective control over its programming

costs. With only 136,000 video subscribers, Wave is a small cable company with virtually no leverage to bring to bear when negotiating with large national cable and broadcast entities who typically won't provide pricing discounts or more favorable terms and conditions unless the cable operator serves in excess of 1,000,000 cable subscribers.

11. The fees Wave must pay producers for programming has been steadily increasing each year. I estimate that the average yearly increase in programming costs borne by Wave over the past 4 years is approximately 10 percent. My expectation is that in general this trend of significant yearly increases will continue for the foreseeable future and, given the continued consolidation of programming vendors, it is possible the annual price increases in programming will be even greater.

12. Because of their control of "must have" programming, I believe the combined market power of Comcast and NBCU will result in significantly higher than anticipated future increases in Wave's programming costs.

13. Wave faces significant competition from other programming distributors. DirecTV and Dish Network compete with Wave throughout its cable service territories. In addition, Comcast and AT&T are direct competitors to Wave in Wave's San Francisco service area. In its other California service areas and in its Oregon and Washington service areas, Wave faces direct completion from AT&T, Verizon, SureWest and a number of other local exchange carriers. Each of these competitors is orders of magnitude larger than Wave and, consequently, able to negotiate more favorable pricing, terms and conditions from programming vendors.

14. Because of the competition faced by Wave, Wave cannot pass through to its subscribers the entire amount of programming cost increases it experiences. I estimate that, on

average, on an annual basis Wave passed through only 60 percent of the programming cost increases it encounters.

15. As a direct result of Wave's inability to pass through the entire amount of its programming cost increases, Wave's margins have shrunk significantly. This has negatively impacted the funds available to Wave for basic system maintenance, system upgrades and improvements, and expansion, such as offering higher speed broadband in more areas.

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

Executed on June 18, 2010



Steve Friedman

EXHIBIT C

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

In the Matter of)
)
Applications of Comcast Corporation,)
General Electric Company, and NBC)
Universal, Inc. to Assign and Transfer)
Control of FCC Licenses)

MB Docket No. 10-56

DECLARATION OF ROBERT GESSNER

1. My name is Robert Gessner. I am President of Massillon Cable TV, Inc. (“Massillon”). My business address is 814 Cable Court NW, Massillon, OH 44647.

2. Massillon is a family-owned and operated telecommunications provider delivering advanced video, data, and voice services to more than 45,000 homes in Stark and Wayne Counties in Ohio.

3. As a cable television service provider, Massillon must contract with broadcast and cable programming providers, including both NBC Universal (“NBCU”) and Comcast, to obtain the programming its subscribers’ desire.

4. Certain networks represent “must have” programming for Massillon in each of its cable markets. “Must have” programming is programming that, if absent from Massillon’s program line-up, would have a significant impact on Massillon’s subscribership levels and hence its competitive position in the market.

5. The local broadcast channels that are owned and operated or are affiliated with one of the Big 4 networks (CBS, Fox, ABC and NBC) in Massillon’s cable TV service area are “must have” programming. This is both because they carry the prime-time programming that

most subscribers would not be willing to forego and because most subscribers view local news, weather, and sports reporting as essential. Hence, a significant percentage of those subscribers would not remain subscribers of Massillon if they could not obtain access to this local broadcast programming.

6. Moreover, regional sports networks are “must have” programming for Massillon. The local professional teams in the region have strong followings and fans expect to be able to watch their teams play live on television. The rising cost of tickets makes television the only affordable source for most fans. Since the vast majority of professional sports games are now available only on regional sports networks, pay television (from one of the four competitors in our market) is a “must have” for sports fans. If Massillon did not carry Fox Sports Net Ohio which has rights to the Cleveland Cavaliers basketball games or Sports Time Ohio which has rights to the Cleveland Indians baseball games, Massillon would stand to lose a significant number of customers.

7. In addition, several programming conglomerates own national networks that, when combined, constitute “must have” programming for Massillon. The NBCU cable networks include USA, SyFy, Bravo, MSNBC, CNBC, The Weather Channel, Universal HD and the Olympic Games. Time Warner’s cable networks include TNT, TBS, HBO and CNN. Viacom’s cable networks include MTV, VH1, Showtime, and Nickelodeon. Disney’s cable networks include ESPN, ESPN2, and the Disney channel. These networks are cable channels that customers expect to have access to when they subscribe to Massillon’s cable service.

8. Our experience has been that increasingly over the past 20 years, owners of national cable networks prefer to negotiate for delivery of cable programming in blocks of affiliated networks which, when viewed in the aggregate, have substantial interest for

subscribers. In this process, the carriage of newer or less viewed networks is often linked to more popular networks. This has the double impact of raising consumer prices and occupying spectrum that would otherwise be available for other program networks, networks that typically do not have the leverage of “must have” programming.

9. As new networks have been acquired by programming conglomerates (for example, the acquisition of the independently-owned Classic Sports network by Disney’s ESPN), these owners of national networks have sought to negotiate for their networks as a group. Moreover, programming conglomerates who own local broadcast TV stations also seek to include distribution of their national program networks when they negotiate retransmission consent agreements for their local broadcast TV stations.

10. The negotiation process for program distribution has become more complex and difficult to administer for Massillon as a result of programmers’ insistence on negotiating for blocks of programming. This complexity has caused Massillon to rely heavily on the National Cable Television Cooperative to manage program negotiations.

11. Massillon has virtually no control over its programming costs. Massillon is a small cable company with no leverage that it can bring to bear when negotiating with large national cable and broadcast entities. The fees Massillon must pay for programming has been steadily increasing each year. In 2005, Massillon paid \$18.72 per subscriber per month for Basic Cable program networks. In 2010, that cost is \$30.85; a \$12.13, or 65% increase. This increase in program cost is due to a combination of steady annual increases, prices being “reset” at the time of contract renewal and new program networks being added, typically as part of contract negotiations for blocks of program networks. As a result, Massillon’s profit margins for video

services have shrunk significantly. My expectation is that in general this trend will continue for the foreseeable future.

12. Massillon faces significant competition from other programming distributors. DirecTV and Dish Network compete with Massillon throughout its cable service territory. AT&T also competes directly with Massillon for video, data and voice customers.

13. Massillon's competitors are significantly larger than Massillon. It is my belief that, due to their size, they benefit from significantly lower rates for program services. Because program providers like NBCU are willing to provide significant price discounts to these larger competitors, Massillon must operate with lower margins and is thus less able to generate the funds needed for system upgrades and new products and services.

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

Executed on June 18, 2010.


Robert Gessner