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TESTIMONY OF WILLIAM S. COMANOR  
ON THE  
COMPETITIVE AND ECONOMIC CONSEQUENCES OF THE  
COMCAST – TIME WARNER CABLE MERGER

August 2014

Qualifications

I am an economist and Professor of Economics at the University of California, Santa Barbara. I am also a Professor in the School of Public Health at the University of California, Los Angeles. At UCSB, I regularly teach a course in Antitrust Economics.

I joined the University of California faculty in 1975. From 1978 to 1980, on leave from my faculty position, I was Director of the Bureau of Economics at the Federal Trade Commission in Washington, D.C. In that capacity, I supervised a staff of over 200 government employees, including more than 85 economists. This staff was responsible for providing economic support for all Commission activities as well as for carrying out economic research activities that dealt with competition and consumer protection issues.

Prior to 1975, I was Assistant and Associate Professor of Economics at Harvard and Stanford Universities. I also served as Professor of Economics for a year in Canada at the University of Western Ontario, and was Fulbright Lecturer in Economics at the University of Tokyo. In 1964, I received my Ph.D. in economics from Harvard University; and in 1965 and 1966 served as Special Economic Assistant to the Assistant Attorney General in charge of the Antitrust Division of the United States Department of Justice.

In April 2003, I received the Distinguished Fellow Award from the Industrial Organization Society. That award is given annually in recognition of excellence in Research, Education and Professional Leadership in the field of Industrial Organization. My work in Antitrust Economics lies within that field of study.

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During my professional career, I have studied, lectured, written, and consulted on many issues dealing with the antitrust economics. A more detailed statement of my professional and educational background, including a list of publications, is attached as Appendix A.

### Assignment and Opinions

I have been asked by officials at the Writers Guild of America, West to review the economic evidence related to the prospective competitive effects in the provision of cable television services of the proposed Comcast – Time Warner Cable merger. I have also been asked to apply this evidence to established antitrust standards in order to draw conclusions as to whether the proposed merger complies with these standards. And finally, I have been asked to respond to both the Public Interest Statement of the merging parties and the economic report supporting the merger.

A striking feature of that Public Interest Statement is the considerable attention paid to the question of whether the proposed consolidation will enhance Comcast's monopsony power. Apparently the parties recognize this is an important regulatory issue which could lead to the merger's rejection on public interest grounds. It is therefore not surprising that the parties find "there is no economic basis for applying monopsony theory to this transaction."<sup>1</sup> Evaluating that contention is an important part of my assignment.

From the evidence and analysis presented below, I agree with the parties' conclusion that with only a few exceptions, there is little competitive overlap between the cable TV and

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<sup>1</sup> Comcast Corporation and Time Warner Cable, Inc., *Applications and Public Interest Statement* Before the Federal Communications Commission, April 8, 2014, p. 146.

broadband Internet services that the two firms offer. However, I disagree with their contention that this factor means they do not compete in the market for video programming, which is an important input in their business. Furthermore, I find that Comcast may have exercised monopsony power in this relevant input market and that its monopsony power may be enhanced by the proposed merger with Time Warner Cable.

The Markets at Issue in this Merger

Comcast and Time Warner Cable (TWC) are both cable TV and broadband Internet service providers. As a result, they are direct horizontal competitors and subject to the *Horizontal Merger Guidelines* promulgated by the US Department of Justice and the Federal Trade Commission.<sup>2</sup> These Guidelines establish policy standards for their antitrust enforcement efforts. Furthermore, as the merging parties recognize, the FCC's standards for evaluating competitive effects are those embodied in these Guidelines.<sup>3</sup>

The enforcement agencies explicitly state in their Guidelines their goal for horizontal merger policy:

The unifying theme of these Guidelines is that mergers should not be permitted to create, enhance, or entrench market power or to facilitate its exercise. ... A merger enhances market power if it is likely to encourage one or more firms to raise prices, reduce output, diminish innovation, or otherwise harm consumers as a result of diminished competitive constraints or incentives.<sup>4</sup>

In this testimony, I apply these standards to the proposed merger.

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<sup>2</sup> US Department of Justice/Federal Trade Commission, *Horizontal Merger Guidelines* August 19, 2010.

<sup>3</sup> Comcast Corporation and Time Warner Cable, Inc., *Applications and Public Interest Statement*, Before the Federal Communications Commission, April 8, 2014, p. 138.

<sup>4</sup> *Horizontal Merger Guidelines*, p. 2.

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Because competitive effects occur within market settings, the first step is to define the market or markets where prices and output levels are set. For the merger at issue, the parties engage in various markets as either buyers or sellers. On the selling side, they supply cable TV and broadband Internet services to household and business subscribers; while on the buying side, they acquire the programming content offered to their subscribers.

As a supplier of cable TV services, Comcast is the nation's largest seller with approximately 22 million subscribers. It also serves about 21 million broadband customers.<sup>5</sup> Somewhat smaller, TWC services about 11 million cable TV subscribers and almost 12 million broadband customers, which makes them the nation's second largest joint provider of these services.<sup>6</sup> Although this proposed merger joins the two largest joint suppliers of cable TV and broadband services, the parties largely but not entirely serve different markets. Comcast acknowledges that the two companies compete in the New York, Kansas City and Louisville market areas,<sup>7</sup> so at least in these local areas, the two firms are direct competitors.<sup>8</sup> Elsewhere, however, that is not the case.

As buyers of television programming, the market circumstances are quite different. Cable systems exist primarily to distribute this content to their subscribers and are commonly referred to as "multichannel video programming distributors" or MVPDs. An

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<sup>5</sup> *In the matter of Application of Comcast Corp. and Time Warner Cable Inc. for Consent to Transfer Control of Licenses and Authorizations (Applications)*, MB Docket No. 14-57, before the Federal Communications Commission, April 8, 2014, pp. 8-9.

<sup>6</sup> *Ibid.*, p. 10.

<sup>7</sup> Presentation of Brian L. Roberts, Chairman and CEO, Comcast Corporation, *Comcast and Time Warner Cable*, February 13, 2014, p. 6.

<sup>8</sup> Comcast has stated that it is prepared to divest certain cable systems if that were required for regulatory approval. Presentation of David L. Cohen, Executive Vice President, Comcast Corporation, *Comcast and Time Warner Cable*, February 13, 2014, p. 16.

essential market for their business is therefore the one in which they purchase this programming. Moreover, an increasing share of television content is distributed via broadband Internet services,<sup>9</sup> so these purchases apply to that segment of their business as well. The competitive effects of the proposed merger are equally important to those arising from their position as sellers. Indeed, the antitrust enforcement agencies state explicitly:

Enhancement of market power by buyers, sometimes called “monopsony power,” has adverse effects comparable to enhancement of market power by sellers. The Agencies apply an analogous framework to analyze mergers between rival purchasers that may enhance their market power as buyers.<sup>10</sup>

A critical issue is therefore whether the proposed merger is likely to enhance the exercise of monopsony power by the newly combined firm in the market for television programming.

#### Buyers in the Market for the Delivery of Video Programming

The buying side of this market is represented by the MVPDs, which include cable TV systems, direct broadcasters such as DirectTV and Dish Network, and telephone providers through AT&T’s U-verse services and Verizon’s FiOS. As indicated in Tables 1 and 2, Comcast is the largest MVPD provider in terms of both number of video subscribers and related revenues, while TWC is the fourth largest in the number of subscribers but third

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<sup>9</sup> See *Independent Lens*, “Poll: Nearly Half of People Watch “TV” on Devices Other Than TVs,” January 4, 2013 (accessed on August 13, 2014) reporting that 49 percent of viewers watch television on computers and mobile devices. Available at: <http://www.pbs.org/independentlens/blog/poll-nearly-half-of-people-watch-tv-on-something-other-than-tvs>. See also Jim Edwards, “TV Is Dying, And Here Are The Stats That Prove It,” *Business Insider*, November 24, 2013 (accessed on August 13, 2014), reporting that 20 percent of U.S. consumers view media on mobile devices compared to 38 percent on televisions in 2013. Available at <http://www.businessinsider.com/cord-cutters-and-the-death-of-tv-2013-11>.

<sup>10</sup> *Horizontal Merger Guidelines*, p .2.

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largest in related revenues. All other firms on the buying side of this market are much smaller.

**TABLE 1: MVPD Video Subscribers (in millions)**

	End of Year 2010	End of June 2011	End of Year 2011	End of June 2012
<b>MVPD Total</b>	<b>100.8</b>	<b>N/A</b>	<b>101.0</b>	<b>100.5</b>
<b>Cable</b>	<b>59.8</b>	<b>58.9</b>	<b>58.0</b>	<b>57.3</b>
Comcast	22.8	22.5	22.3	22.1
Time Warner Cable	12.4	12.2	12.1	12.5
Cox	4.9	4.8	4.8	4.7
Charter	4.5	4.4	4.3	4.3
Cablevision	3.3	3.3	3.3	3.3
All Other Cable	11.9	11.6	11.3	10.5
<b>Satellite Transmission</b>	<b>33.4</b>	<b>33.5</b>	<b>33.9</b>	<b>34.0</b>
DIRECTV	19.2	19.4	19.9	19.9
DISH Network	14.1	14.1	14.0	14.1
<b>Telephone</b>	<b>6.9</b>	<b>N/A</b>	<b>8.5</b>	<b>9.2</b>
AT&T U-verse	3.0	3.4	3.8	4.1
Verizon FiOS	3.5	3.8	4.2	4.5
All Other Telephone	0.4	N/A	0.5	0.6

*Source:* Federal Communications Commission, Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Fifteenth Report (July 22, 2013), 61-62.

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**TABLE 2: MVPD Revenue (in billions)**

	End of Year 2010	End of Year 2011	Year to Date June 2011	Year to Date June 2012
<b>Cable</b>	<b>\$93.8</b>	<b>\$97.9</b>	<b>N/A</b>	<b>N/A</b>
Comcast	\$35.4	\$37.2	\$18.4	\$19.5
Time Warner Cable	\$18.9	\$19.7	\$8.6	\$9.1
Charter	\$7.1	\$7.2	\$3.6	\$3.7
<b>Satellite Transmission</b>	<b>\$32.9</b>	<b>\$35.9</b>	<b>\$17.2</b>	<b>\$18.3</b>
DIRECTV	\$20.3	\$21.9	\$10.4	\$11.1
DISH Network	\$12.6	\$14.0	\$6.8	\$7.2
<b>Telephone</b>	<b>\$11.2</b>	<b>\$15.0</b>	<b>N/A</b>	<b>N/A</b>
AT&T U-verse	\$4.3	\$6.7	N/A	N/A
Verizon FiOS	\$6.9	\$8.3	N/A	N/A

*Source:* Federal Communications Commission, Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Fifteenth Report (July 22, 2013), 66.

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Prices in this market are traditionally set on a per-subscriber basis, which reflects the buyers' valuation of the programming acquired. As purchases are made on a nation-wide basis, the relevant market includes the entire country. From Table 1, it is apparent there are four large firms in this market along with five middle-sized firms. The indicated market shares are for June 2012:

Comcast	22.0%
DirectTV	19.8%
Dish Network	14.0%
Time Warner Cable	12.4%
Cox	4.7%
Verizon FiOS	4.5%
Charter	4.3%
AT&T U-verse	4.1%
Cablevision	3.3%
All Others	<u>11.0%</u>
Total	100%

The importance of market shares, such as those reported above, is emphasized in the federal agency Guidelines mentioned above:

The Agencies normally consider measures of market shares and market concentration as part of their evaluation of competitive effects ... for the ultimate purpose of determining whether a merger may substantially lessen competition.<sup>11</sup>

As their preferred measure of concentration, the agencies calculate the Herfindahl-Hirschman Index (HHI) which is determined by summing the squares of the individual firms' market shares. Following the guidelines' recommended procedures, I calculate the HHI values under four conditions: 1) the current market structure, 2) the market structure

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<sup>11</sup> *Ibid.*, p. 15.

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that would result from the proposed merger between Comcast and TWC, and 3) the market structure that would result from the proposed merger and the proposed divestiture of certain cable systems<sup>12</sup>, and 4) the market structure that would result from the proposed merger together with a second proposed merger between AT&T and DirectTV. The resulting values are:

HHI in the current market structure	1314
HHI with the market structure created by a merger between Comcast and TWC -increase of 546	1860
HHI with the market structure created by a merger between Comcast and TWC and proposed divestiture -increase of 307	1621
HHI with the market structure created by both proposed mergers and proposed divestiture -increase of 469	1783

These values are relevant in comparison with the standards offered in the Guidelines. While the Guidelines state that mergers with HHI values below 1500 describe Unconcentrated Markets, which generally do not raise competitive problems, that is not so with higher HHI values. The Guidelines refer specifically to “Moderately Concentrated Markets, which are those with HHI values between 1500 and 2500,” and state the “Mergers resulting in moderately concentrated markets that involve an increase in the HHI of more than 100

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<sup>12</sup> Comcast has proposed to spin off 1.4 million subscribers to Charter and 2.5 million subscribers to an undisclosed cable system. Comcast and Charter Communications, “Charter and Comcast Agree to Transactions that will Benefit Shareholders, Industry and Consumers,” April 28, 2014, p. 6.

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points potentially raise significant competitive concerns and often warrant scrutiny.”<sup>13</sup> From these HHI values, the proposed merger between Comcast and TWC would create a “moderately concentrated market” that by Guidelines standards requires scrutiny for potential anti-competitive effects.

The data employed above are limited to content received via television, whether through cable or satellite. They do not include programming content received via a broadband connection on a personal computer or other devices such as tablets and smart phones. This latter vehicle for the receipt of programming content is expanding but still remains a small share of the total. In September 2012, for example, consumers watched online video programming on average only about 7 hours of content per month as compared with 34 hours of television programming per week.<sup>14</sup> This factor is relevant for appraising future market conditions because while cable systems and the telephone companies can now offer both televising and broadband Internet services, the technology is not yet available for widespread transmission of broadband signals through satellite-based systems.

This point is not in dispute and has been acknowledged by both the largest satellite and telephone MVPD entities. Thus, DirectTV, the largest satellite transmitter, states specifically that it cannot offer programming via the Internet “because its one-way video delivery service lacks broadband capabilities.”<sup>15</sup> As for providing broadband Internet services by the telephone companies, that option is technically feasible but requires various

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<sup>13</sup> *Horizontal Merger Guidelines.*, p. 19.

<sup>14</sup> US Government Accounting Office, *Video Marketplace Competition is Evolving and Government Reporting Should Be Reevaluated*, GAO-13-576, June 2013, p. 12.

<sup>15</sup> AT&T-DirectTV Application to the FCC, *Description of Transaction, Pubic Interest Showing, and Related Demonstrations*, redacted version, June 11, 2104.

upgrades. AT&T, the largest telephone MVPD, states that “it can only provide video service, and thus a broadband/video bundle, to those homes where it has deployed ‘fiber to the node’ (FTTN) or ‘fiber to the premises’ (FTTP) technologies. While AT&T plans to cover approximately 33 million customer locations with these technologies, that geographic region will cover less than one-quarter of U.S. TV households.”<sup>16</sup> AT&T’s CEO makes this point explicitly. He states: “Due to technology and economic limitations, we can offer video in only a small portion of the country – less than a quarter of American households and even in our wireline service territory, only in more densely populated areas.”<sup>17</sup> Apparently, there is considerable non-substitutability in supply as between the cable company MVPDs and their rivals who use other technologies in their ability to offer programming content on both television sets and via the Internet.

This factor has important competitive implications. Markets are defined in terms of degrees of substitutability in both demand and supply. To the extent that technological factors impede the joint supply of conventional and Internet-based programming content which large numbers of consumers desire to have, then those suppliers face an important market disadvantage which limits their ability to compete. For those customers, the market is limited to the cable companies and portions of the telephone companies who can provide both forms of programming content. Interestingly, this specific point was made recently in Congressional testimony by the CEO of DirectTV. In that testimony, he writes:

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<sup>16</sup> *Ibid.*

<sup>17</sup> Statement of Randall Stephenson, AT&T CEO, Statement on the Proposed Merger of AT&T and DirectTV, Before the United States House of Representatives, Committee on the Judiciary, Subcommittee on Regulatory Reform, Commercial and Antitrust Law, June 24, 2014, p. 2.

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In recent years, ... the market has changed. Bundles have largely replaced pure video. Video itself has combined with the Internet to satisfy customers' demands for more video on demand, TV Everywhere, and expanded recording capabilities.<sup>18</sup>

The evident non-substitutability between satellite-based and more conventional video-delivery platforms raises questions of whether all MVPDs compete in the same relevant economic market. That issue was addressed recently by Professor Michael Katz, and I repeat here his conclusions:

Market shares [of different MVPDs] do not provide a complete and accurate picture of competition because there are differences between a wireline multichannel video programming distributor (MVPD) and a satellite-based MVPD that tends to make them more distant competitors than would be two wireline MVPDs (or two satellite MVPDs) having the same market shares.<sup>19</sup>

I agree with Professor Katz's conclusion. The implication of this conclusion is that separate relevant submarkets exists which alternatively are wireline and satellite-based MVPDs.

Market shares in the wireline MVPD submarket for June 2012 are therefore:

Comcast	33.5%
Time Warner Cable	19.0%
Cox	7.1%
Verizon FiOS	6.8%
Charter	6.5%
AT&T U-verse	6.2%
Cablevision	5.0%
All Others	<u>15.9%</u>

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<sup>18</sup> Statement of Michael White, DirectTV CEO, Statement on the Proposed Merger of AT&T and DirectTV, Before the United States House of Representatives, Committee on the Judiciary, Subcommittee on Regulatory Reform, Commercial and Antitrust Law, June 24, 2014, p. 2.

<sup>19</sup> Michael L. Katz, *An Economic Assessment of AT&T's Proposed Acquisition of DirectTV*, June 11, 2014, pp. 7-8. [Redacted version for public inspection].

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Total 100%

These market shares describe a much more concentrated market. The computed HHI values are now:

HHI in the current market structure	1618
HHI with the market structure created by a merger between Comcast and TWC -increase of 1288	2906
HHI with the market structure created by both the merger between Comcast and TWC and the proposed divestiture -increase of 741	2359

Under the standards used by the federal antitrust agencies, the proposed merger when evaluated in this relevant sub-market increases the HHI value by over 1000 points and transforms a “Moderately Concentrated Market” into a “Highly Concentrated Market.” In such cases, the federal Guidelines state: “Mergers resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power.”<sup>20</sup> However, including the proposed divestiture places the proposed merger at the upper reaches of the “Moderately Concentrated Market” category with an increasing HHI value of 741. On these grounds, the question of whether the satellite transmission MVPDs who are technically foreclosed from offering broadband Internet services can effectively compete in a general market where broadband Internet transmission of programming content is increasingly important is an essential issue to be addressed in evaluating the competitive implications of the proposed merger.

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<sup>20</sup> *Horizontal Merger Guidelines*, p 19.

Sellers and Prices in the Market for the Delivery of Video Programming

Sellers into this market are firms which produce the content watched by consumers and thereby supply video programming.<sup>21</sup> They include primarily the following suppliers

CBS: CBS broadcast network and studios, Showtime

Discovery Communications: Discovery Channel, TLC, Animal Planet

Disney: ABC broadcast network and studios, ESPN, Disney Channel

NBC Universal: NBC broadcast network and studios, Universal, USA Network, MSNBC

21<sup>st</sup> Century Fox: Fox broadcast network and studios. Fox News, 20<sup>th</sup> Century Fox television

Time Warner: CW Network, CNN, HBO, TBS, Warner Bros. Studios

Viacom: MTV, Comedy Central, Nickelodeon, Paramount Pictures<sup>22</sup>

To be sure, these suppliers sometimes purchase programming from independent producers and sometimes produce their own content. In either case, they combine this programming into bundles, which are then sold as packages to the MVPDs, who distribute the product to consumers.

A feature of this market is the extent of vertical integration between suppliers and distributors. Among the largest four MVPDs, only Comcast has a large presence among national suppliers of programming content, which includes 50 national networks.<sup>23</sup> TWC's affiliation with the different Time Warner programming suppliers is unclear because although their formal connections were

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<sup>21</sup> In a 2013 report, the FCC distinguishes between entities that supply video programming and those that distribute it, which are the MVPDs.

<sup>22</sup> GAO Report, p. 7.

<sup>23</sup> Federal Communications Commission, *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, July 22, 2013, pp. 20, 189.

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severed, there may still remain legacy effects. In any event, it appears that the merging firms are the only ones among the four largest MVPDs with substantial integration of national programming suppliers across this market interface.

The extent of integration is relevant for the market for video programming to the extent that integrated distributors treat their affiliated suppliers different from independents. A 2005 study examined this question empirically and reached the following conclusions:

In each of the four network groups studied - basic outdoor entertainment, basic cartoon, basic movie and premium movie networks – vertically affiliated networks were almost uniformly favored by Comcast, Time Warner, and AT&T in terms of higher carriage and/or more frequent positioning on analog program tiers that are more widely available to consumers. In the majority of cases, unaffiliated networks that we identified to be rivals to these integrated networks were carried less frequently and they were more often placed on limited-access tiers.<sup>24</sup>

Suppliers in this market typically receive revenues in the form of both a monthly fee for each subscriber and from any advertising revenues received. The latter are based in part on the number of subscribers who receive the programming.<sup>25</sup> Because of this composite source of potential revenues, content providers are necessarily wary of placing excessive demands on MVPDs for fear of restricting distribution and the concomitant volume of advertising revenues. This revenue structure limits the bargaining strength of programming suppliers relative to the MVPDs and enhances the MVPDs' pricing power in this market.

Although FCC rules require MVPDs to include over-the-air broadcast channels in their basic packages offered to consumers, that is not so for cable networks whose inclusion is subject to

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<sup>24</sup> Doug Chen and David Waterman, "Vertical Foreclosure in the U.S. Cable Television Market: an Empirical Study of Program Network Carriage and Positioning," October 2005, p. 34.

<sup>25</sup> *Ibid.*, pp. 13, 88.

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negotiation between the video programming supplier and the MVPD. While carrying the most popular programming may be essential to the MVPD’s successful penetration in its local markets, that is not so for many “specialty” networks. This contrast is readily seen in the wide distribution of fees paid to the programming providers. For 2013, the highest affiliate fee averaged across all MVPDs was paid for ESPN at \$5.54 per subscriber per month.<sup>26</sup> However, were only six channels in all whose fees exceeded 50¢ and only 36 channels with affiliate fees exceeding 25¢.<sup>27</sup> There were over 150 channels where affiliate fees were lower than that including ten channels with no fees charged at all. For the great bulk of channels, their primary source of revenues are those obtained from advertisers, where the number of subscribers is a critical factor.

An important feature of this market is that the largest MVPDs are reported to pay less for their programming content than their smaller rivals.<sup>28</sup> These reports are confirmed by Comcast whose Chief Financial Officer states that its merger with TWC will lead to reduced programming costs of more than {{ }} per year.<sup>29</sup> These lower prices paid for video programming are sometimes described as “quantity discounts,” but they are actually quite different than that. There are few cost savings associated with servicing a larger number of viewers particularly since production costs are the same regardless of the number of viewers, and furthermore all transmission services are covered by the MVPD buyers. This statement suggests that Comcast pays lower prices for its primary input, which is consistent with its exercise of monopsony power.

Another feature of monopsony power is the reduction of quantities, which here refers to the

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<sup>26</sup> SNL Financial.

<sup>27</sup> *Ibid.*

<sup>28</sup> GAO Report, p. 22, and FCC Report of July 22, 2013, p. 34.

<sup>29</sup> Declaration of Michael J. Angelakis, Before the Federal Communications Commission, MB docket No. 14-57, April 7, 2014, p. 4.

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number of channels purchased by video programming suppliers and distributed to their subscribers. Although programming suppliers typically offer their programming in terms of collections of channels which they seek to sell as a bundle, outcomes are subject to negotiation so the final outcomes are not so neatly packaged. One means to exercise monopsony power is to reject the seller's proposed bundles and agree only to pay for a smaller number of channels. Strikingly, that appears to be the means by which Comcast has acted. See the evidence below on the number of channels carried in its medium-tier packages on its cable networks along with the numbers carried by other wireline distributors:<sup>30</sup>

	<u>2012</u>	<u>2013</u>
Comcast	160 channels	160 channels
Time Warner Cable	NA	200 channels
Cox	236 channels	280 channels
Verizon VOS	285 channels	290 channels
Charter	NA	NA
AT&T U-verse	270 channels	270 channels
Cablevision	NA	NA

While this data is incomplete and requires confirmation, it suggests that Comcast cable systems offer fewer programming channels than do its rivals to most of their subscribers, which again is consistent with its exercise of monopsony power.

Despite the parties' contention, this suggestion is not overturned by the recognition that the costs of producing video programming are largely sunk and borne prior

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<sup>30</sup> Federal Communications Commission, *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, July 20, 2012, p 58; and July 22, 2013, p 59.

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to their consumption with minimal or zero marginal costs or transmission. That cost structure is not unique in the economy and applies as well to the production of bridges (where the marginal cost of another person walking across a bridge is effectively zero) and software (where the marginal cost of another download is effectively zero). Over time, however, there is also a rising supply price of video programming, and it is on this margin that a monopsonist can exploit its position. The relevant cost structure in the market for video programming is not for increased sales of a particular program but rather for more and better programs to attract a wider audience.

To be sure, suppliers in the market for video programming will seek to sell the same product to various buyers just as any seller wants to reach as many buyers as he can. Prices and quantities are still sought to maximize profits. And from the buyer's vantage point, he or she will still pay either the competitive price or that set through the exercise of monopsony power.

In the economic theory of monopsony, a dominant buyer exercises his or her market power by purchasing fewer units and thereby paying a lower price by moving down the supply curve of the input; in this case for video programming. This result is achieved here not by buying fewer units of the same channel's programming but rather by buying fewer channels and paying less overall for its programming content. As noted above, these reduced payments to video programming suppliers are expected to reach {{ }} million over a three year period as a result specifically of "more favorable rates and terms in some

of Comcast’s programming agreements”<sup>31</sup> gained because of the proposed merger. These are the admitted gains expected from Comcast’s enhanced exercise of monopsony power.

An essential feature of the reduced monopsony prices paid for an input is that they do not lead to lower prices of the related output. As Blair and Harrison emphasize in their treatise on Monopsony: that while it might be tempting to infer that any lower input costs secured by a monopsonist will be passed on to consumers in the form of lower output prices, that would be a mistake. They write: “Although the monopsonist does pay a lower price for some inputs, it does not pass on these costs simply because its relevant costs for decision-making purposes are marginal costs and these are not lower.” In fact, they proceed, “**when the monopsonist has market power in its output market, the reduced input prices translate into higher output prices.**”<sup>32</sup> Since the merging parties exercise some degree of market power in their current operations of cable television systems, this economic result indicates that any enhanced monopsony power resulting from the proposed merger will likely lead to higher prices for wireline consumers.

#### Responding to an Economic Report

Among my assignments was to evaluate and comment on the economic report submitted in support of the Comcast-TWC merger by Drs. Rosston and Topper.<sup>33</sup> From the start, these writers emphasize that with only a few exceptions, Comcast and TWC operate in

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<sup>31</sup> Declaration of Michael J. Angelakis, Before the Federal Communications Commission, MB docket No. 14-57, April 7, 2014, p. 4.

<sup>32</sup> Roger D. Blair and Jeffrey L. Harrison, *Monopsony, Antitrust Law and Economics*, Princeton University Press, 1993, pp. 39-42. (emphasis added)

<sup>33</sup> Gregory L. Rosston and Michael D. Topper, *An Economic Analysis of the Proposed Comcast – Time Warner Cable Transaction*, April 8, 2014.

separate geographic regions and therefore do not directly compete as sellers of Cable TV services. However from this observation they draw the further conclusion that as a result, they do not also compete as buyers of video programming. In other words, unless these firms were competing as sellers in the same market place, they cannot compete as buyers of the same essential input. On this point, Rosston and Topper write: “Because Comcast and TWC do not compete for customers, they do not compete in purchasing programming.”<sup>34</sup>

I disagree with this judgment. It rest on the argument that competition in an output market is required for competition to exist in an input market, which is an issue directly explored by Blair and Harrison. In their section on Horizontal Mergers, Blair and Harrison state: “the merger to monopsony may or may not involve monopoly in the output market.” They continue: “In the following analysis, monopsony power without any corresponding monopoly power is assumed. In this case, the merged monopsonist still imposes welfare losses on society.”<sup>35</sup> This point is well known: the fact that a proposed merger may not extend the degree of monopoly power in the relevant output markets does not immunize the parties from regulatory consideration of whether the merger exacerbates the degree of monopsony power in the relevant input market, as in effect Rosston and Topper claim.

Throughout the economy, firms who sell into different markets compete for purchases of the same or similar inputs and this includes inputs with low or minimal marginal costs such as business software. Even though buyers may operate in different industries and thereby not be direct competitors, they can still exploit any market conditions that restrict the number of prospective buyers available to sellers. That result depends on

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<sup>34</sup> *Ibid.*, p. 68.

<sup>35</sup> Blair and Harrison, p. 82.

conditions in the input market and not on any lack of competitive overlap in their output markets.

The second major point made in the Rosston-Topper report is that there may be substantial gains to consumers from the realization of economies of scale resulting from the merger. For the most part, they suggest, these economies result from the presence of fixed costs: “fixed costs lead to economies of scale because average costs decrease as output increases.”<sup>36</sup> Implicit in their discussion on this point is that there will be no need for any increased costs to be borne by a substantially larger firm. While this could be so, they offer no evidence on this matter.

More relevant for our purposes are the quantitative magnitudes of the fixed costs at issue here. The authors state that “Comcast invests around \$1 billion each year in intangible assets, most of which is devoted to software research, development, and deployment to improve its products and services and to develop new ones.”<sup>37</sup> While a significant sum, it represents only about 3 percent of Comcast’s total costs in 2013.<sup>38</sup> Expressed differently, this investment represents about \$45 per subscriber which would fall to about \$29 per subscriber were the merger to take place. Although the principle stated might be correct, the magnitudes involved are small.

Consider Comcast’s cost structure. Its cable communication business is primarily engaged in offering cable television, broadband Internet and voice services to residential

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<sup>36</sup> Rosston-Topper Report, p. 19.

<sup>37</sup> *Ibid.*, p. 19.

<sup>38</sup> Comcast Corp., Form 10-K, 2013.

customers. These three services account for nearly 83 percent of its total revenues.<sup>39</sup> As we are reminded by their documents, these services are provided at the local level which should not be greatly affected by the merger. The second major component of costs are those for programming which now represent about 37 percent of total costs.<sup>40</sup> What remains to be done at the corporate level are product and system development, and while important, do not account for a major share of total costs. The authors' discussion of fixed costs and economies of scale is highly conceptual and pays little attention to the magnitudes involved. In fact, these magnitudes appear to at best represent minor cost savings for a combined firm.

To explore these issues further, consider Comcast's Operating cost data provided in Table 3. For the most part, these costs apply to the provision of wireline services in local markets which are not directly affected by the proposed merger. The only elements of costs directly impacted by the merger are those associated with multi-system operations, and it is striking that the only figure given for such costs represent only about 3 percent of total costs. Furthermore, Comcast's anticipated savings in overhead costs of {{ }} per year<sup>41</sup> would need to be derived from the company's investment in research, development and deployment of only about \$1 billion per year.

See also Table 4 where similar data for Time Warner Cable is presented. Again, it appears that most costs apply to the provision of local wireline services either for television reception or broadband Internet services. While there may be some level of scale economies that can be achieved through this merger, the parties have not disclosed their source.

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<sup>39</sup> *Ibid.*

<sup>40</sup> *Ibid.*

<sup>41</sup> Declaration of Michael J. Angelakis, Before the Federal Communications Commission, MB docket No. 14-57, April 7, 2014, p. 4.

**REDACTED – FOR PUBLIC INSPECTION**

**TABLE 3: Comcast Cable Communications Operating Costs, 2011-2013**  
(\$ millions)

	2013	2012	2011	Percent of Operating Costs and Expenses		
				2013	2012	2011
Programming	\$9,107	\$8,386	\$7,851	37.0%	35.9%	35.8%
Technical and product support	\$5,349	\$5,187	\$5,048	21.7%	22.2%	23.0%
Customer service	\$2,097	\$1,995	\$1,911	8.5%	8.5%	8.7%
Franchise and other regulatory fees	\$1,246	\$1,176	\$1,104	5.1%	5.0%	5.0%
Advertising, marketing and promotion	\$2,896	\$2,731	\$2,430	11.8%	11.7%	11.1%
Other	\$3,936	\$3,874	\$3,594	16.0%	16.6%	16.4%
	\$24,631	\$23,349	\$21,938	100.0%	100.0%	100.0%
<b>Other costs</b>						
Depreciation & amortization	\$64,394	\$6,405	\$6,395			

*Source:* Comcast Corporation, Form 10-K

**Definitions**

Programming expenses, our largest operating expense, are the fees we pay to license the programming we distribute to our video customers. These expenses are affected by the programming license fees charged by cable networks, fees for retransmission of the signals from local broadcast television stations, the number of video customer we server and the amount of content we provide.

Technical and product support expenses include costs to complete server call and installation activities, as well as network operations, product development, fulfillment and provisioning costs.

Customer service expenses include the personnel and other costs associated with handling customer sales and service activity.

Franchise and other regulatory fees: no definition given.

Advertising, marketing and promotion: no definition given.

Other: no definition given.

**REDACTED – FOR PUBLIC INSPECTION**

**TABLE 4: Time Warner Cable Operating Costs, 2011-2013 (\$ millions)**

	2013	2012	2011	Percent of Costs of Revenue		
				2013	2012	2011
Video programming	\$4,782	\$4,621	\$4,342	46.2%	46.5%	47.5%
Employee	\$3,019	\$2,865	\$2,621	29.2%	28.8%	28.7%
High Speed Data	\$175	\$185	\$170	1.7%	1.9%	1.9%
Voice	\$554	\$614	\$595	5.4%	6.2%	6.5%
Video Franchise and other fees	\$500	\$519	\$500	4.8%	5.2%	5.5%
Other direct operating costs	\$1,312	\$1,138	\$910	12.7%	11.4%	10.0%
	\$10,342	\$9,942	\$9,138	100.0%	100.0%	100.0%
<b>Other costs</b>						
Selling, general and administrative	\$3,798	\$3,620	\$3,311			
Depreciation & amortization	\$3,281	\$3,264	\$3,027			
Other	\$119	\$115	\$130			

*Source:* Time Warner Cable, Form 10-K

**Definitions**

Video Programming: no definition given.

Employee and other direct operating costs include costs directly associated with the delivery of the Company's video, high-speed data, voice and other services to subscribers and the maintenance of the Company's delivery systems.

High speed data: no definition given.

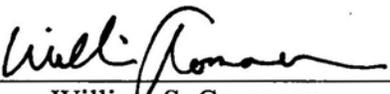
Voice costs associated with the delivery of voice services, including network connectivity costs.

Video franchise and other fees include fees collected on behalf of franchising authorities and the FCC.

**REDACTED – FOR PUBLIC INSPECTION**

This Declaration has been prepared in support of the foregoing Petition to Deny the merger of Comcast and Time Warner Cable. I declare under penalty of perjury that the foregoing statements are true and correct to the best of my knowledge.

Executed this 22nd day August 2014.

  
\_\_\_\_\_  
William S. Comanor

APPENDIX A

Curriculum Vitae

NAME William S. Comanor

ADDRESS Department of Economics  
University of California  
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DATE OF BIRTH May 11, 1937

BIRTHPLACE Philadelphia, Pennsylvania

EDUCATION 1951-1955 Central High School, Philadelphia, PA  
1955-1957 Williams College, Williamstown, MA  
1957-1959 Haverford College, Haverford, PA  
A.B. in Economics  
1959-1963 Harvard University, Cambridge, MA  
Ph.D. in Economics  
1963-1964 London School of Economics,  
London, England

THESIS TITLE The Economics of Research and Development in  
the Pharmaceutical Industry

FIELDS OF INTEREST Applied Microeconomics  
Industrial Organization and Public Policy

PROFESSIONAL  
OFFICES Vice President, Industrial Organization  
Society, 1990  
President, Industrial Organization Society,  
1991

AWARD Distinguished Fellow Award, Industrial  
Organization Society, 2003

BOARD OF EDITORS Review of Industrial Organization  
Antitrust Bulletin  
Journal of Industrial Economics  
International Journal of Advertising

## Professional Experience

- Teaching Fellow, Harvard University, 1961-1963.
- Instructor in Economics, Harvard University, 1964-1965.
- Special Economic Assistant to the Assistant Attorney General, Antitrust Division, U.S. Department of Justice, 1965-1966.
- Assistant Professor of Economics, Harvard University, 1966-1968.
- Associate Professor of Economics, Graduate School of Business, Stanford University, 1968-1973.
- Fulbright Visiting Lecturer, University of Tokyo, 1972.
- Visiting Associate Professor of Economics, Harvard University, 1973-1974.
- Professor of Economics, University of Western Ontario, 1974-1975.
- Director, Bureau of Economics, Federal Trade Commission, 1978-1980.
- Professor of Economics, University of California, Santa Barbara, 1975-
- Chairman, Department of Economics, University of California, Santa Barbara, 1984-1987.
- Visiting Professor of Law, University of California, Los Angeles, 1988-90.
- Visiting Professor of Public Health, University of California, Los Angeles, 1990-93
- Professor, Department of Health Policy and Management, Fielding School of Public Health, University of California, Los Angeles, 1993-

## Books and Monographs

Advertising and Market Power, Harvard University Press, 1974 (with Thomas A. Wilson).

National Health Insurance in Ontario: The Effects of a Policy of Cost Control, American Enterprise Institute, 1980.

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