only injures competition in those areas, but can also lead to a reduction in overall quality that harms competition everywhere.

B.1.2. Delivery of TV video programming

20) Video programming is created for and delivered over a variety of platforms. In what follows, I focus on programming created primarily for home viewing that is delivered by subscription cable, satellite, or local exchange carrier MVPDs (and, to a lesser extent, over-the-air broadcasters and broadband providers). For a discussion of the Internet delivery of video programming, see Section C.4.

B.1.3. Broadcast television

21) Video programming is broadcast by a limited number of broadcast television licensees. The broadcast signal is available without charge to anyone within range who has the appropriate receiver. Consumers do not pay for access to the broadcast signal. Cable networks are not available over broadcast television. Broadcast networks offer some programming that is distributed nationally and some that is distributed only locally.

22) There are more than 1,700 full-power broadcast television stations licensed to operate in the United States.[13] The Transaction would give the created joint venture control of NBCU's two broadcast television networks (NBC and Telemundo) and its 26 local owned-and-operated broadcast television stations.

B.1.4. Cable systems

23) The dominant category of MVPD in the United States today is cable systems. Cable operators deliver video programming by cable to households from cable headends. Cable systems are generally required to collect and retransmit the local broadcast networks' signals, as well as distribute the national cable and premium networks. Cable operators that operate more than one cable system are referred to as multiple system operators (MSOs). The five largest MSOs in the United States are Comcast, Time Warner Cable,[14] Charter, Cox, and Cablevision.

24) A cable headend receives television signals from various content providers (typically via satellite), arranges that content into a format ("channel lineup") chosen by the system, often further manipulates the content (e.g. digitizing and compressing it), and distributes it via wire (coaxial or fiber optic cable)

[13] FCC News Release, "Broadcast Station Totals as of December 31, 2009," released February 26, 2010.

[14] Prior to March 2009, Time Warner was both an MSO and the owner of significant programming interests. In March 2009, the MSO component, Time Warner Cable, was spun off from Time Warner Inc., which holds the programming interests (http://ir.timewarnercable.com/phoenix.zhtml?c=207717&p=irol-separationFAQ#39408, accessed May 12, 2010). In this report, when describing Time Warner for the period after March 2009, I specify Time Warner Cable or Time Warner Inc.

to subscribers' homes. There are roughly 7,000 cable systems currently operating in the United States.[15]

25) Consumers receiving video programming by cable typically subscribe to a "tier" of service that allows them to access a bundle of channels and pay a monthly subscription fee for that service. A typical tier structure includes a "basic" tier that contains the broadcast networks and a limited selection of cable networks, an "expanded basic" tier that contains the channels in the basic tier plus additional cable networks, and a "digital basic" tier that contains all the channels in the expanded basic tier plus additional cable networks. In addition, many cable operators offer niche packages that appeal to specific customer segments. Premium channels and pay-per-view programming are typically sold as an add-on to one of the other tiers.

26) Contracts between content providers and distributors typically contain a "territory" clause restricting the rights of the distributor to distribute that content to the local areas within the US for which the distributor has a valid legal franchise. Some US households are served by more than one cable provider (overbuild cable systems), such as RCN, although the FCC reports that as of 2006, "Relatively few consumers have a second wireline alternative, such as an overbuild cable system."[16]

B.1.5. Satellite systems

27) A second category of MVPD is direct broadcast satellite (DBS or satellite). DBS operators deliver video programming by satellite directly to households, which must have a satellite dish to receive the signal. There are two primary satellite operators, DirecTV and Dish, each of which has national coverage.

28) Except for differences in local broadcast station carriage, the programming offered by satellite is essentially the same as by cable. DBS customers typically pay a monthly subscription fee for service, and as with cable, consumers typically subscribe to a "tier" of service that allows them to access a bundle of channels. However, because satellite systems are entirely digital, even introductory tiers tend to offer more channels than the typical basic or expanded basic cable tier.[17]

[15] NCTA 2008 Industry Overview, p.14, http://i.ncta.com/ncta_com/PDFs/NCTA_Annual_Report_05.16.08.pdf, accessed June 13, 2010.

[16] FCC (2009a), "Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Thirteenth Annual Report," Accepted November 27, 2007, Released January 16, 2009, at paragraph 9. Available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-07-206A1.pdf (accessed May 10, 2010).

[17] Compare the DirecTV (http://www.directv.com/DTVAPP/new_customer/base_packages.jsp?, accessed June 13, 2010) and Dish (http://www.dishnetwork.com/packages/programming/default.aspx, accessed June 13, 2010) channel line-ups with the distribution of the number of basic and expanded basis channels on cable shown in Table 16.

B.1.6. Other wireline video services

29) In a growing number of geographic areas, local exchange carriers (LECs) such as Verizon and AT&T offer video services over their infrastructure. These offerings are similar to those of cable and satellite providers. Like the satellite carriers, the services of Verizon and AT&T are all-digital and consequently feature more channels in their basic tiers than MSO services.

B.1.7. MVPD and network programming consolidation

30) As shown in Table 1, over the past 10 years there has been substantial consolidation in the MVPD market, with the HHI going from 954 in 2000 to 1371 in 2009.

31) In the top fifteen DMAs, the top-ten US MVPDs control 95% of the subscribers in these markets, with Comcast controlling almost one-third of the subscribers in these markets. [[[redacted]]][18] See Table 2.

32) Moreover, there have been significant amounts of consolidation in cable programming. See Table 3. As a result, a great deal of important programming content is now owned by major multi-network owners and MVPDs. The Transaction may trigger additional consolidations as other MVPDs and content providers seek to protect themselves against Comcast who will, subsequent to the Transaction, have the ability and incentive to leverage its content against other MVPDs and its distribution strength against competing content providers such as Bloomberg TV.

33) Major multi-network owners (with ownership shares in five or more cable networks) and MVPDs currently have ownership stakes in 47 of the top 50 networks (94%) in addition to having ownership of the business news networks CNBC World and Fox Business Network. The 49 networks listed in Table 3 that have major multi-network owners and/or MVPD owners account for 87% of the total net advertising revenue for all basic cable networks.

34) For the 53 networks listed in Table 3, all but 4 of them (92%) are owned by major multi-network owners and/or MVPDs. The only widely distributed networks not owned by a major multi-network owner and/or MVPD are Bloomberg TV, Hallmark Channel, TV Guide Network, and WGN America. SNL Kagan's 2009 Economics of Basic Cable Networks considers 216 cable networks, but lists only 16 networks (7.4%) as being 100% owned by a single-network owner in April 2009. Bloomberg TV is the only remaining independently owned news channel.

[18] [[[redacted]]]

35) Given the economic incentive of a cable MSO to discriminate in such matters as channel location and promotion of networks in which it has a direct financial stake, it is unsurprising that networks that compete with programming owned or operated by the leading MSOs suffer discrimination in carriage, channel location, and other matters under the control of the MSO as described below in Section C.1.

B.1.8. Advertising on cable TV programming networks

36) The production and delivery of video programming generates audiences, which then can be "sold" to advertisers. Cable networks typically sell advertising time on their networks through advertising agencies, acting on behalf of corporate or other clients.[19] In addition, an MVPD distributing a network typically demands the right to sell some (*e.g.*, two minutes per hour) spot advertising on that network as a condition of providing carriage. Prices for advertising time are based primarily on the size and characteristics of the audience. Advertisers typically approach the purchase of advertising time with a fixed advertising budget and a target number of impressions over a fixed period of time. Advertisers also typically have targets for the distribution of their advertising dollars across programming genres, specifying for example shares for business news, sports, and spot advertising.

37) Nationwide spot advertising sales are possible through satellite distributors DirecTV and Dish. Some MSOs such as Comcast sell advertising across multiple systems,[20] and there are spot advertising sales firms, such as National Cable Communications, which is designed to be a clearinghouse for national spot cable sales.[21] In the future, a national platform may also be available through Canoe, which is a joint effort by the six top MSOs (all of the six MSO among the top-ten MVPDs) to combine their systems to create a national platform for interactive ad sales.[22]

[19] Unless otherwise noted, statements in this paragraph rely on Trevor Fellows, Head of Global Media Sales, Bloomberg TV, April 13, 2010, interview.

[20] See http://www.comcastspotlight.com/ (accessed April 14, 2010), which describes Comcast Spotlight as "the advertising sales division of Comcast Cable, helps put the power of cable to use for local, regional and national advertisers. It is focused on providing multi-platform marketing solutions to reach audiences most effectively and efficiently. Headquartered in New York with offices throughout the country, Comcast Spotlight has a presence in nearly 90 markets with approximately 30 million owned and represented subscribers. Comcast Spotlight is a trademark of Comcast Cable."

[21] National Cable Communications is jointly owned by Comcast, Cox, and Time Warner Cable, and claims to represent every other MSO in the US. (http://www.spotcable.com/about.html, accessed May 31, 2010)

[22] The MSOs involved are: Comcast, Time Warner Cable, Bright House, Cablevision Systems, Charter Communications, and Cox. The goal of Canoe is: "to create national platforms for enhanced-TV applications such as addressable TV, and to deal with advertiser frustrations stemming from the lack of scale and compatibility of different MSOs." (Steve McClellan, "Transforming TV from Medium to Platform," *Ad Week*, Sept. 29, 2008, available at http://www.adweek.com/aw/content_display/news/media/e3i120e70a153d46c4b30e76dbeb37699bb, accessed April 14, 2010.)

B.2. Horizontal and vertical combinations created by the Transaction

B.2.1. Horizontal

38) The merged parties have significant horizontal overlaps in areas of broadcast and cable network programming, online entertainment services, and filmed entertainment.

39) The Transaction will increase concentration in the market for cable network programming. NBC Universal owns and operates two national broadcast networks, NBC Television Network and Telemundo Network, the second-largest US. Spanish-language broadcast network, as well as 26 local television stations.[23] NBC Universal also owns a number of leading cable networks, including CNBC, MSNBC, Bravo, Chiller, CNBC World, mun2, Oxygen Media, Sleuth, Syfy, Universal HD, and USA Network.[24] NBC Universal also owns significant minority stakes in other networks such as the A&E Television Networks (which includes A&E, Bio, The History Channel, Lifetime, and other cable networks), ShopNBC, and The Weather Channel.[25] Comcast owns attributable interests in 11 national programming networks, including five wholly owned (E!, The Golf Channel, Versus, Style, and G4) and six in which Comcast has minority stakes (PBS KIDS Sprout, TV One, NHL Network, Current Media, MLB Network, and Retirement Living Television).[26] Comcast also has partial ownership interests in three companies providing PPV or VOD programming, with majority stakes in Exercise TV and iN DEMAND Networks and a minority stake in FEARnet.[27] In addition, Comcast wholly owns a large portfolio of regional and local programming networks, including The Comcast Network, New England Cable News, Comcast Entertainment Television, Comcast Hometown Television, C2, CN100, and Comcast Television Network, and has a minority stake in Pittsburgh Cable News.[28] Finally, Comcast has a substantial portfolio of interests in sports networks, including wholly-owned networks: Comcast SportsNet California, Comcast SportsNet Mid-Atlantic, Comcast SportsNet New England, Comcast SportsNet Northwest, Comcast SportsNet (Philadelphia) and Comcast Sports Southwest; majority-owned networks: Cable Sports Southeast and Comcast SportsNet Bay Area; half ownership in The Mtn. – MountainWest Sports Network; and minority-owned networks: Comcast SportsNet Chicago and SportsNet New York.[29]

40) There are also substantial horizontal overlaps in terms of online interactive services. NBCU owns and operates a number of online sites such as NBC.com, CNBC.com, iVillage and has a nearly 1/3 stake in Hulu.com, which offers a large selection of videos from nearly 170 commercial content providers.

[23] See GE and Comcast's "Applications and Public Interest Statement", pp.26-30.
[24] See GE and Comcast's "Applications and Public Interest Statement", p.30.
[25] See GE and Comcast's "Applications and Public Interest Statement", pp.26-31.
[26] See GE and Comcast's "Applications and Public Interest Statement", pp.19-20.
[27] See GE and Comcast's "Applications and Public Interest Statement", p.20.
[28] See GE and Comcast's "Applications and Public Interest Statement", pp.20-21.
[29] See GE and Comcast's "Applications and Public Interest Statement", p.21.

NBCU also owns a 50% share in msnbc.com, a joint venture with Microsoft, and a minority stake in The Weather Channel Interactive assets including the domain weather.com.[30] Comcast's online interactive assets include Comcast.net, Fandango, DailyCandy, Plaxo, and Fancast.[31]

41) Finally, the parties have overlapping interests in filmed entertainment, with NBCU owning Universal Pictures, one of the six major American movie studios (others being Warner Bros. Pictures, 20th Century Fox, Paramount Pictures, Columbia Pictures and Walt Disney Pictures/Touchstone Pictures), and art house studios Focus Features and Focus Features International.[32] Comcast owns a minority stake in MGM (Metro-Goldwyn-Mayer), which owns distribution rights to a large collection of movies and television programming.[33]

B.2.2. Vertical

42) While there are horizontal overlaps between NBCU and Comcast as described above in terms of cable network programming, on-line interactive service, and filmed entertainment, the primary concern I address relates to the competitive effects where Bloomberg TV and CNBC compete.

43) Comcast's main business areas today are cable systems and video services as well as broadband Internet and digital voice. Assets in these areas are necessary for the distribution and delivery of TV and on-line content and hence give rise to vertical relationships between content providers and delivery providers. The Transaction will create an entity with an increased combination of assets in these two areas.

44) Cable distribution is a local business due to the geographic limits imposed by cable infrastructure and the requirements imposed by local governments who typically franchise specific cable operators within their jurisdiction. The CEO of Comcast has publicly testified that cable is a local business.[34] See Table 2.

45) Comcast-owned cable systems serve approximately 23.8 million customers in 39 states and the District of Columbia.[35] Of these, approximately 18 million, representing approximately 76 percent of

[30] See GE and Comcast's "Applications and Public Interest Statement", pp.31-33.

[31] See GE and Comcast's "Applications and Public Interest Statement", pp.22-23.

[32] See GE and Comcast's "Applications and Public Interest Statement", p.31.

[33] See GE and Comcast's "Applications and Public Interest Statement", pp.21-22.

[34] Testimony of Brian L. Roberts, US Senate Committee on Commerce, Science, & Transportation, Hearings on Consumers, Competition, and Consolidation in the Video and Broadband Market, March 11, 2010, available at http://commerce.senate.gov/public/index.cfm?p=Hearings&ContentRecord_id=b6c5fd27-eb69-417f-9075-54712a42e1cc&ContentType_id=14f995b9-dfa5-407a-9d35-56cc7152a7ed&Group_id=b06c39af-e033-4cba-9221-de668ca1978a&MonthDisplay=3&YearDisplay=2010, accessed June 14, 2010, saying at time stamp 141:14, "and I hope that we are going to invest in localism because we are a local company. And whether that is the TV station or the cable station, there has been a trend to cut back on local public affairs programming, local news programming."

[35] See GE and Comcast's "Applications and Public Interest Statement," p.17.

Comcast's cable customer base, subscribe to digital cable services.[36] Significantly, Comcast is the dominant MVPD provider in ten of the top-fifteen DMAs, with subscriber shares greater than 60% in the top-15 DMAs of Chicago, Philadelphia, and Boston, greater than 50% in San Francisco, Detroit, and Seattle-Tacoma, and greater than 40% in Atlanta, Washington, DC, Houston, and Minneapolis-St. Paul. Over the same cable infrastructure, Comcast delivers high speed internet services to approximately 15.7 million subscribers and digital telephony services to approximately 7.4 million customers.[37] Comcast also offers its consumers a mobile wireless broadband service, marketed as Comcast High-Speed 2go.[38]

46) News and information programming is distinct in many ways from other TV programming and has been recognized as uniquely important content in which a diversity of perspectives is critical.[39] News programming has also been treated as a product market distinct from other programming categories by regulators.[40]

47) News, in all its forms, is fact-based, timely programming that involves the gathering, editing, and reporting of information. Dedicated cable news networks encompass a variety of types of news, including general news, business news, sports news, weather news, etc. The remainder of this report focuses the television programming primarily dedicated to TV business news. I have identified four TV business news programming networks: Bloomberg TV, CNBC, CNBC World, and Fox Business Network. These four networks are unique in their emphasis on business and financial news, making them particularly close substitutes for one another.

48) The first step in any merger competition analysis is to determine the market in which the merging parties operate. A market definition exercise typically starts by establishing the closest substitutes to

[36] See GE and Comcast's "Applications and Public Interest Statement," p.18.

[37] See GE and Comcast's "Applications and Public Interest Statement," p.19.

[38] See GE and Comcast's "Applications and Public Interest Statement," p.24.

[39] See, e.g., the FCC's 2006 Quadrennial Review of the broadcast ownership rules stating: "Ensuring that the public has access to a diversity of viewpoints promotes First Amendment values." (FCC (2008a), "In the Matter of 2006 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules," Report and Order and Order on Reconsideration, Adopted December 18, 2007, Released February 4, 2008, at footnote 208. Available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-07-216A1.pdf, accessed June 14, 2010.) "We reaffirm the Commission's conclusion [in the FCC's 2002 Biennial Review Order] that 'fostering the availability of diverse viewpoints remains an important policy goal, and that diversity of ownership promotes diversity of viewpoints.'" (FCC, 2008a, paragraph 82) "In adopting the newspaper/broadcast cross-ownership rule over 30 years ago, the Commission sought to promote competition and diversity of viewpoints. Indeed, diversity of viewpoint has been especially important in the context of newspaper/broadcast cross-ownership, given the reliance the public has placed on these media as sources of local news and information." (FCC, 2008a, paragraph 63)

[40] In the Time Warner-Turner case (FTC, "In the Matter of Time Warner Inc., Turner Broadcasting System, Inc., Tele-Communications, Inc., and Liberty Media Corporation," Docket No. C-3709, Decision and Order), the FTC defines "Independent Advertising-Supported News and Information Video Programming" as a distinct programming category involving programming that "is a 24-hour per day service consisting of current national, international, sports, financial and weather news and/or information, and other similar programming." (p.3) Time Warner was ordered to "execute a Programming Service Agreement with at least one Independent Advertising-Supported News and Information National Video Programming Service, unless the Commission determines, upon a showing by Time Warner, that none of the offers of Carriage Terms are commercially reasonable." (p.13)

the product or service under investigation from a demand-side perspective. These substitutes put the most immediate competitive constraints on companies delivering the focus product or service. In order to answer the question which products (and geographic areas) are part of the relevant market, the so called SSNIP (small, but significant non-transitory increase in price) test is used. The test asks whether a hypothetical monopolist would be able to *ceteris paribus* profitably increase the price for the group of products (in a particular geographic area) included in the candidate relevant market by a small, but significant amount (typically 10%).[41] If hypothetical monopolist can sustain supra-competitive prices, this group of products is usually considered to be the relevant market.

49) I present analysis below that supports the conclusion that TV business news programming networks constitute a relevant antitrust product market.[42] This conclusion is based on a qualitative review of the characteristics and history of such networks and a quantitative analysis of data concerning network distribution, viewing, advertising, and other metrics. My consideration of both qualitative and quantitative sources is consistent with the customary economic approach, as well as the analytical methods discussed in the Draft Revised Merger Guidelines released by the Department of Justice and Federal Trade Commission on April 20, 2010.

50) As those guidelines make clear, the ultimate objective in any antitrust merger analysis is to assess the competitive effects of the transaction rather than to measure market definition as an end in itself. (Draft Revised Merger Guidelines, §4) This observation is significant here because whether or not there is agreement with my conclusion that TV business news programming constitutes a relevant product market, the evidence strongly shows that Bloomberg TV and CNBC are close competitors, which creates an incentive for CNBC and its owners to discriminate against Bloomberg TV.

51) Business news programming is distributed largely through local geographic markets, which are defined by the scope of the cable systems' franchises, but the four main business news networks are distributed nationally without regional alterations. Thus, I conclude that the relevant geographic market for TV business news programming networks is national in scope.

B.3. Overview of business news networks

52) Most cable programming networks provide focused content that appeals to audience segments with a particular interest in such content. The demographically distinctive audiences attracted to such networks tend to make networks in different programming categories poor substitutes for one another from the perspective of either MVPDs or advertisers. Discrete programming categories, such as TV

[41] See Sections 4.1.1 & 4.1.2 of the "Horizontal Merger Guidelines," released for public comment on April 20, 2010, available at http://www.ftc.gov/os/2010/04/100420hmg.pdf, accessed April 20, 2010 (hereafter "Draft Revised Merger Guidelines).

[42] My analysis focuses on the MVPD distribution and advertising sides of the market. I have insufficient data to perform an analysis of whether business news on-line distribution is an antitrust market.

business news, accordingly have the characteristics of discrete product markets, as is discussed in more detail below.

53) The recognition of TV business news and similar categories as distinct markets within the broader news and information programming market is reflected in NBCU CEO Jeffrey Zucker's comments reported in the *New York Times* related to NBCU's partial acquisition of the Weather Channel: "'We're No. 1 in business news, No. 1 in general broadcast news, and now we're No. 1 in weather news too.'"[43]

B.3.1. Business news network characteristics

54) TV business news programming networks feature distinctive content. During the days and hours when international and national markets are open, each of the business news networks features programming filled with business and market-related news, scrolling stock market prices, currency and commodity pricing information, foreign market information, interviews with CEOs and other business leaders, commentary from investment professionals, and the live broadcast of important market-related events, including general news of interest to the financial markets. Programming is supported by news bureaus worldwide.

55) Business news networks compete directly for the interviews that comprise much of their content. Each of the business news programming networks competes with the others for "scoops" or exclusive interviews with business newsmakers. In press releases and with on-screen graphics, CNBC has described itself as "first in business news"[44] and promotes some of its interviews as "First on CNBC."[45] This suggests there is competition between Bloomberg TV and CNBC to schedule interviews, particularly exclusive interviews, with people of interest to the business news audience.

56) [[[redacted]]][46] This type of head-to-head competition provides further evidence that Bloomberg TV and CNBC compete for similar and distinct audiences. (See Draft Revised Merger Guidelines, §2.14)

[43] Michael J. de la Merced, "Weather Channel Is Sold to NBC and Equity Firms," *New York Times*, July 7, 2008.

[44] "CNBC Confronted with a Formidable Challenger," *Los Angeles Times*, August 2, 2007, http://articles.latimes.com/2007/aug/02/business/fi-cnbc2, accessed June 14, 2010.

[45] See, e.g., http://www.cnbc.com/id/21310533/First_on_CNBC_Maria_Bartiromo_Speaks_with_Former_Federal_Reserve_Chairman_Alan_Greenspan_on_Closing_Bell_Transcript_Included, accessed April 13, 2010.

[46] [[[redacted]]]

57) Bloomberg TV, CNBC, and Fox Business Network share similar schedules designed around the US stock market opening hours, with pre-market opening shows, business news in real-time during market opening hours, and "closing bell" shows covering the last 60-minute operations in the stock markets. After the closing bell, a series of shows with headlines, analysis, and commentaries follow. Bloomberg TV's and CNBC's regular programming also includes coverage of Asian and European markets. CNBC World's programming is also structured around the US business day, but with segments tailored to the timing of European and Asian markets.

58) Programming is also similar visually. All networks make extensive use of stock tickers, *i.e.*, bands shown on the lower and/or upper part of the screen during the network's live business programming, charts and graphs that contain up-to-date values and/or changes in prices of securities, currencies, commodities, and/or stock indices. Shows in market pre-opening hours and just before the final bell feature a "countdown clock" showing minutes and seconds left to market opening or closing. None of these features appears in other programming.

59) The channel descriptions for the business news networks provided by DirecTV highlight their focus on business news. Bloomberg TV is described as "A sophisticated 24-hour business and financial news channel [which] delivers power tools for power players and serious investors."[47] CNBC's programming is similarly described as follows: "Financial news highlights dominate the day, while nights include features and discussions of contemporary business issues." CNBC World "offers global financial markets in real time, live and worldwide," while Fox Business Network "offers in-depth business reporting on financial and political news from around the globe."

60) DirecTV places the four business news channels Bloomberg TV, CNBC, CNBC World, and Fox Business Network in their "news" genre.[48] The other "news" channels listed by DirecTV are: BBC America, CNN, C-Span, C-Span2, Current, ESPNews, Fox News Channel, Headline News, MSNBC, RFD TV, Univision, The Weather Channel, and WGN America. None of DirecTV's descriptions for the other news channels mention financial news. CNN and Fox News Channel mention "business" news only as topic included within a broad generalist menu: "CNN offers programs ranging from business to sports to entertainment," while Fox News Channel is described as providing "programming on key issues and events in politics, business, family, health and medicine, sports and entertainment." Neither CNN nor Fox News Channel provides the focus on business and financial news offered by the business news channels.

61) The business news networks offer supporting and in some cases identical programming on their websites. According to CNBC, "viewers can manage their individual investment portfolios and gain additional in-depth information from on-air reports by accessing www.CNBC.com."[49] Bloomberg TV

[47] Network descriptions in this paragraph are from http://www.directv.com, accessed March 29, 2010.
[48] Network descriptions and channel classifications in this paragraph are from http://www.directv.com, accessed March 29, 2010.
[49] CNBC Press Release, "CNBC Launches the New CNBC.com---The Digital Destination for Real Time Business & Investing

streams its broadcast in real time on its website.[50] Fox Business Network offers its programming at FOXBusiness.com LIVE.[51]

62) Based on this, I would expect a typical consumer or advertiser to view Bloomberg TV, CNBC, and Fox Business Network as providing similar content compared with one another and distinctive content compared to other programming. CNBC World also provides similar content, but with a somewhat greater emphasis on international markets.

B.3.2. Business news programming history

63) The history of CNBC and Bloomberg TV, as well as other cable networks, suggests that new programming generally, and business news specifically, are markets with high barriers to entry.

64) As an example of the difficulty of entering the business news market, Time Warner failed in its attempt to enter the TV business news market with its financial and business news network CNNfn after failing to secure adequate distribution for the network and being "left in the dust by its main competitor, CNBC."[52]

65) NBC first floated the idea of starting a cable news service to compete with CNN in 1985,[53] but met resistance from cable MSOs to the concept of a CNN competitor. As a result, NBC eventually determined to instead launch a network focused on business and financial news, CBNC,[54] and began attempts to obtain carriage commitments for CNBC in 1987.[55] Two years after CNBC entered, it acquired its business news network competitor FNN, which had gone into bankruptcy.[56]

66) In testimony before the Senate Commerce Committee in 1990, then NBC chairman Bob Wright testified as reported by the FCC that, "a number of large MSOs insisted as a condition of carriage that CNBC not become a general news service in direct competition with CNN, which is owned in part by TCI, Time Warner, Viacom and other MSOs."[57] The FCC explained that the relevant carriage contracts "stipulate that '[i]t is understood and agreed that it is not the intent of [CNBC] to allow [the

News and Analysis," available at http://presskit.cnbc.com/pdf/LaunchRelease-cnbc.pdf , accessed March 30, 2010.

[50] http://www.bloomberg.com/tvradio/tv/, accessed April 13, 2010.

[51] http://www.foxbusiness.com/fbnlive/index.html, accessed April 13, 2010.

[52] "AOL Time Warner to Revamp CNNfn," *New York Times*, February 1, 2001, available at http://www.nytimes.com/2001/02/01/business/technology-aol-time-warner-to-revamp-cnnfn.html?scp=2&sq=cnnfn&st=cse, accessed May 31, 2010.

[53] Waterman and Weiss (1997) at p.68.

[54] Waterman and Weiss (1997) at pp.55-56.

[55] Waterman and Weiss (1997) at p.69.

[56] "Purchase Of FNN Boosts NBC's Cable-Market Share," *The Seattle Times*, May 26, 1991, available at http://community.seattletimes.nwsource.com/archive/?date=19910526&slug=1285405, accessed May 31, 2010.

[57] FCC (1990), "In the Matter of Competition, Rate Deregulation and the Commission's Policies Relating to the Provision of Cable Television Service," 5 FCC Rcd 4962 (1990), at paragraph 120.

service] to become, and the CNBC Service or no segment thereof shall become, a general news service covering events unrelated to [business, financial, consumer and other specified news events].' "[58] "Specifically, Wright testified that CNBC has 'a provision in our affiliation agreement that was requested, required if you will, by most cable operators that we not enter into general competition with CNN.' "[59] The FCC concluded that the "effect of the CNBC clause is to protect CNN from competition."[60]

67) Historical pricing in cable TV news programming illustrates that competition within cable programming categories is indicative of distinct product markets. For example, Waterman and Weiss (1997, p.68) describe how in 1981, CNN sharply reduced its fees to cable operators when faced with the launch of ABC's Satellite News Channel (SNC). Three days after the announced launch of SNC in the fall of 1981, Ted Turner announced that he would offer a second news service, CNN2, which became Headline News, for no extra charge to cable operators. "CNN2 launched on schedule [by January 1, 1982], and SNC soon followed. SNC, though, failed to obtain enough system affiliations, and within a year its owners had shut it down, sold their assets to Turner Broadcasting, and agreed to a three-year no-competition clause. Then, within a month of SNC's demise, Turner announced that he would more than triple CNN's fees to cable operators."[61]

68) Evidence of competitive effects related specifically to Bloomberg TV and CNBC are evident in the history of Bloomberg TV. Beginning in 2001, Bloomberg TV's morning programming was simulcast on the USA Network {{[redacted]}}[62] {{[redacted]}} exclusive merger negotiations between USA's owner Vivendi and CNBC's owner GE were announced on September 2, 2003, which ultimately put USA under common ownership with CNBC. {{[redacted]}} This provides an example of the harm that can result to competing business news networks when CNBC is combined with a distribution channel upon which those competing business news networks rely.

[58] FCC (1990) at paragraph 120.

[59] FCC (1990) at footnote 184.

[60] FCC (1990) at paragraph 121.

[61] Waterman and Weiss (1997) at p.68.

[62] {{[redacted]}}

B.4. TV Business news distribution

69) While the anecdotal evidence of Section B.3 is strongly suggestive, it is also important to evaluate the market definition using market-based data on demand-side substitution and related market definition techniques. This section discusses the empirical evidence indicating that (1) CNBC and Bloomberg TV are regarded as substitutes by MVPD customers; and (2) that a hypothetical TV business news programming monopolist would likely find it profitable to impose a small but significant price increase on MVPD customers. Both analyses support the conclusion that TV business news programming constitutes a relevant economic market.

B.4.1. Demand-side substitutability

70) Demand-side substitution is the starting point of a market definition analysis. (Draft Revised Merger Guidelines, §4) To analyze substitutability from the perspective of MVPDs, I performed a probit analysis (see Table 4 and accompanying text). In order to isolate the effects of substitutability from overall system size (larger systems would be more likely to carry both CNBC and Bloomberg TV, regardless of whether they were substitutes), I control for systems size by limiting the analysis to cable operators that are not MSOs. I conclude that carriage of CNBC on basic or expanded basic decreases the carriage rate for Bloomberg TV on that tier by close to two-thirds (63%) and that the presence of Bloomberg TV on the basic or expanded basic tier has a significant negative effect on the carriage of CNBC on that tier.

B.4.2. Critical loss analysis

71) I have also applied a critical loss analysis to determine whether a hypothetical TV business news programming monopolist could profitably impose a SSNIP, indicating that TV business news programming is a relevant economic market. (Draft Revised Merger Guidelines, §4.1.3) See Table 5 and accompanying text. The critical loss method determines in a first step the critical percentage of customers a hypothetical monopolist would have to lose to make a small, but significant non-transitory increase in price unprofitable. In a second step, the likely losses are compared to the critical threshold: if the likely losses in sales are less than the critical loss than the price increase is profitable and the market is defined.

72) Market definition for a wholesale market must consider both direct and indirect effects, as is done in Table 5 and the accompanying text. Direct demand substitution arises in a television programming context when distributors choose not to carry networks in response to a wholesale price increase. Indirect demand substitution arises in this context when distributors continue to carry networks in response to a wholesale price increase (raising their prices), but subscribers choose to switch in response to the retail price increase.

73) The methodology I follow to defining the market was also recently employed by Ofcom in its investigation into the United Kingdom Pay-Television market.[63] As was the case in Ofcom's analysis, I do not incorporate decreased advertising revenue from reduced subscribership associated with the price increase.[64]

74) As shown in Table 5 and the accompanying text, I conclude that because the wholesale price of business news programming is so small relative to the subscription price for MVPD services, indirect demand substitution does little to constrain the profitability of a small price increase by a hypothetical monopolist in TV business news programming. In addition, I conclude that an antitrust market exists based on the critical loss of direct demand substitution, notwithstanding that there are assumptions and elasticity estimates for which it would not be satisfied.

B.5. Conclusion as to market definition

75) Taken as a whole, when I weigh the quantitative support for an antitrust market from the critical loss analysis together with the compelling qualitative evidence for the existence of a TV business news programming market, I conclude that there is an antitrust market for business news. Furthermore, Comcast will have the ability through unilateral actions to substantially diminish competition in MVPD-delivered business news programming and thereby reduce the diversity of news and information programming available to consumers and eliminate the preferred source of business news programming for some consumers. Thus, considering the market definition results and the potential seriousness of harms in this market, I conclude that it is appropriate to analyze potential foreclosure effects presented by the Transaction on the basis that there is a relevant antitrust market for TV business news programming in the US.

B.6. Supply-side substitution and barriers to entry

76) As discussed above, there are large economies of scale in the production of television programming, particularly programming such as business news that relies on news gathering personnel and infrastructure, real-time programming, established anchor personalities, and a reputation for reliability. The applicants confirm that economies of scale and scope apply particularly to the production of local news and information.[65] These suggest significant barriers to entry in TV business news. The conclusion is supported by data from SNL Kagan on network cash-flow margins, which show high

[63] See the Ofcom documents: "Pay TV Market Investigation: Consultation Document," December 18, 2007; "Pay TV Second Consultation: Access to Premium Content," September 30, 2008; and "Pay TV Phase Three Document: Proposed Remedies," June 26, 2009; and the associated annexes. Available at http://www.ofcom.org.uk/consult/condocs/market_invest_paytv/, accessed May 11, 2010.

[64] See Ofcom's Second Consultation, p.61.

[65] See GE and Comcast's "Applications and Public Interest Statement," page 40ff.

cash-flow margins for CNBC, CNBC World, and the major general news networks relative to other cable networks.[66] See Table 6. According to SNL Kagan, CNBC has the second-highest cash-flow margin and CNBC World has the third-highest cash-flow margin of any major cable network. CNBC's cash-flow margin is 61%, in comparison to an industry average for all basic cable networks of 38%. Bloomberg TV's cash-flow margin is 28% [[[redacted]]][67] General news networks Fox News, MSNBC, and CNN/HLN all have cash-flow margins that are above average. The continuing negative cash flow of Fox Business Network since its entry in 2007, despite being part of the Fox family of networks, provides further evidence of entry barriers for business news programming.

77) The evidence of significant barriers to entry in TV business news, the historical example of unsuccessful attempted entry by the well-financed CNNfn, and the continuing negative cash flows for Fox Business Network since its entry in 2007, collectively provide evidence of significant barriers to creating a profitable business news network.

78) Although a general news network such as CNN could reposition itself by adding more business and financial news to its lineup, the analysis of substitutability in Section B.4.1 shows that general news networks have not found it profitable to position themselves as substitutes for business news. An on-line financial newspaper might be a candidate for entering the TV market, but as with a general news network, it would have to compete with the established business news networks on the systems where they are carried. The hurdles for starting a new business news network without such a head start would be even greater.

79) In summary, supply-side substitution does not appear to be a significant threat to the profitability of a small price increase by a hypothetical monopolist in TV business news programming.

B.7. Business news network advertising

80) The business news audience can be characterized as affluent adults, predominantly males.[68] This is a distinctive "hard to reach" audience segment that is highly valued by advertisers. While business news programming is not the only means of reaching this audience, it is a particularly effective medium for doing so. Other than business news, few other networks, such as Comcast's The Golf Channel and to a lesser extent ESPN, serve a similar viewer demographic. That said, it is not clear that these networks would be viewed as satisfactory alternatives to business news by advertisers

[66] High cash-flow margins generally would be expected to induce entry in the absence of significant sunk costs, which for a network might include: developing programming/infrastructure, obtaining affiliation agreements (may involve payments to distributors), obtaining advertising agreements, getting viewer acceptance, and getting advertiser acceptance (may require obtaining sufficient viewership to cross Nielsen reporting thresholds).

[67] [[[redacted]]]

[68] Statements in this paragraph rely on Trevor Fellows, Head of Global Media Sales, Bloomberg TV, April 13, 2010, interview.

because of the substantial differences in content and typical viewing time (prior to and during the weekday trading period for business news versus nights and weekends for sports programming).

81) The household income for Bloomberg TV, CNBC, and The Golf Channel are higher than those of general news networks such as MSNBC, CNN, and Fox News, and those of general sports networks such as ESPN. See Table 7. The audiences for Bloomberg TV, CNBC, and The Golf Channel are relatively more male than for the general news networks CNN, MSNBC, and Fox News, although they are less male that the audience for ESPN. See Table 8. The audiences for CNBC and The Golf Channel are older than the audiences for the general news networks, which in turn are older than the audiences for ESPN. See Table 8. {{[redacted]}}

82) {{[redacted][69] [redacted]}}

83) This evidence supports the conclusion that TV business news programming attracts a specific viewer demographic, which is of particular interest to financial services and insurance advertisers. The evidence tends to support the conclusion that the advertising side of the market for TV business news programming is an antitrust market, although it is not conclusive standing alone. In my opinion, there is ample evidence to compel a review of the effect of the Transaction on TV business news advertising.

B.8. Business news network on-line distribution

84) I have insufficient data on the on-line distribution of TV business news programming to conduct a quantitative market definition analysis. However, given the demand for instant business news via mobile devices and wirelessly enabled computers, restrictions, limitations, or disincentives related to the on-line distribution of TV business news programming are clearly likely to lessen competition in TV business news programming, opposed to the FCC's interest in promoting consumer access to a diversity of news and information sources (see footnote 39).

[69] {{[redacted]}}

85) Because of this public interest aspect of the on-line distribution of business news, the effects of the Transaction on the on-line distribution of business news raises serious issues of harm to competition and to the public interest. I address particular aspects of the on-line distribution market and potential harms associated with restrictions on on-line distribution in Section C.4.

C. Competitive foreclosure effects presented by the Transaction

C.1. Overview of foreclosure incentives and related literature

86) The incentive to foreclose in a vertical merger is typically viewed by economists as requiring market power by the downstream firm, which would be Comcast in the case of the Transaction, and the incentive and ability to leverage that market power to affect competition in an upstream market, which for the purposes of this report would be the TV business news programming market.[70] If a network's distribution is reduced, its average cost per subscriber increases, which could diminish the network's ability to invest in programming and thereby reduce its competitiveness.[71] The cycle can continue if the resulting reduction in program quality leads to a reduction in viewership that further reduces spending on programming.[72] Networks for which there are good substitutes are relatively more vulnerable to foreclosure.[73]

87) The empirical evidence emerging from the economics literature on cable vertical integration shows that vertically integrated cable operators tend to favor their affiliated program services, being more likely to carry affiliated networks and less likely to carry non-affiliated networks (Waterman and Weiss, 1996, and Chen and Waterman, 2007),[74] carrying rival networks in less accessible tiers (Chen and Waterman, 2007), and carrying fewer networks altogether (Waterman and Weiss, 1996). The applicability of this evidence to Comcast is heightened by the fact that a senior Comcast official has stated publicly that Comcast treats its affiliated networks as "siblings" and non-affiliated networks as "strangers."[75] In the economics literature, overall consumer welfare effects of vertical integration are

[70] See Church, J. (2004), "The Impact of Vertical and Conglomerate Mergers on Competition," Final Report to Directorate General for Competition, Directorate B Merger Task Force, European Commission, especially Section 3.3, available at http://ec.europa.eu/competition/mergers/studies_reports/merger_impact.pdf, accessed May 31, 2010.

[71] See Waterman and Weiss (1997) at pp.62-63.

[72] See Waterman and Weiss (1997) at p.65.

[73] See Waterman and Weiss (1997) at p.65.

[74] Waterman, D. and A. Weiss (1996), "The Effect of Vertical Integration between Cable Television Systems and Pay Cable Networks," *Journal of Econometrics* 72, 357-395. Chen, D. and D. Waterman (2007), "Vertical Ownership, Program Network Carriage, and Tier Positioning in Cable Television: An Empirical Study," *Review of Industrial Organization* 30(3), 227-251.

[75] Tr. of R. at 1695:17-1696:22, *NFL EnterprisesLLC* v. *Comcast Cable Comms., LLC*, File No. CSR-7876-P, Apr. 16, 2009 (testimony of Stephen Burke).

less clear, with Chipty (2001)[76] showing statistically significant, but small, positive effects and Ford and Jackson (1997)[77] showing negative effects.[78]

88) The evidence from the empirical industrial organization literature that vertically integrated MVPDs use denial of access to the most favorable tier and denial of carriage to disadvantage non-integrated programmers that compete with their vertically integrated programmers suggests that Comcast may have an incentive to devalue non-integrated programming to reduce competition for its integrated programming, with potential harm to consumers and competition. In particular, the literature suggests that Comcast will have the incentive and ability to take actions aimed at competitors to CNBC and CNBC World, including Bloomberg TV, that harm competition in TV business news programming. The diminishment or elimination of these two networks as competitors would allow Comcast-NBCU to increase the advertising rates it charges for CNBC and/or to increase the license fees it charges to MVPDs, with the expected negative consequences for consumers and advertisers.[79]

89) In their public interest statement, Comcast and NBCU claim that the conditions for the adoption of anticompetitive foreclosure strategies do not exist post-transaction. They argue that in the downstream market, Comcast only holds a 25 percent share of national MVPD subscriptions, which Comcast argues is insufficient to constitute a "bottleneck" in distribution. Furthermore, this subscription share has been falling for some time. This ignores the evidence that MVPD markets are inherently local and in the largest DMAs, which are particularly important for business news,[80] Comcast's pre-Transaction market share is far higher, often exceeding 50 and even 60 percent. See Table 2. [[[redacted]]][81]

[76] Chipty, T. (2001), "Vertical Integration, Market Foreclosure, and Consumer Welfare in the Cable Television Industry," *American Economic Review* 91(3), 428-453.

[77] Ford, G. and J. Jackson (1997), "Horizontal Concentration and Vertical Integration in the Cable Television Industry," *Review of Industrial Organization* 12, 501-518.

[78] The empirical economics literature on the effects of cable vertical integration on important consumer outcomes starts from Waterman and Weiss (1996) and continues with Ford and Jackson (1997), Chipty (2001), and Chen and Waterman (2007). These papers share similar methodological approaches, exploiting the rich cross-sectional variation across cable systems in horizontal size and vertical integration to study the impact of vertical integration on a variety of cable outcomes, including cable systems' decisions about carrying individual program services (Chen and Waterman, 2007, Chipty, 2001, and Waterman and Weiss, 1996), their pricing (Chipty, 2001, and Waterman and Weiss, 1996), their positioning in more or less aeeessible tiers (Chen and Waterman, 2007), and other marketing decisions (Waterman and Weiss, 1996). Chipty (2001) also studies individual program services' penetration rates, and Ford and Jackson (1997) also study system-level programming costs and their passing-on to subscribers. The literature generally does not consider the effect of vertical integration on to freedom of expression and programming diversity concerns, something of particular importance for news and information programming. (See Groseclose, T. and J. Milyo (2005), "A Measure of Media Bias," *Quarterly Journal of Economics* 120(4), 1191-1237, examining liberal/conservative bias in news media.)

[79] Ford and Jackson (1997) estimate that the pass through of cost decreases is approximately 50%, all else equal. This suggests that fee increases would translate into price increases for consumers, with approximately half of the price increase passed along to consumers.

[80] Trevor Fellows, Head of Global Media Sales, Bloomberg TV, April 13, 2010, interview.

[81] [[[redacted]]]

90) Because the parties proposed an inappropriately broad market for programming in their public interest statement ("national cable programming networks" and "regional cable networks," with the exception of regional sports networks constituting a separate market), they argue that they would have to foreclose a large number of competing networks to have an effect and that this would significantly reduce the number of networks carried on Comcast, with the effect of putting Comcast at a serious competitive disadvantage vis-à-vis other MVPDs. In addition, Comcast points out that the current regulatory regime protects independent programmers from discrimination.[82]

91) As shown in Section B, the market for MVPD distribution of TV business news programming is an antitrust market characterized by high barriers to entry, implying that Comcast need only foreclose one or two networks, namely Bloomberg TV and/or Fox Business Network, in order to achieve the benefits of foreclosure. Furthermore, evidence presented above on the importance of Comcast distribution to Bloomberg TV's continuing operation speaks to the ability of Comcast to eliminate Bloomberg TV as a competitor to CNBC on any system by denying Bloomberg TV access to Comcast's systems.

92) The concerns described in the overview above are borne out in the data for business news. As I discuss below, competitive harms in business news as a result of the Transaction are possible through channel placement (Section C.2), refusal to carry (Section C.3), restrictions on on-line distribution (Section C.4), carriage bundling (Section C.5), and advertising bundling (Section C.6).

93) The incentive for Comcast to engage in activities that result in these competitive harms follows from the ownership interest in CNBC and CNBC World that Comcast would obtain through the Transaction and the resulting incentive to increase advertising revenues and license fees for those networks, increasing or maintaining CNBC's 85% market share in TV business news.[83]

C.2. Potential harms relating to neighborhood effects

94) I conclude that the Transaction creates a significant incentive for Comcast to reduce Bloomberg TV's competitive impact by locating Bloomberg TV in a less desirable channel location, far from CNBC. This is particularly significant because in the absence of the Transaction, it would be likely that Bloomberg TV would be positioned in the same "neighborhood" as CNBC when Comcast realigns its channel locations as it transitions its headends from analog to digital transmission – adoption of a viewer-friendly, genre-based channel lineup is valuable to viewers when an MVPD offers a large number of channels.[84] This conclusion is buttressed by the fact that the DirecTV and DISH channel

[82] See GE and Comcast's "Applications and Public Interest Statement," p.107f.

[83] See footnote 2.

[84] Time Warner Cable promotes its "NEW theme-based digital lineup" for various Wisconsin systems as making "finding what you want faster and easier than ever." (http://www.timewarnercable.com/wisconsin/learn/new_digital_lineup.html, accessed June 14, 2010)

line-ups as well as FIOS and U-Verse are genre-based and cluster the business news programming of Bloomberg TV, CNBC, and Fox Business Network close to one-another. Similarly, throughout Europe and Asia, where headends offer hundreds of digital channels, business news is "neighborhooded."

C.2.1. Channel position on cable versus satellite

95) I begin by using the difference between Bloomberg TV's channel placement on satellite and average channel placement on cable to analyze the effects of channel position on viewership.

96) The Dish channel lineup includes: 203-Bloomberg TV, 204-truTV, 205-Fox News Channel, 206-Fox Business Network, 207-CNBC World, 208-CNBC.[85] On DirecTV, the channel lineup includes 353-Bloomberg TV, 354-G4, 355-CNBC, 356-MSNBC, 357-CNBC World, 358-Current TV, 359-Fox Business Network. Thus, on both Dish and DirecTV, Bloomberg TV is positioned within five channels of CNBC.[86]

97) In contrast, on cable, Bloomberg TV and CNBC are rarely within five channel positions of one another at present on Cablevision, Charter, Comcast, Cox, or Time Warner (less than 0.21% of households, conditional on both networks being carried),[87] although this is expected to change as cable systems become digital and can more easily mimic the channel organization by genre that is used by DirecTV, Dish, AT&T, and Verizon (distributors not constrained by legacy analog systems).[88] See Table 10 for Comcast's channel positions in major DMAs.

[85] Dish channel guide available at http://www.dishnetwork.com/downloads/Channel-Lineup/StandardHDChannelGuide.pdf, accessed March 29, 2010. On Dish, Bloomberg TV is also available at channel 893, with CNBC also available at channel 892, as part of Dish's Latin group of programming services, which are carried on channels in the 800s. Bloomberg TV is part of the DishLatino Max package. [[[redacted]]]

[86] Data constraints prevent me from analyzing the effects of adjacency, which would presumably be stronger than the effects of being within a five-channel neighborhood.

[87] 2007 TMS Data. For other MSOs, 2007 TMS Data show that they are within five channels for 5.97% of households carrying both and for non-MSOs, they are within five channels for 14.94% of households carrying both. In addition, 2007 TMS Data show that Bloomberg TV and CNBC World are typically placed at channel locations above 100, while CNBC is typically placed in a channel position below 50, which is also typical for CNN.

[88] As evidence that cable MSOs are beginning to move towards channel organization by genre, in a recent press release, Time Warner Cable announced that in North and South Carolina it is rearranging its digital channels into categories by programming type, placing the general news and business news together. (Time Warner Cable Press Release, "TV Made Easy: Time Warner Cable Launches New Theme-Based Channel Lineup," March 26, 2010: "The new digital lineup rearranges digital channels above 100 into easy-to-find categories based on programming type, such as sports, music, and kids & family. The lineup will launch in the Charlotte area beginning March 30th. All Time Warner Cable digital customers across North and South Carolina will enjoy the new lineup by June. 'Research has shown that our customers tend to watch particular types of programming rather than a particular channel,' said Brian Kelly, president, residential services, Time Warner Cable Carolinas. 'Grouping channels that offer the same type of programming together will make it easier for our customers to find the shows they enjoy.' " (Available at http://www.timewarnercable.com/carolinas/about/inthenewsdetails.ashx?PRID=2844&MarketID=144, accessed April 14,

98) Transaction-specific harms related to neighborhooding are likely if Comcast either moves Bloomberg TV to worse channel position, positions CNBC in one or more channel locations that are not part of a business news neighborhood that includes Bloomberg TV when it reorganizes its channel lineup by genre, or delays the reorganization of its channel lineup by genre.

C.2.2. Quantification of neighborhood effects

99) Data provide evidence of neighborhood effects for Bloomberg, showing that viewing for Bloomberg is higher (statistically significant difference) on satellite systems compared to cable systems. As shown in Table 11, 22.7% of cable and satellite subscribers watch any business news, with CNBC being the dominant network. The table shows that 2.2% of subscribers watch Bloomberg TV and 21.8% of subscribers watch CNBC. Focusing on viewers who watch CNBC, they spend on average 2.51 hours per week watching CNBC. Focusing on viewers who watch Bloomberg TV, they spend on average 2.21 hours per week watching Bloomberg TV. The difference in average hours watched on Bloomberg TV and CNBC, conditional on watching those networks, is not statistically significant.

100) To examine whether Bloomberg TV's higher viewership on satellite might be related to effects other than neighborhooding, I perform the regression analyses reported in Table 12, which include controls for the MVPD distributing the programming. These regression analyses show that, even with these controls, being in the same channel neighborhood with CNBC has a statistically and economically significant positive effect on the probability that a subscriber watches Bloomberg TV and on the number of hours that subscribers watch Bloomberg TV each week.

C.2.3. Remedies related to neighborhood effects

101) An appropriate remedy associated with harms related to channel position would be to require Comcast to carry all business news networks in a neighborhood on the same tier with CNBC using adjacent and contiguous channels for each Comcast tier and channel where CNBC is carried. A condition that required genre-based channel placement more generally would address concerns related to the abuse of channel placement for other types of programming as well.

C.3. Potential harms relating to refusal to carry and tiering

2010)) In addition, Time Warner Cable's digital channel lineups for Cleveland and various Wisconsin cities show a similar rearrangement of channels. (Cleveland: http://www.twclineup.com/lineups0210/SuburbanCleveland1.pdf, accessed April 14, 2010. Wisconsin: http://www.timewarnercable.com/wisconsin/learn/new_digital_lineup.html, accessed June 14, 2010.)

C.3.1. Distribution of business news networks

102) Distribution agreements between MVPDs and business news networks typically specify business terms that include a length of time over which the MVPD has the right and/or obligation to distribute the signal, the geographic scope of the agreement, per-subscriber license fees, marketing and promotion commitments, and advertising time to be made available to the MVPD. In addition, most contracts include commitments by the MVPD to distribute the network to a minimum percentage of its subscribers or to carry the network on a particular tier of service. MVPDs also frequently demand that contracts include a "most-favored-nation" clause that commits the network to give the MVPD terms that are as favorable as or more favorable than those granted to any other comparable MVPD.

103) [[[redacted] [89] [redacted]]]

104) Due to the economies of scale in the production of content, an important element of the strategy of any network is to get distributed as widely as possible. [[[redacted]]] Bloomberg management states that the loss by Bloomberg TV of revenue derived through its distribution on Comcast systems would by itself imperil the future of Bloomberg TV.[90]

C.3.2. Commission staff model of foreclosure

105) The applicants submitted their analysis utilizing the Commission Staff model to analyze the likelihood of *upstream foreclosure*. (Israel and Katz, 2010a)[91] I conduct a similar analysis examining the likelihood of *downstream foreclosure*, and I conclude that there is a significant threat of downstream foreclosure as a result of the Transaction. See Table 13 and accompanying text. I find that it would be profitable both in the short run and long run for Comcast to deny carriage to Bloomberg TV and to encourage non-Comcast MVPDs to deny carriage to Bloomberg TV. By excluding Bloomberg TV, CNBC would gain increased viewership and hence increased advertising revenue for CNBC. The same is true if Comcast placed Bloomberg TV on a disadvantageous tier vis-à-vis CNBC, rather than

[89] [[[redacted]]]

[90] James Cofer, Head of US Distribution, Bloomberg TV, interview, April 12, 2010.

[91] Israel, M. and M. L. Katz (2010a), "Application of the Commission Staff Model of Vertical Foreclosure to the Proposed Comcast-NBCU Transaction." Comments in FCC MB Docket No. 10-56, filed March 5, 2010.

denying it carriage altogether. In the absence of appropriate conditions or other constraints, the Transaction is likely to lead to the foreclosure of Bloomberg TV from distribution over Comcast systems or the placement of Bloomberg TV on a disadvantageous tier on Comcast systems.

C.3.3. Remedies related to refusal to carry and tiering

106) Possible remedies associated with harms related to carriage would be (a) to require Comcast to carry competing business news networks, including Bloomberg TV, on its systems (as precedent for this, in the Time Warner-Turner Broadcasting transaction, Time Warner was required "to carry a 24-hour news network that would compete with CNN on half of its cable systems"),[92] (b) to require Comcast to carry competing business news networks, including Bloomberg TV, on the same tier with and on channels contiguous and adjacent to CNBC in every tier and channel position where CNBC is placed, and (c) to prohibit Comcast from imposing carriage terms for business news networks that are not fair, reasonable, and non-discriminatory (including with respect to the payment of appropriate subscription fees). In addition, Comcast could be prohibited from offering discounts or inducements to any MVPD on condition that the distributor provide non-Comcast business news networks with less favorable terms or conditions of carriage than they otherwise would.

C.4. Potential harms relating to on-line distribution

107) On-line distribution is of particular importance to the video business news. The amount of content available on-line is increasing each year, and at the same time, more homes have broadband connections to the Internet.[93] Traditional distributors of video programming are being challenged by the entry of on-line TV and might fear that consumers "cut the cord" and get their video content directly from the programmers on-line instead of going through intermediaries such a cable companies.[94] This potential competitive threat from on-line distribution by programmers creates competitive pressure on the distribution side. Thus, MVPDs have an incentive to restrict this competition. The TV Everywhere initiative of Comcast and Time Warner Inc. is evidence of this (see Section C.4.1).

108) The degree of resistance by programmers to restrictions on the on-line distribution of their programming is directly related to the extent to which they can profit from unrestricted on-line distribution. Thus, changes to the on-line landscape that reduce the convenience with which viewers

[92] See Mark Landler, "A Hard Line Softened for Time Warner and Turner," *New York Times*, September 13, 1996.

[93] FCC (2009a) at paragraph 17.

[94] The chief executive of Time Warner Cable Inc., Glenn Britt, admits that cable companies fear that subscribers might leave them due to free on-line distribution: "We are starting to see the beginning of cord cutting... People will choose not to buy subscription video if they can get the same stuff for free." (http://www.huffingtonpost.com/2009/02/09/cable-companies-see-custo_n_165138.html, accessed April 15, 2010)

can access network programming on-line, reduce the quantity of network programming available on-line without a subscription, or focus consumers' on-line viewing time at MVPD-sponsored subscription-only sites, have the effect of decreasing programmers' incentives to resist restrictions on on-line distribution.

109) The Transaction is likely to accelerate current movements towards making certain on-line content available only to MVPD subscribers through two key effects.[95] [[[redacted]]][96] and which provides a viable option for programmers to provide unrestricted access to their programming.[97] As shown in Table 14, in rankings of video streams, Hulu was second only to YouTube in January 2010. Second, the Transaction allows Comcast to add NBCU's high-value video content to its existing subscription-only offerings at Fancast XFINITY TV and to other subscription-only sites envisioned as part of the TV Everywhere initiative (see Section C.4.1). Comcast's incentive to limit on-line distribution of NBCU programming to limited-access sites such as Fancast XFINITY TV, which is only available to Comcast customers with both cable TV and Internet subscriptions,[98] is intensified by the network effects for the site that the presence of NBCU's programming would likely generate. Thus, the Transaction can be expected to shift the on-line landscape in the direction of on-line access to network video content being limited to MVPD subscribers, with the effect of decreasing programmers' incentives to resist restrictions on on-line distribution.

110) To the extent that the TV Everywhere initiative encompasses major MVPDs, programmers have limited ability to resist restrictions on on-line distribution demanded by those MVPDs.[99] Programmers

[95] [[[redacted]]] See also "Will Google TV Jump Through the Hulu Hoop?," SNL Kagan, June 3, 2010 (available at http://www.snl.com/InteractiveX/article.aspx?CDID=A-11274446-13358&KPLT=4, accessed June 7, 2010), stating that industry analysts expect a subscription version of Hulu will be forthcoming.

[96] [[[redacted]]]

[97] NBCU's broadcast content is largely available for free on Hulu (http://www.hulu.com/) as well as on NBC's webpage (http://www.nbc.com/) and Telemundo's site (http://msnlatino.telemundo.com/). However, industry analysts expect a subscription version of Hulu will be forthcoming. ("Will Google TV Jump Through the Hulu Hoop?," SNL Kagan, June 3, 2010, available at http://www.snl.com/InteractiveX/article.aspx?CDID=A-11274446-13358&KPLT=4, accessed June 7, 2010)

[98] See http://www.fancast.com/ and http://www.comcast.com/About/PressRelease/PressReleaseDetail.ashx?prid=946, accessed March 26, 2010.

[99] The Competition Commission in the UK prohibited a similar joint venture by the major distributors of video on demand, BBC Worldwide Limited, ITV, and Channel Four Television Corporation (C4C), called Project Kangaroo, saying: "We concluded

would suffer significant losses if their networks were not carried on major MVPDs because of the limited advertising and subscription revenue currently available through on-line distribution.[100] In comparison, MVPDs face minimal losses associated with (temporal) unavailability of most individual networks on their systems.[101]

111) Restrictions on the on-line distribution of network video content in the terms of carriage are of particular concern for news and information programming, including business news programming, because such restrictions limit the diversity and accessibility of news and information sources available to consumers. [[[redacted]]]

112) In the remainder of this section, I provide additional discussion of TV Everywhere and historical evidence related to the imposition of on-line restrictions by MVPDs. Taken together, the analysis of this section suggests that harms related to restrictions in on-line distribution are worthy of further investigation. I conclude with possible remedies.

C.4.1. TV Everywhere

113) TV Everywhere is a joint initiative by Comcast and Time Warner Inc. According to the two companies, it is a standard-setting initiative which is intended to assist in the development of on-line content.[102] According to the *New York Times*, several MVPDs, such as AT&T, Comcast, DirecTV,

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that prohibition of the JV as currently envisaged, or of any other transaction which would lead to a merger of VOD activities carried on by the parties, was the only effective remedy to the SLC [substantial lessening of competition] and adverse effects that we had found." (Competition Commission, "A report on the anticipated joint venture between BBC Worldwide Limited, Channel Four Television Corporation and ITV plc relating to the video on demand sector," February 4, 2009, p.7, available at http://www.competition-commission.org.uk/rep_pub/reports/2009/fulltext/543.pdf, accessed June 1, 2010)

[100] As described in Israel and Katz (2010a, p.36) network television generally has more advertisements per hour and a higher inventory sell-out rate than on-line sources, which together outweigh the higher cost per thousand impressions received for on-line advertising. Israel and Katz (2010a, p.36) state that, "if a consumer switched from watching an NBC program on television to watching it on Hulu or nbc.com, NBCU could lose a substantial amount of advertising revenue associated with that viewer." Overall, Screen Digest estimates that on-line TV represents only 2.2% of the TV advertising market as of 2008. (http://www.broadcastingcable.com/article/307050-Report_US_TV_to_lose_2_Billion_in_Ad_Revenue_By_2013.php, accessed April 15, 2010)

[101] See FCC (2004), "In the Matter of General Motors Corporation and Hughes Electronic Corporation, Transferors, and The News Corporation Limited, Transferee, For Authority to Transfer Control," Memorandum Opinion and Order, 19 FCC Rcd. 473, Appendix D: Technical Appendix, for an assessment of the effect on viewership numbers for MVPDs of a temporal discontinuation of certain programming.

[102] "In a joint announcement last month, Time Warner Inc. and Comcast introduced a set of principles called "TV Everywhere." Developed by the two companies, the principles are designed to serve as a framework to facilitate deployment of online television content in a way that is consumer friendly, pro-competitive and at no additional cost to customers." (http://www.comcast.com/About/PressRelease/PressReleaseDetail.ashx?PRID=892, accessed March, 26 2010)