> *The proposed transaction would not make an increase in affiliate fees more likely. It would not lower the elasticity of demand facing Fox programming. In short, the Fox fees today already capture whatever edge Fox programming can give to one distributor over another (given the program access rules preventing discrimination). NC's investment in DIRECTV cannot magically enhance the price that Fox can get for its programming from any distributor -- cable, DIRECTV, or EchoStar.*[51]

33. Mr. Kimmelman had claimed that NC would increase its revenues from cable households by charging all of them more for its programming. The purpose of this paragraph was to point out that any non-discriminatory elevation of affiliate fees by NC would cause a reduction in NC's programming profits.

34. Professor Rogerson's comments appear to misunderstand this paragraph. First, Professor Rogerson states that "in CRAs [*sic*] own raising rivals' costs theory, even though the upstream firm is choosing the optimal take-it-or-leave-it price before the merger [*sic*], this does NOT mean that the deal will leave price unchanged."[52] This criticism is confusing to us because we explained that the transaction is unlikely to leave prices unchanged. Indeed, our earlier submission carefully examined how NC's incentives to set its programming prices *would change* as a result of the proposed transaction. Second, Professor Rogerson states, "It [CRA] suggests that the transaction would NOT change the calculation of the optimal take-it-or-leave-it price in this model either. Once again, this is incorrect."[53] We actually analyzed in depth how the transaction would change NC's incentives to set the price of its programming. Indeed, we have shown (very generally) that as a result of a partial ownership acquisition, NC would have an incentive to set a lower price for programming, *ceteris paribus*. Third, Professor Rogerson takes us to task for using the word "fact" instead of "assumption." He states that "[W]hen CRA refers to the *fact* that the upstream firm is able to announce the profit-maximizing take-it-or-leave-it price before the transaction, it of course [*sic*] not referring to a *fact* at all. Rather, it is referring to its own *assumption* that the upstream firm is able to announce such a price."[54] Our reference to "the fact

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51 *CRA Initial Report* at pages 58-59.

52 *Second Rogerson Analysis* at page 40 (capitalization in original).

53 *Id.* at page 41 (capitalization in original).

54 *Id.* at page 42.

that Fox's fees today already maximize the profits that Fox can earn on its programming" did indeed reflect an assumption – the standard assumption in microeconomics that firms (here NC) act to maximize profits. We doubt that readers would have been confused by the sentence.

35. We explained in our initial submission that acquiring a stake in DIRECTV would give NC an incentive to set somewhat lower non-discriminatory programming prices than would otherwise maximize NC's profits. In particular, we reported a *general result* that acquiring a stake in DIRECTV would give NC an incentive to set lower non-discriminatory programming prices than otherwise.

> *Assuming that prices must be non-discriminatory, as a result of the program access rules and undertakings, NC's partial ownership interest in DIRECTV in fact gives NC an incentive to uniformly* lower *the prices charged by Fox to DIRECTV and other MVPDs, not raise them.*[55]

36. We went on to explain that this was a general result:

> *This analysis involves general economic principles and does not depend on particular assumptions about exact subscriber movements. Therefore, it is not necessary to carry out the type of numerical analysis presented earlier with respect to denial of access to Fox programming. However, we do provide an illustrative arithmetic example of this analysis in Appendix A.*[56]

37. We can clarify the economic logic underlying this finding and provide a framework for quantifying this pro-competitive effect. We stress here, as we did in our original submission, that in practice there are many other forces affecting affiliate fees, so the incentive identified here may be manifest in greater marketing efforts by NC or DIRECTV, improved quality of programming, or simply a slower rate of increases in affiliate fees than would otherwise occur due to market forces and inflation. In the Appendix, we provide a formal proof of the proposition cited above. The theorem in the Appendix proves that NC's investment in DIRECTV would give NC an incentive to set a lower non-discriminatory affiliate fee than it would otherwise set. (For simplicity, the Appendix assumes that the pro-competitive effect takes the form of a

55 *CRA Initial Report* at page 60 (emphasis in original).

56 *Id.* at page 61.

reduction in price and does not consider possible pro-competitive alternatives to price reductions such as quality improvements or greater marketing efforts.)

38. Given our statements above – that our conclusion on this point "involves general economic principles and does not depend on particular assumptions about exact subscriber movements" – we find it very peculiar that, in its submission to the Commission on behalf of Cablevision, LECG would criticize us by stating that "CRA offers no analysis based on actual data to establish that efficiencies offset incentives to raise price ***in this case***."[57] After all, our conclusion regarding the *direction* of the incentive – namely, towards lower non-discriminatory NC programming prices – is general and does not rely on nor does it require specific measurements.

4. Quantification of the Reduction of Double Marginalization

39. In this section, we roughly estimate the *magnitude* of NC's incentive to reduce non-discriminatory programming prices after the proposed transaction. As discussed above, the pro-competitive effect on NC's incentives may also take the form of greater promotional efforts or improved quality of service. However, for the purpose of estimating the magnitude of the pro-competitive effect of the proposed transaction, we analyze a simplified model in which the pro-competitive effect can only take the form of a price reduction. In the Appendix, we provide the logic and equations behind this analysis. As we stressed in our initial submission, a consistent analysis must start from the presumption that NC is already setting its programming prices to maximize its programming profits. We use this consistency condition to infer the elasticity of demand for NC programming at current prices.

40. As explained in the Appendix, lower non-discriminatory RSN affiliate fees by NC benefit DIRECTV in two ways. First, they lower DIRECTV's costs and thus directly raise DIRECTV's profits, to the extent that these lower costs are *not* passed through to consumers. Second, to the extent that the lower affiliate fees *are* passed through to

[57] *LECG Presentation* at slide 23 (emphasis in original).

consumers, they will attract some new subscribers, further raising DIRECTV's profits. We refer to these respectively as the *direct* and *indirect* effects on DIRECTV's profits.

41. These two effects depend in part on DIRECTV's "pass-through" rate, that is, the fraction of the lower affiliate fees (as offered to all MVPDs) that DIRECTV passes through (over time) in the form of lower subscription fees to subscribers purchasing a programming package with an RSN. (Recall that in this model, price effects are a proxy for non-price effects, such as quality improvements and promotions.) We denote this pass-through rate by *R*. Pass-through rates are generally expected to fall between zero and unity.

42. As explained in the Appendix, we lack the data necessary to accurately measure the indirect effect. We do know that this effect provides NC with an additional reason to lower affiliate fees and so including it would strengthen our results. For this reason, the numbers reported below in Table 1 *underestimate* the extent to which NC's profit-maximizing RSN affiliate fees would fall as a result of the proposed acquisition, though we cannot gauge the magnitude of the underestimate. However, because the indirect effect involves DIRECTV attracting more subscribers based on lower subscription fees, it is clear that the underestimate is greater for larger pass-through rates.

43. Using the analysis in the Appendix, we have constructed Table 1, which thus provides a lower bound (i.e., underestimate) on the percentage reduction in NC's profit-maximizing price for an RSN as a function of the pass-through rate, *R*. As just explained, the rows in Table 1 corresponding to the larger values of *R* give the larger underestimates, so we consider these rows to be potentially less informative. As shown in Table 1, for pass-through rates of   or less, NC's profit-maximizing RSN price would fall by roughly   to   as a result of its acquisition of a 34% ownership stake in DIRECTV, relative to what it would charge otherwise. Table 1 also shows that if NC were to increase its ownership share in DIRECTV to 50%, NC's profit-maximizing RSN price would fall by roughly   to   for pass-through rates of   or less, *ceteris paribus*.

Table 1: Estimated Lower Bound on Reduction in NC's Profit Maximizing Price

Pass-Through Rate	News Corp. Ownership Interest in DIRECTV	
	34%	50%
0.1		
0.2		
0.3		
0.4		
0.5		
0.6		
0.7		
0.8		
0.9		

44. Although an incentive to reduce prices by to might appear modest, these potential price reductions would be offered on a non-discriminatory basis *to all MVPDs*, not just to DIRECTV. Therefore, the total market value of the price reduction is much larger than it might appear. This is because the market value is to of the fees paid to NC by all MVPDs, not to just of the affiliate fees paid by DIRECTV. For example, a to industry-wide non-discriminatory price reduction in NC RSN affiliate fees would amount to roughly to per year, based on NC RSN affiliate fee revenues of about in 2002. Because DIRECTV's share averages 13% nationally, this market value would be between and of DIRECTV's affiliate fees paid to NC for the RSNs. Moreover, these figures do not include any quantification of the indirect effect, as discussed above. Nor do these calculations include the pro-competitive benefits associated with NC's transfer of know-how from its existing satellite operations to DIRECTV.

45. Professor Rogerson dismisses NC's efficiency claims on the grounds that they are not based on a theory of vertical coordination, but rather involve the type of claims

typically made for horizontal mergers and so deserve less deference.[58] This is a peculiar criticism in several ways. First, the elimination of double marginalization is, in fact, a vertical coordination efficiency.[59] Second, the only reason why there would not be further vertical coordination efficiencies is because of the program access rules – rules that Professor Rogerson dismisses as ineffective. If the rules were a dead letter, as suggested by Professor Rogerson, then one would expect to see an *even greater* elimination of double marginalization in the prices that DIRECTV would pay for NC programming, not to mention greater coordination of new program investment and promotion. Third, even if the other efficiencies claimed by NC should not be given the same deference as one might give vertical coordination claims, that premise does not make such efficiencies irrelevant or invalid. In this regard, Professor Rogerson does not seem to provide any specific criticisms of the claimed efficiencies or dispute their existence or magnitude, saying only that these benefits should not be given deference.

5. Professor Rogerson's Joint Profit Maximization Assumption

46. A key assumption of Professor Rogerson's analysis is that NC and DIRECTV would act as a single firm after the transaction and engage in conduct to maximize joint profits, despite the fact that NC has only a 34% financial interest and despite constraints on joint profit maximization such as the Commission's program access rules and the voluntary undertakings, as well as the Audit Committee of independent directors and corporate and securities laws. Professor Rogerson criticizes our assumption that NC and DIRECTV will act as separate firms, in which DIRECTV management acts to maximize its profits and NC maximizes its own profits plus 34% of the profits at DIRECTV. He states that we have made a "serious conceptual error"

58 *Second Rogerson Analysis* at page 39.

59 LECG's slides suggest that a necessary condition for reduction of double marginalization is that "substantial market power exists at two vertically related levels [...]" (*LECG Presentation* at slide 23). As we discussed in our initial submission, reduction in double marginalization occurs whenever both upstream and downstream prices exceed marginal cost pre-transaction (*CRA Initial Report* at pages 10-12). This condition holds, for example, for all intellectual property because marginal production and distribution costs approach zero. We very much doubt that Professor Rubinfeld or Dr. Cameron would argue that all intellectual property rights holders earn supra-competitive profits or that all such rights holders should be regulated as dominant firms.

and claims that our method of treating NC and DIRECTV as separate companies is "completely untenable."[60] Of course, joint profit maximization would reduce the critical subscriber shifts necessary for NC profitability.[61] However, we do not believe we have made an error. To the contrary, in our view, it is inappropriate to treat this partial acquisition the same as a complete merger.

47. Professor Rogerson asserts that complete coordination would occur because there are incremental profits to be made by coordinating.[62] But, he eschews specifics. He fails to explain how the two firms would actually carry out the coordination after the transaction to maximize the total (joint) profits of the two companies. After the transaction, NC would negotiate affiliate fees and carriage arrangements with DIRECTV and other MVPDs for its programming. In practice, these agreements would tend to be multi-year arrangements that specify affiliate fees. Such agreements are already in place today. When NC subsequently negotiates with other MVPDs regarding carriage of the Fox RSNs and other Fox programming networks, the voluntary commitments, MFNs, audit rights and the FCC program access rules would provide various protections to ensure that the MVPDs get roughly the same terms and conditions from NC that DIRECTV receives.

48. But, suppose we follow Professor Rogerson and assume instead that all of these constraints are easily circumvented and unenforceable. In that world, suppose that NC were to withhold certain programming from rival MVPDs. This would significantly

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60 *Second Rogerson Analysis* at pages 8 and 12 respectively.

61 It is noteworthy that even in this unrealistic scenario, a three-month RSN disruption analyzed in Section II.A. would not be jointly profitable. In this case, DIRECTV would need to capture about of the foreclosed MVPD's subscriber base. Even here, the critical subscriber loss is about the same as Cablevision's loss in the YES experience. In that situation, Cablevision lost at most 1%. But that loss was from a *full-year disruption*, not simply a three-month disruption. Moreover, Professor Rogerson focuses particularly on the case of small cable operators, and many of these involve areas where DIRECTV is marketed by the NRTC, and in which the critical subscriber loss is larger. Thus, a three-month disruption would be very unlikely to generate sufficient switching to be profitable. Similarly, the one-month temporary O&O disruption analyzed in Section II.B. likely also would not be jointly profitable. DIRECTV would need to capture about of the foreclosed MVPD's subscriber base if access to an O&O were withheld from a cable operator – a figure that appears implausibly high.

62 This assumption on Professor Rogerson's part seems to be driven at least in part by his belief that there will be a single corporate entity after the proposed transaction is complete. Such is obviously not the case.

reduce NC's net profits, even when its programming profits are augmented by the income from its 34% investment in DIRECTV. Assuming that joint profits would rise, DIRECTV would have to compensate NC with a side payment sufficient to make up for these losses, plus share some of the incremental total profits.[63] These necessary side payments would be large and very difficult to disguise. Any provision in the multi-year agreement between NC and DIRECTV that specified payments from DIRECTV to NC conditional upon NC withholding programming from rival MVPDs obviously would raise significant issues under the program access rules and the voluntary commitments offered by NC. Therefore, the necessary side payments would have to be based on some kind of hidden, unwritten understanding or unrelated transaction between NC and DIRECTV or disguised in some other form.

49. Perhaps Professor Rogerson has in mind that NC would dramatically increase the affiliate fees it charges to DIRECTV, in the expectation that DIRECTV would continue to purchase the programming and include it in its basic tier. For example, using the YES experience as an illustrative fact pattern, for every month that an RSN does not appear on a cable system like Cablevision in New York, the RSN would need to recoup in higher affiliate fees from DIRECTV. Given the relatively small size of DIRECTV, the RSN would have to charge approximately per subscriber per month more to DIRECTV just in order to break even.[64] (Of course, on these data, DIRECTV would lose money as a result, but like Professor Rogerson, we will leave this unprofitability aside for the purpose of this calculation.) This price increase would be highly visible – a *-fold increase* in the affiliate fee would be easily detected by other MVPDs, who would certainly inform the FCC.

6. Bargaining Theory vs. Raising Rivals' Costs Theory

50. Professor Rogerson criticizes our use of the standard industrial organization pricing theory of profit-maximization and instead claims to prefer a model of bargaining

63 As we showed above in the YES example, it is highly unlikely that the joint profits would rise, but we ignore these findings here.

64 The RSN would likely have to increase its affiliate fee even more as it would get lower advertising revenue because so many fewer consumers view it.

interaction. He also complains that we ignored his bargaining theory presentation in our earlier submission.[65] We did not respond more on this point in our previous submission because Professor Rogerson did nothing more than barely sketch out the idea. He also placed a large caveat on his analysis, saying that it was a novel approach that has never been addressed by the FCC. For example, in introducing his theory, Professor Rogerson stated, "The danger of enhancing News Corp.'s bargaining power is a more novel issue that I do not believe the Commission has ever explicitly addressed before in its evaluation of the competitive harms of vertical integration."[66] In his subsequent submission, Professor Rogerson provides some additional details, but it is still not complete enough to provide a basis for a public interest determination in this matter. We see several problems with his analysis.

51. First, his bargaining theory proves too much. According to Professor Rogerson's version of the bargaining theory and vertical coordination, *every* (even partial) vertical ownership acquisition would lead to a significant danger of programming price increases by changing the threat point of the (partially) vertically integrated programmer. Coupled with his downplaying of the benefits of elimination of double marginalization and other efficiencies and his dismissal of the program access rules and the other constraints on anticompetitive coordination, his theory would seem to approach *per se* illegality for all partial vertical acquisitions by all cable programmers.[67] This *per se* approach is also suggested by the fact that he does not provide any evidence that integrated cable programmers actually have previously acted in accordance with his concerns. (Alternatively he provided no explanation of why this transaction would lead to higher prices in this matter despite the fact that such an outcome has not previously been observed.) In the light of the significant vertical

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65 *Second Rogerson Analysis* at page 2 ("Lexecon and CRA ignore and do not account for the more likely scenario – that News Corp., armed with increased bargaining power, has increased ability to raise prices to all distributors, and therefore to consumers, through the actual or threatened withholding of programming.").

66 *First Rogerson Analysis* at page 4.

67 For example, he assumes that the parties to a partial vertical acquisition can successfully coordinate with respect to anticompetitive actions, but he seems very skeptical that they could (or would choose to) eliminate double marginalization or achieve benefits of vertical coordination in other ways (e.g., investment in new programs or new technologies, promotion, etc.).

acquisitions that have occurred in this industry, we believe that Professor Rogerson would need to provide considerably more empirical evidence before the Commission should place any significant weight on his bargaining theory.

52. Second, his analysis of the bargaining theory is incomplete and thus unsuitable to provide a firm basis for policy. Professor Rogerson merely provides a sketch of a bargaining theory without much in the way of specifics.[68] For example, Professor Rogerson assumes that a temporary service disruption would drive a large number of subscribers to DIRECTV, an assumption that we have criticized above and is inconsistent with all evidence available. He also ignores the costs that DIRECTV would have to bear to acquire these consumers and the likelihood that they will have above-average churn rate at DIRECTV, as also discussed above.

53. Furthermore, Professor Rogerson does not address the real world complexity of the bargaining environment. He assumes that temporary disruptions of NC programming would hurt the MVPD after the programming is restored. But, he ignores the possibility that the NC program network also would be damaged, perhaps by as much or more than the MVPD. Neither Professor Rogerson nor LECG take account of these additional losses in their numerical analyses. As discussed above, during the period of disruption, viewers would begin to watch other competing programming and might not return to the NC network or its local owned stations when the programming is restored. This might be especially important with respect to local news broadcasts and other local programming. In addition, if the MVPD also is a program supplier, then its programs might be the ones that gain from the temporary period of disruption to NC's stations. For example, in the Disney/Time Warner dispute, Disney was concerned about competition between Toon Disney and Cartoon Network.[69]

54. Another complexity that Professor Rogerson does not discuss is the possibility that the MVPDs might have counterstrategies to combat the bargaining threats of a vertically integrated programmer like NC. For example, a MVPD could threaten to drop other

68 His Appendix A provides a bare-bones illustrative bargaining model. However, this model assumes perfectly inelastic demand. Nor does it include any consideration of counterstrategies or double marginalization.

69 *At Least 4 MSOs Involved in Retransmission Disputes,* Communications Daily, March 16, 2000.

NC programming if NC withholds its O&O or sports network. Alternatively, an MVPD could threaten to retaliate against a strategy of NC withholding by promoting programs that compete with NC programming. An MVPD could threaten to place the RSNs or other Fox programming on higher price tiers or an inferior channel position, a move that might hurt NC much more than the MVPD. Thus, the bargaining leverage may be far more balanced than suggested by Professor Rogerson when he simply labels sports as "must have" programming. Professor Rogerson does not deal with any such retaliatory counterstrategies.[70] But, these counterstrategies could be very significant constraints on NC's threats, both before and after the transaction. These are firms that often interact in multiple geographic areas and with respect to multiple products.

55. Some of these potential MVPD threats might become even more powerful after the transaction.[71] For example, if the disrupted MVPD also is vertically integrated, it could threaten to retaliate by withholding its own programming from DIRECTV. In addition, any MVPD facing actual or potential disruption by NC could threaten to retaliate by embarking in a promotion campaign targeted against DIRECTV. Other potential MVPD threats may not become more powerful, but were simply not raised in the less contentious world before NC began "looking for a fight." These sorts of counterstrategies would have to be analyzed in a bargaining theory of foreclosure. Professor Rogerson also ignores the potential for MFNs or the Commission's rules to protect the rival MVPDs by providing them with counter-threats, including complaining to the FCC.[72] These counter-threats could be powerful. For example, if

70 Indeed, Professor Rogerson's claim that sports is "must-have" apparently is based on the standard industrial organization model of take-it-or-leave-it-offers. But, in a bargaining interaction scenario, the cost of withholding to the programmer also figures into the equilibrium fee. For example, national carriage has similar "must-have" characteristics for the broadcasters who sell national advertising. RSNs also are vulnerable to counterthreats by the MVPDs that could maintain lower affiliate fees.

71 The proposed transaction has no effect on the MVPD's profits (or losses) associated with some of these potential MVPD threats. However, the transaction has the effect of increasing the NC losses associated with these MVPD threats. These kind of "threat point" effects are similar to the one identified by Professor Rogerson, except for the fact that they work in the opposite direction and have not been taken into account in his analysis.

72 In approving NC's prior investment in EchoStar, the Commission declined to impose any program access conditions because the existing rules "provide MVPDs an avenue for redress if they believe a News Corp. programming arrangement involves price discrimination or unfair practices." *MCI Telecommunications Corp. and EchoStar 110 Corp.*, 16 FCC Rcd. 21608, 21622 (1999).

the vertically integrated cable operators can negotiate low fees, then other MVPDs might be able to use MFNs or the Commission's rules to obtain lower fees themselves.

56. Of course, the YES natural experiment also throws light on the real world bargaining interaction. At the end of the disruption between YES and Cablevision, it appears that the settlement was closer to what Cablevision wanted than what YES wanted. YES was not placed on the expanded basic tier by Cablevision.[73] Furthermore, it is our understanding that Time Warner, which had previously reached a carriage agreement with YES, apparently now has invoked an MFN clause in its contract with YES to be able to place the network on a tier other than the expanded basic tier.[74] Therefore, in this real world example, it appears that the MVPD had more bargaining leverage, not the owner of the sports programming network. And, in the real world, it appears that MVPDs are able to use MFNs to gain more favorable terms.

57. Third, Professor Rogerson's bargaining theory assumes that the bargaining involves only NC and the MVPD. However, an added complexity is that it would be more realistic to assume a multi-party bargaining interaction, in which the owners of the sports rights also are involved. As discussed in our earlier submission, the profits of the owners of the sports rights would be reduced if an RSN were withheld from rival MVPDs. Those rights holders would need to be compensated for their losses and would expect to share in the incremental profits. The fact that there are multiple rights holders on a particular RSN complicates the bargaining interaction still further.

58. Fourth, Professor Rogerson does not take any reduction of double marginalization into account in his bargaining theory. Again, his analysis lacks sufficient detail. Even in a bargaining theory, NC would have the incentive to reduce the price it charges to DIRECTV, and this lower price would give DIRECTV the incentive to reduce its

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73 Cablevision is paying YES monthly affiliate fees of $2.12 per subscriber. (See R. Thomas Umstead, *YES, It's On Again: Not a Day Too Late,* Multichannel News, April 7, 2000. It is our understanding that the YES Network is not part of Cablevision's basic package and instead may be purchased a la carte for $1.95 per month or is part of a separate sports tier for $4.95 per month. One of the key initial demands of the YES Network was that the channel appear in the basic cable package.)

74 See, e.g., www.timewarnercablenj.com/news13.html (announcing that expanded basic subscription prices will be lowered by $1 per month and YES will be available a la carte for $1 per month).

subscription price to consumers or to increase the quality of its service offering, *ceteris paribus*. These incentives in turn also could give NC the incentive to reduce the fees or increase the quality it offers to rival MVPDs, *ceteris paribus*.

59. Finally, despite embracing the bargaining theory, Professor Rogerson seems to return ultimately to the more standard raising-rivals'-costs theory for predicting the effect of the transaction. In the bargaining theory, one would expect that changes in threat points and/or payoffs would lead to a change in the payments to NC. However, bargaining models in general predict that the two firms quickly would reach the equilibrium outcome without ever having to carry out their threats. In this regard, Professor Rogerson ultimately argues that NC actually will purposefully withhold programming from DIRECTV's rivals (e.g., for three months) because that temporary disruption will move enough subscribers to DIRECTV to make the disruption profitable on its own.[75] Professor Rogerson writes:

> *Furthermore, as I stated in my previous affidavit, it seems likely to me that the transaction will actually increase the number of temporary withdrawals engaged in by News Corp. That is, it may well be that after taking over [sic] DirecTV, News Corp. will be "looking for a fight" in the sense that it will actually be able to increase its profits by manufacturing disputes that would create the pretext for a temporary withdrawal of service.*[76]

60. Therefore, even when presenting his bargaining model, Professor Rogerson continues to focus heavily on the raising-rivals'-costs theory that he in other instances argues is inappropriate. And, in that framework, Professor Rogerson does not show that the transaction likely would lead to higher subscription prices charged to consumers.

7. Conclusion

61. After careful review of Professor Rogerson's latest analysis and LECG's slides, we stand by the conclusions in our previous analysis. We still believe that the proposed partial acquisition of DIRECTV by NC will serve the public interest.

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75 This is also the approach used by LECG.

76 *Second Rogerson Analysis* at page 20.

Appendix: Reduction of Double Marginalization

I. The RDM Effect: A General Theorem

We assume that NC charges the same programming prices (i.e., uniform affiliate fees) to each MVPD both before and after the proposed transaction. Let W denote the price of a NC program (e.g., a RSN), and let $\Pi_{NC}(W)$ be the profit function of NC.

Assuming that pre-transaction NC chooses its programming prices to maximize profits, we have:

$$\frac{\partial \Pi_{NC}}{\partial W} = 0 \quad \text{at } W = W^{*} \tag{1}$$

where W^{*} is the profit-maximizing affiliate fee charged by NC to each MVPD prior to its investment in DIRECTV.

Now suppose that NC acquires an ownership share of K in DIRECTV. Let $\Pi_{D}(W)$ be the (reduced-form) profit function of DIRECTV. We make the standard assumption that each downstream firm's profits decrease when the entire downstream industry faces uniformly higher costs. Therefore, we know that $\Pi_{D}(W)$ is a decreasing function of W, i.e., $\partial \Pi_{D} / \partial W < 0$.

After its investment in DIRECTV, NC maximizes the sum of its programming profits and its share of DIRECTV's profits, which are influenced by the affiliate fees it charges. NC's new objective function is $\Pi_{NC} + K\Pi_{D}$. The first-order condition for NC's profit-maximizing affiliate fee is now given by:

$$\frac{\partial \Pi_{NC}}{\partial W} + K\frac{\partial \Pi_{D}}{\partial W} = 0 \quad \text{at } W = W^{**} \tag{2}$$

where W^{**} is NC's post-transaction profit-maximizing affiliate fee (charged to each MVPD). Using equation (1) and $\partial\Pi_D / \partial W < 0$, the left-hand side of equation (2) is negative at $W = W^*$. The concavity of the profit function then implies $W^{**} < W^*$.

This proves that NC's investment in DIRECTV will give NC an incentive to set a lower non-discriminatory affiliate fee than it would otherwise set.

II. Estimating the Magnitude of the RDM Effect

We illustrate the estimation approach by considering NC's post-transaction incentive to reduce the affiliate fees of the RSNs. We assume that NC receives an affiliate fee W (from the MVPDs) and an advertising fee A (from the advertisers) for each MVPD subscriber that gets the RSN. We denote the initial level of W by W^*, and we use $dW = W - W^*$ to denote the post-transaction *change* in the affiliate fee (from the pre-transaction level W^* to any level W) and we shall use a similar notation for all changes. Our objective is to find the new level of W that maximizes NC's overall profits after the proposed transaction and compare that to W^*.

A. Impact on NC Programming Profits

We denote by Q the total number of subscribers to the NC RSN. Then NC's programming profits are given by $\Pi_{NC}(W) = (W + A)Q(W)$, where $Q(W)$ represents the demand curve for the NC RSN.

The pre-transaction first-order condition for NC's affiliate fee is given by $\Pi'_{NC}(W) = (W + A)Q'(W) + Q(W) = 0$, which can be re-written as $E = -W/(W + A)$, where $E = Q'(W)W/Q$ is the elasticity of demand faced by NC. Calibrating using representative numbers from NC's RSNs, we have pre-transaction affiliate and advertising fees of $W^* =$ and $A^* =$, respectively. Therefore, the implied elasticity of demand faced by NC is given by $E =$ (i.e., $-W^*/(W^* + A^*) =$).

It follows from the previous paragraph that the total number Q of RSN subscribers changes by the amount:

$$dQ = EQ^* \frac{dW}{W^*} = \qquad \cdot \frac{dW}{W^*} \tag{3}$$

where Q^* is the pre-transaction total number of RSN subscribers (among all MVPD subscribers). Equation (3) is exact if the demand for the NC RSN is linear; otherwise, it is an approximation.

Using equation (3), the change in NC's programming profits is given by:

$$d\Pi_{NC} = (W^* + A^*)dQ + (Q^* + dQ)dW$$

$$= \qquad Q^* (\frac{dW}{W^*})^2 \tag{4}$$

where the second equality makes use of equation (3). As we have stressed elsewhere, higher (or lower) affiliate fees reduce NC's programming profits, since they are already maximized at W^*. (Formally, equation (4) implies $d\Pi_{NC} < 0$ for all $dW \neq 0$.)

B. *Impact on DIRECTV Profits*

How will a change in NC's RSN affiliate fees affect DIRECTV's profits? There is a direct effect and an indirect (or induced) effect. The direct effect results from the lower costs that DIRECTV experiences on its existing RSN subs, to the extent that those lower costs are not passed on to subscribers. The indirect effect results from the increased number of DIRECTV subscribers to the package of programming including the RSN in response to any price reduction DIRECTV offers as a result of its lower costs. The indirect effect further raises DIRECTV's profits, assuming that these customers are either new MVPD subscribers or upgrade from other programming packages not including an RSN that generate a lower margin to DIRECTV.

We are unable to measure the indirect effect reliably using the data available to us. So we offer a quantification without this effect. This exercise will therefore *underestimate* the extent to which the proposed transaction would give NC an incentive to charge lower affiliate fees for its RSNs.

We use dP to denote the change in MVPD subscription prices, and $R = dP / dW$ to denote the pass-through rate of industry-wide cost changes. We assume that R is constant over the relevant price range. (The magnitude of the pass-through rate may depend upon the program service under consideration and may change over time.)

The change in DIRECTV's profits from the direct effect of lower costs is given by $d\Pi_D = S_D Q^*(dP - dW) + S_N Q^* T dP$, where S_D is DIRECTV's share of RSN subscribers (excluding NRTC subscribers), S_N is NRTC's share of RSN subscribers, and T is the royalty rate earned by DIRECTV on NRTC's revenues. Thus, $S_D Q^*$ and $S_N Q^*$ are the number of RSN subscribers at DIRECTV and NRTC, respectively. (We assume that DIRECTV and NRTC change their subscription prices by the same amount, dP, and they neither gain nor lose market share as a result of the change in RSN affiliate fees since those fees apply equally to all MVPDs. In addition, we assume that the change in RSN affiliate fees has no effect on the royalty rate, T.)

C. Overall Incentive for NC to Lower Affiliate Fees

Post-transaction, NC chooses dW to maximize its total profits, or equivalently to maximize $d\Pi_{NC} + Kd\Pi_D$, where K is NC's ownership share in DIRECTV. Adding up these two terms, we have:

$$d\Pi_{NC} + Kd\Pi_D = - \qquad {}^{*}Q^*(\frac{dW}{W^*})^2 + KW^*Q^*[S_D(R-1) + S_N TR]\frac{dW}{W^*}.$$

NC will choose $\frac{dW}{W^*}$ to maximize this expression. The resulting first-order condition is $\frac{dW}{W^*} + K[S_D(R-1) + S_N TR] = 0$. Solving for $\frac{dW}{W^*}$, our expression for the (lower bound on) NC's optimal change in the RSN affiliate fee is given by:

$$\frac{dW}{W^*} = \qquad K[S_D(1-R) - S_N TR].$$

Using $K = 0.34$, $S_D =$, $S_N =$, and $T =$, this expression becomes:[77]

$$\frac{dW}{W^*} = - \qquad - \qquad R).$$

This is the expression used in Table 1 in the main body of our report. The comparable expression with $K = 0.50$,

$$\frac{dW}{W^*} = - \qquad - \qquad ,$$

is used to generate the second column in Table 1 corresponding to NC 50% ownership of DIRECTV rather than 34% ownership.

77 Values for S_D and S_N are from *CRA Initial Report* at pages 23-24, Table 3. The value for T reflects the commercial arrangement between DIRECTV and NRTC, as it relates to "core" services. The NC RSNs are "core" services.

RESPONSE TO WILLIAM P. ROGERSON AND DANIEL L. RUBINFELD AND DUNCAN CAMERON

Dennis W. Carlton, Janice H. Halpern and Gustavo E. Bamberger

Lexecon Inc.

September 8, 2003

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INTRODUCTION

1. We have been asked by The News Corporation Limited ("News Corp."), General Motors Corporation and Hughes Electronics Corporation to review "A Further Economic Analysis of the News Corp. Takeover of DIRECTV," the second report filed by Professor William P. Rogerson on behalf of the Joint Cable Commenters in this matter.[1] We also have been asked to respond to arguments raised in a PowerPoint presentation to the Federal Communications Commission ("FCC") staff on August 19, 2003 by Professor Daniel L. Rubinfeld and Dr. Duncan Cameron on behalf of Cablevision Systems Corporation. We previously filed a report in this matter. Our qualifications are described in that report.

2. As we explain in this report, we conclude that Professor Rogerson's analysis is flawed and his criticisms of the proposed transaction are unfounded. Nothing in Professor Rogerson's second report causes us to change our view that the proposed transaction raises no significant competitive concerns. We also explain that the analysis presented by Professor Rubinfeld and Dr. Cameron is equally flawed and that it provides no basis for concern that this transaction will reduce competition. In fact, evidence that they present reinforces our conclusions.

3. Our report is organized as follows. In Section I, we briefly review the arguments that have been used in the past to criticize vertical transactions in the multichannel video program distribution ("MVPD") industry. In Section II, we note that Professor Rogerson agrees with us that the proposed transaction does not raise "permanent" foreclosure concerns, and we explain that his analysis of "temporary" foreclosure is flawed and misleading. In Section III, we

1. We refer to this as Professor Rogerson's Second Report. The joint commenters are Advance/Newhouse Communications, Cable One, Cox Communications and Insight Communications.

show that Professor Rogerson's "bargaining" theory does not raise significant anticompetitive concerns. In Section IV, we show that Professor Rogerson's analysis of "barriers to entry" into the regional sports network ("RSN") business is flawed. In Section V, we explain that the arguments and evidence presented by Professor Rubinfeld and Dr. Cameron provide no basis for concern that this transaction will injure competition. In fact, when interpreted properly, some of their evidence supports our conclusions, and not theirs. Finally, we summarize our conclusions in Section VI.

I. VERTICAL THEORIES OF ANTICOMPETITIVE HARM.

4. Professor Rogerson does not dispute that the proposed transaction raises no significant horizontal concerns, but he claims that the vertical nature of the transaction creates significant risk of competitive harm. However, he offers no empirical evidence to support his various theories of how the integration of a program supplier – News Corp. – and a distributor of video programming – DIRECTV – will injure competition. Moreover, he ignores considerable evidence that rebuts his theoretical speculations of harm.

5. Critics have raised two types of vertical concerns. The first is a refusal to deal, where one or both merging parties refuse to serve unaffiliated firms. As applied to this case, the possible concern would be that News Corp., a content provider, would refuse to supply programming to rival MVPDs that compete with DIRECTV. The second concern is raising the price to unaffiliated parties. As applied here, the possible concern could be that News Corp. would raise the price of its networks to rival MVPDs, thereby weakening them and potentially leading to higher consumer prices.

6. Both types of concerns have been considered in the past during antitrust review of proposed vertical mergers involving content providers and cable companies. These issues also

have been the subject of extensive rule-making procedures by the FCC. The FCC's investigations have focused on vertical concerns possibly arising from integration of cable companies with cable programming, and the difficulty that control over programming could create for new MVPDs attempting to challenge cable's "dominant" position. Moreover, the FCC has adopted non-discrimination rules to address its concerns about these vertical issues in the context of cable.

7. There are sound economic reasons why vertical concerns are less likely to arise from this merger than from vertical mergers involving cable companies. The magnitude of anticompetitive incentives and the likelihood of anticompetitive harm depend on the relative shares of the acquired distributor and the possibly "foreclosed" disadvantaged distributors, and on the likelihood that consumers will switch to the acquired distributor in response to the feared anticompetitive conduct. As we explained in our prior report, and as Charles River Associates ("CRA") demonstrated in the quantitative analysis it presented in its original report, DIRECTV's share of the MVPD industry and the likelihood that subscribers to other MVPDs would switch to DIRECTV in response to the type of foreclosure or raising-rivals'-costs conduct that critics (in particular Professor Rogerson, Professor Rubinfeld and Dr. Cameron) hypothesize will occur are too low to make such conduct profitable.

8. Unlike cable firms, DIRECTV has no "dominant" position in the MVPD business to protect. Rather, DIRECTV is a challenger to incumbent cable companies and, as such, is the type of firm that the program access rules and requirements were intended to protect. Thus, by itself, the fact that this transaction is vertical should not be interpreted as raising the types of vertical concerns that the FCC has considered in the past in the context of cable companies. Rather, determining whether any vertical issues are raised by the integration into programming of a relatively small MVPD that faces "dominant" cable competitors in most local markets

requires a thorough theoretical and empirical analysis which we and CRA provided in our original reports and which, we explain below, has not been provided by either Professor Rogerson or by Professor Rubinfeld and Dr. Cameron.

9. Furthermore, economic analysis should proceed from the presumption that vertical mergers are motivated by expected efficiencies.[2] As we explained in our prior report, News Corp. expects to achieve significant cost savings at DIRECTV and to accelerate the introduction of new DBS service offerings. The result likely will be increased competition among MVPDs and increased consumer welfare.

II. PROFESSOR ROGERSON CONCEDES THAT FORECLOSURE IS NOT A CONCERN. THE "TEMPORARY" PROGRAMMING WITHDRAWAL HE POSITS IS EQUALLY UNLIKELY.

10. In our prior report, we explained that if an exclusive arrangement were really in the collective financial interests of DIRECTV and News Corp. – as proponents of a foreclosure theory must contend – it likely would have occurred already through contract. Yet the empirical evidence is that News Corp.'s networks are licensed nonexclusively to cable and to both of the DBS companies. Thus, we concluded this transaction does not make such foreclosure likely.

11. Professor Rogerson does not dispute that "it may be fairly easy to sign a contract that guarantees that News Corp. will provide its programming exclusively to DIRECTV" (p. 22).[3] And Professor Rogerson goes further in his agreement with us – though for different

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2. *See* Michael H. Riordan and Steven C. Salop, "Evaluating Vertical Mergers: A Post-Chicago Approach," 63 *Antitrust Law* Journal 513 (Winter 1995), p. 519, quoted on p. 6 of our prior report ("...many if not most vertical mergers are either procompetitive or competitively neutral"). There is a large economic literature that discusses how vertical arrangements can be procompetitive in various situations. *See,* Dennis W. Carlton and Jeffrey M. Perloff, Modern Industrial Organization, 3rd. Ed. (2000), Chapter 12.

3. Page references in the text and footnotes are to Professor Rogerson's second report.