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IN THE COURT OF CHANCERY OF THE STATE OF DELAWARI

ACP MASTER, LTD., AURELIUS CAPITAL MASTER, LTD., and AURELIUS OPPORTUNITIES FUND II, LLC,	,))
Plaintiffs,)
v.) C.A. No. 8508-VCL
SPRINT CORPORATION, SPRINT COMMUNICATIONS, INC., ERIK PRUSCH, JOHN W. STANTON, WILLIAM R. BLESSING, BRUCE A. CHATTERLEY, MUFIT CINALI, JOSE A. COLLAZO, HOSSEIN ESLAMBOLCHI, DENNIS S. HERSCH, BRIAN P. MCANDREWS, KATHLEEN H. RAE, THEODORE H. SCHELL, JENNIFER L. VOGEL, SLADE GORTON, STARBURST I, INC., and SOFTBANK, CORP.,	,))))))
Defendants.)
ACP MASTER, LTD., AURELIUS CAPITAL MASTER, LTD., and AURELIUS OPPORTUNTIES FUND II, LLC,)))
Petitioners,)
v.) C.A. No. 9042-VCL
CLEARWIRE CORPORATION,)
Respondent.)))

REBUTTAL REPORT

of

GREGG A. JARRELL

October 23, 2015

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I. INTRODUCTION AND SUMMARY OF OPINIONS

1. I have been retained by Robbins, Russell, Englert, Orseck, Untereiner & Sauber LLP, on behalf of the Plaintiffs/Petitioners in the above-captioned "fiduciary action" and "appraisal action," to opine on the fair value of Clearwire Corporation, a Delaware corporation ("Clearwire" or the "Company"), as of July 9, 2013 (the "Valuation Date").

2. I previously submitted in these actions a report dated September 25, 2015 (the "Jarrell Report") in which I set forth my qualifications and compensation. Capitalized terms undefined herein have the meaning ascribed to them in the Jarrell Report.

3. In the Jarrell Report, I concluded that the fair value of Clearwire's common stock as of the Valuation Date was \$11.27 per share, which was based on my independent discounted cash flow ("DCF") analysis.¹

4. I have been asked to respond to the Expert Report of Bradford Cornell, dated September 25, 2015 (the "Cornell Report"). Other materials that I reviewed for this rebuttal report, beyond those cited in the Jarrell Report, are cited in the text of this report and its exhibits.

5. Prof. Cornell concluded in his report that on the Valuation Date, the fair value of Clearwire's common stock was \$2.13 per share based on his adjusted present value ("APV") analysis and "the proceeds from a possible partial sale of spectrum."²

6. Prof. Cornell and I came to significantly different conclusions as to the fair value per share of Clearwire's common stock. In effect, we are valuing two completely different

¹ See Jarrell Report, ¶3. I also noted that this value would be greater if the NPA were rescinded or if the value of Clearwire's excess spectrum assets, if any, were included. See Jarrell Report, ¶326, footnotes 446-447.

² See Cornell Report, ¶15.

companies. Prof. Cornell values Clearwire using the SCC Projections³ that were prepared by Clearwire's management without knowledge that a standalone Sprint expected to increase its tonnage used on Clearwire's network and without taking into account Sprint's additional expected increase in demand for Clearwire's services because of SoftBank's investment in Sprint.

7. In stark contrast, I value Clearwire using the June Projections – SoftBank Plan, which reflects that SoftBank was acquiring Sprint and that Sprint was likely to increase its demand for Clearwire's services further.⁴ Moreover, I consider the June Projections – SoftBank Plan to fully reflect Clearwire's operative reality as of the Valuation Date mainly because:

- a) Sprint had better insight into Sprint's long-range demand for Clearwire's 4G services than Clearwire's management team because: (i) Sprint was Clearwire's single-largest customer and only major wholesale customer; and (ii) Sprint was Clearwire's majority shareholder and had been an investor in Clearwire since November 2008;
- b) Sprint, by virtue of being the third largest wireless communications company in the United States in 2013, was a major participant within Clearwire's industry;
- c) The June Projections SoftBank Plan was prepared approximately three weeks before the Valuation Date, which is more than seven months after the SCC and MCC projections prepared in October/November 2012 and two months after the SCC and MCC Projections were updated in May 2013;
- d) The June Projections SoftBank Plan explicitly contemplates the completion of the SoftBank/Sprint transaction and its impact on Clearwire; and
- e) Sprint's management told its board of directors at a June 17, 2013 board meeting that if the Sprint/Clearwire transaction was not completed, then Sprint's management's "fall back position" would be as set forth in the June Projections SoftBank Plan.⁵

³ See Cornell Report, ¶¶48-50, 64-65.

⁴ See Jarrell Report, ¶328.

⁵ See Jarrell Report, ¶331.

8. The selection of the appropriate projections to use for Clearwire's DCF model is the single most significant driver of the difference between Prof. Cornell and myself. The next significant value driver is the selection of the perpetuity growth rate – Prof. Cornell uses 3.35% and I use 4.50%.⁶ I believe that Prof. Cornell understates Clearwire's terminal value by using an unreasonably low perpetuity growth rate that is no different than long-term historical measures of inflation. Prof. Cornell's assumption that Clearwire will grow at a rate less than the long-term growth rate of the overall economy is inconsistent with long-term historical evidence that Clearwire's industry was growing at nearly three times the rate of the overall economy. Both Prof. Cornell and I have similar expectations for the growth rate in the U.S. economy as measured by GDP of either 4.50% or 4.70%.⁷ I believe that expected GDP is an appropriate estimate of Clearwire's perpetuity growth rate, whereas Prof. Cornell takes a pessimistic view that Clearwire's terminal period growth rate will be substantially less than the overall economy.

9. Both Prof. Cornell and I rely on the DCF valuation method, but he uses the adjusted present value (or APV) model instead of the more common weighted-average-cost of capital (or WACC) model, which I use.⁸ I believe it is more appropriate to use the standard WACC model that assumes a constant, going-concern leverage ratio consistent with Clearwire's actual leverage ratio at that time. Prof. Cornell's use of the APV model makes it more difficult to identify the differences between us in the important assumptions and to compare these differences on an apples-to-apples basis. To facilitate comparison, I compute the value-equivalent WACC model implied by Prof. Cornell's APV model, based on the SCC Projections.

⁶ See Cornell Report, ¶70; Jarrell Report, ¶308.

⁷ See Cornell Report, ¶70; Jarrell Report, ¶307.

⁸ See Cornell Report, ¶59; Jarrell Report, ¶¶3, 242.

10. Based on Prof. Cornell's WACC-equivalent model, the remaining difference between his fair value and my fair value is more than accounted for after I make corrections to Prof. Cornell's beta, market risk premium, and cost of debt.

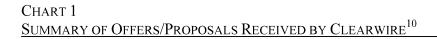
11. After carefully reviewing the Cornell Report, I continue to stand by my original findings expressed in the Jarrell Report.

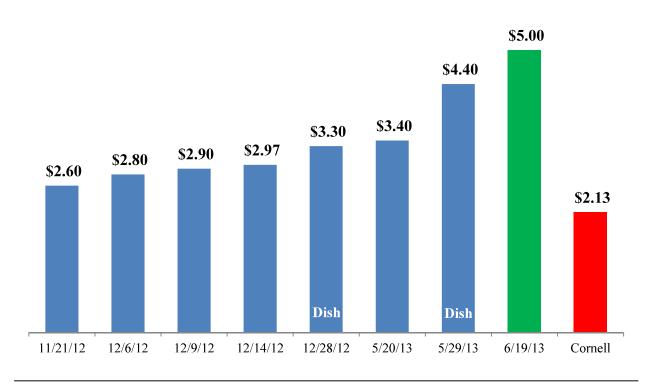
II. REBUTTAL ANALYSIS

A. Cornell's Fair Value is Considerably Below Deal Value

12. Prof. Cornell does not attempt to reconcile his \$2.13 per share fair value with the significantly greater minority-based proposals from DISH of \$3.30 per share and \$4.40 per share, and Sprint's offers that ranged from \$2.60 per share to the ultimate deal value of \$5.00 per share, as shown in Chart 1 below:⁹

⁹ Prof. Cornell notes that various stock prices, offers from Sprint, and the proposals from DISH were between 71% and 285% higher than Clearwire's stock price from October 10, 2012 of \$1.30 per share. *See* Cornell Report, ¶¶31, 37, 40, 41, 43. I note that the increases in the corresponding enterprise values relative to the enterprise value when using the \$1.30 per share stock price are as follows: (i) the \$2.22 per share stock price from October 11, 2012 reflects a 23.5% increase in enterprise value; (ii) the \$2.97 per share offer from Sprint reflects a 43.1% increase in enterprise value; (iii) the \$3.40 per share offer from Sprint reflects a 54.4% increase in enterprise value; (iv) the \$4.40 per share proposal from DISH reflects a 80.5% increase in enterprise value; (v) the \$5.00 per share deal value from Sprint reflects a 265.9% increase in enterprise value; and (vi) my \$11.27 per share fair value opinion reflects a 265.9% increase in enterprise value.





13. Prof. Cornell's purported \$2.13 per share fair value is 57% below the \$5.00 per share deal value and 52% below DISH's final minority-based proposal of \$4.40 per share. Prof. Cornell does not attempt to explain why both Sprint and DISH would make offers for a minority stake that were so much greater than his \$2.13 per share fair value for a controlling stake in Clearwire as of July 2013. Assuming Sprint and DISH would not knowingly offer more for a minority stake than the fair value of a controlling stake in Clearwire, then it would appear that Prof. Cornell's fair value of \$2.13 per share cannot be reconciled with these actual offers.

B. Deficient "Reasonableness Tests" Provide Baseless Comfort for Cornell's Fair Value

14. After Prof. Cornell determined that Clearwire's fair value as of the Valuation Date was \$2.13 per share, he limited his examination of the "reasonableness" of his valuation

¹⁰ See Jarrell Report, ¶115, Table 8.

conclusion to only considering: (i) prior sales of Clearwire shares and (ii) the value of Clearwire if it were bankrupt.¹¹

Prior Sales of Clearwire Shares

15. Prof. Cornell compares his \$2.13 per share fair value with prior sales of Clearwire shares by Clearwire and certain of its large shareholders between December 2011 and December 2012. The weighted average price from those five transactions was \$1.89 per share.¹² Based on this, Prof. Cornell concludes that:

The individual and collected market behavior of well-informed parties during these periods is a useful and <u>confirmatory check on</u> <u>my analysis of the value of Clearwire</u> at the Appraisal Date.¹³

16. Prof. Cornell, however, does not acknowledge that these prior transactions represent sales of minority blocks of Clearwire's shares, which do not equate to a control value or a fair value, which necessarily must exclude any minority discount.

17. Additionally, although Prof. Cornell believes that the selling parties in these transactions were "well-informed,"¹⁴ he cites no evidence, and I know of none, that any of these parties were aware of Sprint's long-term tonnage forecasts for Clearwire. Moreover, Prof. Cornell does not distinguish between sales transactions that took place before SoftBank's interest in Sprint became known and those that took place after. As I explain below,¹⁵ SoftBank's interest in Sprint positively affected the value of Clearwire. All but one of the transactions that Prof. Cornell cites took place before SoftBank's interest became publicly known.¹⁶

- ¹² See Cornell Report, ¶95, Exhibit 7.
- ¹³ See Cornell Report, ¶95 (emphasis added).
- ¹⁴ See Cornell Report, ¶95.
- ¹⁵ *See infra*, ¶¶49-65.
- ¹⁶ See Cornell Report, ¶95, Exhibit 7.

¹¹ See Cornell Report, ¶¶93-94.

18. Indeed, the most recent sale transaction with Eagle River at a price of \$2.97 per share,¹⁷ which is clearly the least uninformed of the five Prof. Cornell considered because it came after the SoftBank news, does not support his *lower* \$2.13 per share fair value. Moreover, as I discussed in the Jarrell Report, Sprint also agreed to pay Eagle River an additional "make whole payment" if Sprint subsequently acquired or disposed of its Clearwire shares over the next three years at a price higher than \$2.97 per share, with the make whole payment equal to the excess of such higher price over the \$2.97 per share price.¹⁸

19. Therefore, I do not think that the Eagle River sale of a minority-block of shares at \$2.97 per share to Sprint supports a control-based fair value of \$2.13 per share. To the contrary, Prof. Cornell's determination of fair value would seem to clearly *fail* this particular reasonableness test.

Possibility of Bankruptcy

20. Prof. Cornell also compares his \$2.13 per share fair value with values of \$0.18 to \$1.04 per share that Blackstone, a financial consultant to Clearwire, thought could be realized in the event of a Clearwire bankruptcy.¹⁹

21. But this purported reasonableness test is inconsistent with the basic economic premise of a fair value determination of Clearwire as a viable going-concern business. Indeed, the great majority of the publicly-traded going-concern companies have fair values greater than

 $^{^{17}\,}$ The Eagle River transaction was agreed to on October 17, 2012 and was completed on December 11, 2012. *See* Jarrell Report, ¶70.

¹⁸ See Jarrell Report, ¶70.

¹⁹ See Cornell Report, ¶96. It is my understanding that Blackstone's bankruptcy analysis was withheld from production in this case.

their bankruptcy values. Thus, I do not understand the merit of basing a reasonableness test of fair value on this incredibly low and irrelevant bankruptcy-value hurdle.²⁰

22. Lastly, both of Prof. Cornell's reasonableness tests fail to account for Clearwire's operative reality as of the Valuation Date, which I discuss in the next section.

C. Cornell's Use of the SCC Projections Ignores Clearwire's Operative Reality

23. The only financial projections that Prof. Cornell uses for his discounted cash flow analysis are Clearwire management's single-customer case ("SCC") projections, specifically those updated in May 2013 (the "SCC Projections").²¹ Prof. Cornell mentions, but does not use, Clearwire's multi-customer case ("MCC") projections.²² He does not mention the various projections prepared by Sprint regarding Clearwire in the weeks and months preceding the Valuation Date.

24. Prof. Cornell believes the SCC Projections are the "most reasonable" projections because: (i) Mr. Schell testified that they reflect "the only reality that we knew;" (ii) they are the "most contemporaneous" projections prepared by Clearwire management; (iii) they were provided to the Special Committee's and the Clearwire board's financial advisors for their fairness opinions; and (iv) they were disclosed to shareholders in the May 22 Proxy Statement.²³ Prof. Cornell found that "Clearwire's representatives did not believe Clearwire would be able to

²⁰ In addition to setting an incredibly low hurdle, Blackstone's analysis was performed for Clearwire and thus was presumably uninformed by Sprint's projections of Clearwire's revenue.

²¹ See Cornell Report, ¶¶48-50, 64-65.

²² See Cornell Report, ¶¶48-50, 64-65.

²³ See Cornell Report, ¶¶50, 64.

obtain a second customer and thus did not view the MCC as achievable as of the Appraisal Date."²⁴

25. In my opinion, Prof. Cornell erred because the SCC Projections fail to reflect Clearwire's operative reality as of the Valuation Date. First, they ignore the information about Clearwire's principal source of revenue (Sprint) from the best available source of that information (Sprint). Second, they ignore the beneficial effect that SoftBank's acquisition of a controlling stake in Sprint would have on Clearwire.

26. It is not apparent why Prof. Cornell ignores the Sprint projections, but assuming it

is because they are not "management" projections, I believe that is unreasonable in this case. I

considered this in the Jarrell Report when I noted that the Delaware Court of Chancery has

expressed a clear preference for using management prepared projections:²⁵

[M]anagement was in the best position to project the short-term prospects of the company, as they created projections *ex ante*, *based upon information gleaned from their particular customers*.²⁶

Delaware law clearly prefers valuations based on contemporaneously prepared management projections because <u>management ordinarily has the best first-hand knowledge of a</u> <u>company's operations</u>.²⁷

27. Because of the unique facts and circumstances of this case, I believe that the

Court's logic for preferring management projections extends to Sprint's projections.²⁸

²⁴ See Cornell Report, ¶¶50, 64.

²⁵ See Jarrell Report, ¶205.

²⁶ See In re Emerging Commc'ns, Inc. S'holders Litig., 2004 WL 1305745, at *15 n.49 (Del. Ch. May 3, 2004) (emphasis added) quoting Cede & Co. v. Technicolor, Inc., C.A. No. 7129, 2003 WL 23104613, at *3 (Del. Ch. Dec. 31, 2003).

²⁷ See Muoio & Co. v. Hallmark Entm't Invs. Co., 2011 WL 863007, at *19 n.157 (Del. Ch. Mar. 9, 2011) (emphasis added) quoting Doft & Co. v. Travelocity.com Inc., 2004 WL 1152338, at *5 (Del. Ch. May 20, 2004).

²⁸ See Jarrell Report, ¶206.

28. As discussed in the Jarrell Report, Sprint had uniquely extensive and detailed knowledge of Clearwire's operations and cost structure by virtue of the following:

- a) Sprint was Clearwire's majority shareholder;
- b) Sprint had been an investor in Clearwire since November 2008; and
- c) Sprint was Clearwire's single-largest customer and only major wholesale customer.²⁹

29. Of these, the most relevant is Sprint's unique knowledge of Clearwire's future revenue based on its status as Clearwire's single-largest customer and only major wholesale customer. Sprint had a much deeper understanding of its projected level of utilization of Clearwire's network than Clearwire's management did. Because Sprint did not share with Clearwire the amount that it expected to pay Clearwire over time, Clearwire's management was hindered in its ability to prepare accurate long-range projections.³⁰

30. For these reasons, I concluded in the Jarrell Report that Sprint actually had better insight into Sprint's long-range demand for Clearwire's services than did Clearwire's management team.³¹

i) Sprint's Projections of Clearwire

Sprint-Created Projections of Usage and Payments

31. Clearwire's revenue consisted principally of retail revenue (sales of data plans to consumers) and wholesale revenue (sales of network capacity to telecommunications providers).³² In the years preceding the Valuation Date, Sprint was Clearwire's largest

²⁹ See Jarrell Report, ¶207.

³⁰ See Jarrell Report, ¶209.

³¹ See Jarrell Report, ¶210.

³² See Jarrell Report, ¶28.

wholesale customer.³³ Sprint's payments accounted for "substantially all" of Clearwire's wholesale revenue.³⁴ Sprint's wholesale payments were also a substantial portion of Clearwire's total revenue. They accounted for over 35% of Clearwire's total revenue in 2011 and 2012.³⁵

32. The share of Clearwire's total revenue from Sprint was expected by Sprint to increase in the coming years. Under all of the relevant sets of projections, Clearwire's retail business was expected to decline for the next several years.³⁶ With a decreasing retail business, the wholesale business (and thus revenue from Sprint) would account for an increasing share of Clearwire's revenue.

33. To execute its business plan, Sprint created multi-year projections that included its projected usage of Clearwire's network capacity, in terms of both usage quantity and payments for that usage.³⁷ In order to arrive at those projections, Sprint began by modeling the amount of network capacity it would need. Those models calculated both the capacity that Sprint had on its own network, and the amount of capacity it would have to purchase from a third party, namely Clearwire.³⁸ Data usage projections were referred to as "tonnage" forecasts.³⁹ Stephen Bye, Sprint's former CTO, explained the purpose of those forecasts:

Really the purpose of the forecast, and this is probably an important point, is it really was with a view of how do we augment the capacity and manage the engineering going forward in the network. Because at the end of the day, we have to know what carriers to add, where in the network and how to order that

³⁴ See Jarrell Report, ¶30. Sprint accounted for 98.0% of Clearwire's 2012 wholesale revenue. See Bates No. CLWRDEL-01916570 (tab "Revenue," cell G239 \div cell G243).

- ³⁵ See Jarrell Report, ¶30, Table 2.
- ³⁶ See Jarrell Report, ¶132.
- ³⁷ See Jarrell Report, ¶¶161, 166 (Table 10), 195 (Table 13).

³⁸ See, for example, Email at Bates Nos. SPRDEL-000058745-755.

³⁹ See Jarrell Report, ¶133.

³³ See Jarrell Report, ¶30.

capacity and get that capacity deployed. And that was real important to the network team from an engineering/operations perspective. We needed those forecasts.⁴⁰

34. Sprint's tonnage forecasts, its best attempt to project its demand,⁴¹ were used by Sprint in part to estimate its payments to Clearwire. As I discussed at length in the Jarrell Report, Sprint created three financial plans in 2012 estimating Sprint wholesale payments to Clearwire before the announcement of the SoftBank/Sprint transaction, all of which were used in the SoftBank/Sprint proxy.⁴² Those included the Long Term Plan–Compensation (adjusted), the Long Term Plan–Outlook ("LTP-O"), and the Long Term Plan–Outlook with 2.5GHz Build.

35. Setting aside the LTP-O with 2.5GHz Build and its no-cost assumption, Sprint consistently expected that its payments to Clearwire for use of Clearwire's network would increase greatly in 2013 and beyond.⁴³ As early as April 2012, Sprint recognized that "unless we solve our spectrum and capacity needs in some other way, we will become increasing[ly] dependent on Clearwire, and could make payments to Clearwire over the next five years that exceed [\$10B..." based on a usage price of \$6 per gigabyte.⁴⁴ Sprint's payment estimates increased as 2012 progressed, and by September 2012, it estimated that it would pay Clearwire \$36.9 billion between 2013 and 2022 for access to Clearwire's network based on the current contract.⁴⁵ The SCC Projections anticipated less than \$10 billion in 4G wholesale revenue from 2013 through 2020.⁴⁶

- ⁴¹ See Bye Dep., p. 33, 36.
- ⁴² *See* Jarrell Report, ¶¶163-177.
- ⁴³ See Jarrell Report, ¶177.
- ⁴⁴ See Lynn Dep. Ex. 18, April 27, 2012 at Bates No. SPRDEL-00009515.
- ⁴⁵ See Lynn Dep. Ex. 4, September 4, 2012 at Bates No. SPRDEL-000009634.
- ⁴⁶ See Jarrell Report, Exhibit 6-A.

⁴⁰ *See* Bye Dep., p. 38.

36. In April of 2013, Sprint believed that "Sprint traffic [on Clearwire] and payments [to Clearwire would] increase" further.⁴⁷ In May and June of 2013, Sprint developed projections for its tonnage on Clearwire's network in the event that SoftBank acquired a controlling stake in Sprint, but Sprint did not acquire Clearwire.⁴⁸ I have referred to these projections in the Jarrell Report as the "June Projections – SoftBank Plan."

37. Sprint recognized that it was in the best position to know what its future demands for Clearwire's capacity would be. Daniel Hesse, the former CEO of Sprint, explained at his deposition:

Q. And you would agree with me ... [that] Sprint knows better than Clearwire how much Sprint is going to pay to Clearwire in the future?

A. That is fair, that Sprint would. But Sprint has many different views and [a] number of different scenarios and assumptions. But yes, Sprint has more information about what Sprint is likely to do than Clearwire would. Yes.⁴⁹

38. Clearwire's CTO, John Saw, acknowledged that Sprint was in the best position to know what it planned to pay Clearwire for using Clearwire's spectrum. He explained that it was important for Clearwire to accurately assess Sprint's tonnage needs so it knew where to add additional capacity.⁵⁰ He believed that Clearwire would have received the most accurate information from Sprint:

- ⁴⁸ *See* Jarrell Report, ¶¶181-201.
- ⁴⁹ See Hesse Dep., pp. 277-78.

⁴⁷ See Lilley Dep. Ex. 18, April 2, 2013 at Bates No. SPRDEL-000065654. See also Schwartz Dep. Ex. 30, "Board of Directors Meeting," June 17, 2013, at Bates No. SPRDEL-000015472 (A June 2013 presentation to the Sprint Board indicated that "Clearwire may become more valuable as Sprint traffic and payments increase.").

⁵⁰ See Saw Dep., pp. 75-76. See also Saw Dep., p. 116 (agreeing that "Sprint prepared forecasts would be important inputs for Clearwire").

Q. And Sprint, rather than Clearwire, was best positioned to know that. correct?

. . .

A. If you are in the wholesale business you would need to get the projections from your wholesale customer.

Q. In this case Sprint?

A. In this case Sprint.⁵¹

39. Although Clearwire would not have needed to know all of the details of Sprint's business plan, it would "need the correct tonnage number" from Sprint in order for Clearwire to accurately estimate its revenues and plan any network adjustments.⁵² The vast quantitative differences that persisted during 2012 and 2013 between Sprint's forecasted demand for tonnage on Clearwire's network and Clearwire's forecasts of Sprint's demand for tonnage in its SCC Projections, together with the fact that Sprint knew of Clearwire's forecasts of Sprint's demand for Clearwire, clearly reveals that Clearwire *did not* know of Sprint's forecasts when it made the SCC Projections. Nonetheless, in view of Prof. Cornell's puzzling decision to rely exclusively on Clearwire's SCC Projections in his DCF estimation of Clearwire's fair value as of July 2013, I discuss in more detail in the next section the evidence I found in the record regarding the question of whether or not the SCC Projections reflect any knowledge of Sprint's longer term tonnage projections and/or reflect the effect of SoftBank's investment in Sprint.

The Absence of Sprint's Forecasts in the SCC Projections

40. Despite Sprint's and Clearwire's acknowledgement that Sprint, rather than Clearwire, was best positioned to estimate Sprint's demand, Sprint apparently did not share its projected usage of Clearwire's network with Clearwire except in a very limited manner. Hope

 ⁵¹ See Saw Dep., p. 76.
 ⁵² See Saw Dep., p. 118.

Cochran, Clearwire's CFO, explained that Clearwire's projections had virtually no input from Sprint: "Sprint LTE revenue is our [Clearwire] team's projection. I don't think we get projections that far out from Sprint, so the early part may be partly based on them (although I think they make other adjustments) but the rest is our buildup over time....⁵³ Sprint "would provide tonnage forecasts for us. And I don't remember exactly how far out they went, but I would be surprised if they were more than a few quarters."⁵⁴ Clearwire's President and CEO, Erik Prusch, also testified that Sprint provided very limited information to Clearwire regarding its projected use of Clearwire's spectrum:

> Q. And the communications that you recall either participating in or hearing about with Sprint about its projected tonnage usage, how far out was Sprint projecting its tonnage usage? Was it projecting it out, say, a quarter, a year, farther out than that to the best of your recollection?

• • •

A. The best -- the best of my recollection it was no further than really a year.⁵⁵

41. At no point did Clearwire's projections, particularly the SCC Projections on

which Prof. Cornell relies, take into account Sprint's long-term expectation for its usage of

Clearwire's network (and thus its payments to Clearwire).

42. Clearwire's business plans, including the SCC Projections, were prepared by Ms.

Cochran's subordinate, Anwei Li, and her staff.⁵⁶ One component of the financial models that

Ms. Li and her staff prepared was a forecast of the tonnage that Sprint would use on Clearwire's

⁵³ See Cochran Dep. Ex. 14, May 6, 2013 at Bates No. CLWRDEL-01927097.

⁵⁴ See Cochran Dep., p. 140.

⁵⁵ See Prusch Dep., p. 74.

⁵⁶ See Cochran Dep., pp. 49, 72-73. See, for example, Bates Nos. CLWRDEL-01923136, 00823683, 01927097-099.

network.⁵⁷ This component was a significant part of the SCC Projections for three reasons. First, the SCC Projections assumed that Sprint would continue to be Clearwire's only major wholesale customer. Second, as explained above, Clearwire was expected to become increasingly dependent on its wholesale business, as its retail business was declining.⁵⁸ Third, as I explained in the Jarrell Report, tonnage is a key driver of wholesale revenue.⁵⁹

43. Clearwire's wholesale group created forecasts of the tonnage that Sprint would use on Clearwire's network.⁶⁰ One such forecast, created in early October 2012, derived projected Sprint tonnage numbers by forecasting the amount of data that Sprint would demand for its smart phones, mobile hotspots, and tablet devices.⁶¹ To arrive at usage numbers, Clearwire's wholesale group appears to have relied, in part, on publicly available forecasts from UBS (the investment bank).⁶² There is no indication that any of the information used in the wholesale group's forecast came from Sprint.

44. Clearwire's wholesale group sent this tonnage forecast to Ms. Li in early October 2012.⁶³ Ms. Li incorporated the inputs of the wholesale group when creating Clearwire's financial models, such as the SCC Projections.⁶⁴ Table 33 below compares these two estimates of the tonnage that Sprint would use on Clearwire's network, the first from Clearwire's

⁵⁷ See Bates No. CLWRDEL-01916570 (tab "Revenue," row 78).

⁵⁸ *See supra*, ¶32.

⁵⁹ See Jarrell Report, ¶133.

⁶⁰ See Cochran Dep., pp. 71-72.

⁶¹ See Cochran Dep. Ex. 10, October 2, 2012 at Bates No. CLWRDEL-01919041 (heading "LTE Overbuild").

⁶² See Cochran Dep. Ex. 10, October 2, 2012 at Bates No. CLWRDEL-01919041 (heading "LTE Overbuild," p. 1).

⁶³ See Cochran Dep. Ex. 10, October 2, 2012 at Bates No. CLWRDEL-01919039.

⁶⁴ See Cochran Dep., pp. 72-73, 76.

wholesale group in October 2012, and the second from the SCC Projections, which were

finalized in May 2013:

TABLE 33 <u>CLEARWIRE PROJECTIONS OF LTE TONNAGE FROM SPRINT</u> (in millions per month)								
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
October 2012: ⁶⁵ Gigabytes	0.032	1.311	6.430	14.432	21.427	26.983	32.410	n/a
SCC Projections Gigabytes	(May 20 0.039	9 13): ⁶⁶ 1.323	6.430	14.432	21.427	26.983	32.410	35.308
Difference	-0.007	-0.012	0.000	0.000	0.000	0.000	0.000	n/a

45. The Sprint tonnage forecast embedded in the May 2013 SCC Projections, in the years 2015 to 2019, matches up exactly with the wholesale team's October 2012 forecast. The SCC Projections thus included a Sprint tonnage forecast that had apparently not been provided by Sprint and did not take into account any of the events after early October 2012, such as SoftBank's planned purchase of Sprint.

46. Clearwire's forecast of the tonnage that Sprint would use on Clearwire's network was significantly lower than Sprint's forecast, as shown in the Jarrell Report⁶⁷ and in Table 34 in the next subsection below.

47. Sprint was aware of the mismatch between its higher projected usage of Clearwire's network and related payments to Clearwire and Clearwire's lower estimates of how much usage Sprint would be purchasing. Sprint had access, beginning in the fall of 2012, to an

⁶⁵ See Bates No. CLWRDEL-01919041 (tab "LTE Overbuild," row 196).

⁶⁶ See Bates No. CLWRDEL-01916570 (tab "Revenue," row 78).

⁶⁷ See Jarrell Report, ¶166 (Table 10), 195 (Table 13).

electronic data room that contained Clearwire's projections.⁶⁸ The data room contained current versions of the SCC and the MCC models,⁶⁹ which Sprint had analyzed by the beginning of 2013.⁷⁰ In fact, Sprint's finance department had noted in January 2013 that the Sprint revenue assumed by Clearwire was "far less than Sprint assumed" it would actually pay Clearwire in future years.⁷¹

48. I concluded in the Jarrell Report,⁷² and reiterate here, that the SCC Projections are unreliable to use in a DCF model of fair value as of the Valuation Date because they did not take into account Sprint's projected usage of Clearwire's network and payments to Clearwire. As individuals at Sprint and Clearwire testified,⁷³ Sprint would be in the best position to assess its demand, but it did not provide that information to Clearwire. Sprint was Clearwire's largest wholesale customer, and was expected to account for an even larger share of Clearwire's overall revenue in the future. In my opinion, Prof. Cornell's failure to even consider Sprint's projections is a remarkable oversight that vitiates his DCF valuation model.

ii) Effect of SoftBank

49. SoftBank's planned acquisition of a controlling stake in Sprint further increased Sprint's likely demand for Clearwire's services. The SCC Projections and, therefore, Prof. Cornell's valuation, do not account for this further likely increase in demand.

⁷² See Jarrell Report, ¶327.

⁶⁸ See April 23 Proxy Statement, p. 25.

⁶⁹ See Bates Nos. CLWRDEL-00250923, CLWRDEL-00250121.

⁷⁰ See "Clearwire Offer – Sprint Perspective," January 22, 2013, at Bates No. SPRDEL-000242095, 242103-105; "Clearwire Sum of the Parts Valuation," January 24, 2013, at Bates No. SPRDEL-000007338, tabs "SCC DCF" and "MCC DCF." See also, Email, at Bates Nos. SPRDEL-000036113-114; "Clearwire Proxy Questions," January 23, 2012, at Bates Nos. SPRDEL-000036115-120; "Business Plan Discussion Materials," December 2012, at Bates Nos. SPRDEL-000036121-137; Clearwire Data Room Index, at Bates No. CLWRDEL-00152639.

⁷¹ See Euteneuer Dep. Ex. 17, January 31, 2013 at Bates No. SPRDEL-000036571.

⁷³ See Saw Dep., pp. 75-76; Hesse Dep., pp. 277-78.

Effect of SoftBank's Investment in Sprint

50. In addition to its pending purchase of a controlling stake in Sprint, SoftBank

would contribute \$4.9 billion in cash to Sprint.⁷⁴ SoftBank also would contribute "expertise in

the deployment of next-generation wireless networks, and [a] track record of success in taking

share in mature markets from larger telecommunications competitors."75

51. Sprint believed that these contributions by SoftBank would strengthen Sprint's

network and increase the use of that network by Sprint's customers:

[T]he Sprint board of directors ... considered the following factors:

•••

Their view of SoftBank's successful track record of improving the competitive position of target companies and driving growth and financial performance in prior acquisitions, and its experience as a leader in providing LTE technology to its subscribers, which the Sprint board of directors believed could provide valuable knowledge to help support Sprint's Network Vision plan to bring LTE service nationwide, enhancing network coverage, call quality and data speeds, and to help New Sprint compete with the two large incumbent U.S. carriers; [and]

• • •

The positive effect on Sprint's balance sheet from the initial \$3.1 billion investment by Parent in the Bond, followed by the additional \$4.9 billion cash contribution to New Sprint by SoftBank at the effective time of the SoftBank Merger (in addition to the \$12.14 billion in cash that will be paid to Sprint stockholders pursuant to the terms of the Merger Agreement), as the additional equity is expected to provide financial flexibility to New Sprint and enable New Sprint to be a stronger and more robust competitor in the U.S. telecom market, and the cash investment by SoftBank is expected to allow New Sprint to invest, internally and externally, to grow its business, to improve its network and customer

⁷⁴ See Sprint's Schedule 14A Proxy Statement filed with the SEC on May 1, 2013 (the "Sprint Proxy Statement"), p. 136.

⁷⁵ See Sprint Proxy Statement, p. 93.

experience, and to help support Sprint's Network Vision plan, which will bring LTE service nationwide.⁷⁶

52. Ronald Fisher, President of SoftBank Holdings, stated that the goal of SoftBank's

investment in Sprint was "to make Sprint successful."77 Part of making Sprint successful

included expanding Sprint's network.⁷⁸

53. Multiple executives of Clearwire stated that SoftBank's investment in Sprint

would benefit Clearwire by increasing Sprint's use of Clearwire's services. Clearwire's

Executive Chairman, John Stanton, testified that "a number of factors" would be good for

Clearwire's shareholders if the Sprint/SoftBank deal succeeded:⁷⁹

I believe that they would have more customers. I believed they'd have access to devices that would have higher usage levels and be more popular with customers. They might introduce additional plans that were creative, that were popular in Japan and largely, particularly at the time, not effective in the U.S.⁸⁰

54. Mr. Prusch (Clearwire's CEO) likewise testified:

All telecom carriers in the United States require very significant levels of capital to succeed. Not only to be able to continue to increase the supply of data, but to be able to maintain, operate, renew their networks on a semiregular basis. And Sprint had shown, through its financial statements, that it was challenged from a -- from a capacity standpoint and from an available capital standpoint. This is relative to AT&T and Verizon and others.

So we believed that [SoftBank's investment] would help them be able to renew their networks and potentially grow faster, which would then translate into opportunities for Clearwire since we had the significant position in spectrum.⁸¹

- ⁷⁹ See Stanton Dep., p. 253.
- ⁸⁰ See Stanton Dep., p. 253.
- ⁸¹ See Prusch Dep., pp. 77-78.

⁷⁶ See Sprint Proxy Statement, pp. 93-95.

⁷⁷ *See* Fisher Dep., p. 210.

⁷⁸ *See* Fisher Dep., p. 210.

55. Mr. Saw (Clearwire's CTO) and Ms. Cochran (its CFO) gave similar testimony.^{82,83} Theodore Schell, a director and member of Clearwire's Special Committee, agreed that "what's good for Sprint was good for Clearwire."⁸⁴

56. Sprint prepared tonnage forecasts for its use of Clearwire's services both before and after it became aware of the investment that SoftBank would make. The LTP-O, for instance, was prepared in August 2012, before SoftBank's investment in Sprint.⁸⁵ The June Projections – SoftBank Plan was prepared in June 2013, by which time the investment SoftBank would make had become clear.⁸⁶ The tonnage that Sprint anticipated in the June Projections – SoftBank Plan significantly exceeded the tonnage that Sprint anticipated in the LTP-O projections, as shown below in Table 34:

⁸⁶ See Jarrell Report, ¶187.

⁸² See Saw Dep., p. 148 ("Q. Did you expect that SoftBank's investment in Sprint would either expand or accelerate the TDD LTE deployment? A. Candidly I would have expected that, yes. Q. And would you therefore have expected that Clearwire's tonnage forecasts should be revised to account for that? ... A. I believe that if we deploy more TDD LTE sites, then actually the forecast would go up.").

⁸³ See Cochran Dep., pp. 118-119 ("Q. And did you think it would result in an improvement to Sprint's balance sheet? A. SoftBank's acquisition of Sprint? Q. Yes. A. Yes. Q. And why is that? A. Because they were infusing cash into the company as well. Q. Okay. And what are the -- what did you understand the benefits would be to Sprint of SoftBank infusing cash into Sprint? … A. I don't remember specifically. That would be a question for Joe Euteneuer. But in general, cash is always good. … Q. Do you know whether Clearwire ever learned from either SoftBank or from Sprint whether SoftBank intended to make greater use of Clearwire's network than Sprint had intended to prior to the planned acquisition by SoftBank? A. I think they both had ambitions for a great network. And SoftBank clearly is ambitious and would want it to be a great network faster. So they would utilize whatever assets they had to be able to do that.").

⁸⁴ See Schell Dep., p. 93.

⁸⁵ See Jarrell Report, ¶165.

TABLE 34									
CLEARWIRE PRO	JECTIONS	S OF LTE	Tonna	GE FROM	1 Sprint				
(in millions per year)									
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	
SCC Projections (May 2013): ⁸⁷									
Gigabytes	0.5	15.9	77.2	173.2	257.1	323.8	388.9	423.7	
LTP-O Projections (August 2012): ⁸⁸									
Gigabytes	5.0	72.0	307.0	491.0	n/a	n/a	n/a	n/a	
June Projections – SoftBank Plan: ⁸⁹									
Gigabytes	27.9	195.0	586.0	1242.7	1865.4	2389.3	n/a	n/a	

57. Significantly, SoftBank's investment in Sprint was expected to have this effect on Clearwire whether or not Sprint acquired Clearwire. Masayoshi Son, SoftBank's Chairman and CEO, testified that, if Sprint owned 51 percent of Clearwire (as it did by the end of 2012), then "Sprint can have the ... rights to utilize the Clearwire spectrum in a friendly manner that Sprint can utilize. ... So merger -- merger was not essential."⁹⁰ Mr. Son told investors that even if the Merger failed, Sprint would be "pretty happy" with 65% ownership of Clearwire.⁹¹ Sprint and Raine had privately discussed majority ownership as being sufficient to suit SoftBank's needs.⁹²

58. SoftBank's investment in Sprint was part of Clearwire's operative reality as of the Valuation Date. Sprint's shareholders voted in favor of SoftBank's acquisition of a controlling

⁸⁷ See Jarrell Report, Exhibit 6-B.

⁸⁸ See "Project Galaxy," September 28, 2012 at Bates No. SPRDEL-000012975.

⁸⁹ See Jarrell Report, Exhibit 6-B.

⁹⁰ See Son Dep., p. 120. See also Son Dep., pp. 214-216.

⁹¹ See "Presentation by Masayosh[i] Son," April 30, 2013, Bates Nos. SBDE00000248, 254. See also CLWRDEL-00266934 (email noting that on May 8, 2013, Mr. Son met with a "large [Clearwire] shareholder" and told them that if the Merger failed, SoftBank was "comfortable" owning 68% of Clearwire).

⁹² See Email, April 29, 2013 at Bates No. RAINE-SB-00012184.

stake on June 25, 2013.⁹³ Sprint reported at the time that "[c]onsummation of the Sprint-SoftBank transaction remains subject to the receipt of the Federal Communications Commission approval."⁹⁴ The Federal Communications Commission approved the transaction on July 5, 2013, four days before the Valuation Date.⁹⁵

The Failure of the SCC Projections to Account for SoftBank

59. The SCC Projections assumed that Sprint would be Clearwire's only major wholesale customer. These projections, however, did not account for the effect that SoftBank's investment in Sprint would have on Sprint and, thus, on Clearwire. As shown in Table 35 below, Clearwire's projected revenue contemplated in the June Projections – SoftBank Plan exceeded the projected revenue in the June Projections – Standalone Plan that assumed the SoftBank/Sprint transaction would not be completed and exceeded the revenue projections in both the SCC Projections and the LTP-O projections:

⁹³ See Sprint's Form 8-K filed with the SEC on June 25, 2013.

⁹⁴ See Sprint's Form 8-K filed with the SEC on June 25, 2013, Ex. 99.1, p. 1.

⁹⁵ See Sprint's Form 8-K filed with the SEC on July 5, 2013.

TABLE 35 <u>CLEARWIRE REVENUE PROJECTIONS</u> (\$ in millions)									
	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	
SCC Projections (May 2013): ⁹⁶									
Revenue		\$885	\$1,145	\$1,611	\$1,977	\$2,288	\$2,576	\$2,732	
LTP-O Projections (August 2012): ⁹⁷									
Revenue	\$508	,	\$1,675	\$2,623	n/a	n/a	n/a	n/a	
June Projections – Standalone Plan: ⁹⁸									
Revenue			\$2,795	\$4,088	\$5,262	\$6,126	n/a	n/a	
June Projections – SoftBank Plan: ⁹⁹									
Revenue			\$3,466	\$5,240	\$6,476	\$7,435	n/a	n/a	

60. Witnesses generally did not recall whether the SCC Projections, prepared by Clearwire's management, accounted for the effect of SoftBank's investment in Sprint. Such witnesses included Ms. Cochran (Clearwire's CFO),¹⁰⁰ Mr. Saw (Clearwire's CTO),¹⁰¹ the financial advisors to Clearwire's Special Committee and Board of Directors,¹⁰² and two of the three members of Clearwire's Special Committee.¹⁰³

61. Based on my review of the documents, however, I have concluded that the SCC

Projections did not account for the effect of SoftBank's investment in Sprint.

- ⁹⁹ See Jarrell Report, Exhibit 13-D.
- ¹⁰⁰ See Cochran Dep., p. 120.
- ¹⁰¹ See Saw Dep., pp. 145-146, 150.
- ¹⁰² See Mendelow Dep., p. 39; Hess Dep., pp. 183-184.

⁹⁶ See Jarrell Report, Exhibit 13-A.

⁹⁷ See "Project Galaxy," September 28, 2012 at Bates No. SPRDEL-000012969.

⁹⁸ See Bates No. SPRDEL-000068040 (revenue with "Standalone Plan" overlay).

¹⁰³ See Deposition of Kathleen Rae ("Rae Dep."), August 4, 2015, pp. 113-114; Hersch Dep., p. 92.

62. The principal effect of SoftBank's investment in Sprint would be to increase the wholesale payments that Sprint made to Clearwire. As I explained in the Jarrell Report, the two key determinants of wholesale payments made to Clearwire were: (i) the amount of data used over Clearwire's network, or "tonnage," measured in gigabytes per unit of time, and (ii) the price charged per gigabyte.¹⁰⁴ For the reasons discussed above, SoftBank's investment in Sprint was expected to significantly increase the first of these two determinants, the tonnage.

63. Thus, the question is whether the tonnage forecast embedded in the SCC Projections accounts for the effect of SoftBank's investment in Sprint. As I explained above, Clearwire's tonnage forecast came from Clearwire's wholesale team.¹⁰⁵ The wholesale team provided forecasts of Sprint's tonnage for financial modeling purposes on October 2, 2012,¹⁰⁶ before anyone at Clearwire learned of SoftBank's intention to acquire a controlling stake in Sprint.¹⁰⁷ The tonnage forecast that the wholesale team provided on October 2, 2012 is comparable to (and, in most years, identical to) the tonnage forecast embedded in the SCC Projections, as Table 33 above shows.

64. I have identified no document indicating that Clearwire attempted to account for the effect of SoftBank's investment in Sprint when preparing the SCC Projections.

65. Because the SCC Projections do not account for the effect on Clearwire of SoftBank's investment in Sprint, and Prof. Cornell relies only on the SCC Projections to conduct

¹⁰⁴ See Jarrell Report, ¶133.

¹⁰⁵ *See supra*, ¶¶44-45.

¹⁰⁶ See Cochran Dep. Ex. 10 at Bates No. CLWRDEL-01919039.

¹⁰⁷ See April 23 Proxy Statement, pp. 20-21. In fact, SoftBank's announcement came as a surprise to Ms. Cochran when she learned of it early in the morning of October 11, 2012. See Cochran Dep., pp. 103-105.

his DCF analysis, Prof. Cornell's DCF-based fair value does not account for the effect on Clearwire of SoftBank's investment in Sprint.

D. Cornell's Use of an APV Model is Not Necessary

66. Prof. Cornell relies exclusively on the DCF valuation method and the SCC Projections, plus his transaction-based estimate of the value of certain spectrum, to compute his fair value of Clearwire. Although Prof. Cornell relies on the DCF valuation method, he uses the adjusted present value (or APV) model instead of the more common weighted-average-cost of capital ("WACC") model, which I use.^{108,109} Although any APV analysis can be recast as a value-equivalent WACC analysis (and vice versa), Prof. Cornell's use of the APV model makes it more difficult to identify the differences between the important assumptions in our analyses and to compare these differences on an apples-to-apples basis.

67. Given a particular set of projections, both the APV-based DCF and the WACCbased DCF models discount the same unlevered free cash flows. The difference between these two models is how they handle income-tax savings from tax-deductible interest payments (referred to as "interest tax shields") and its implication for the discount rate used in each model.

68. The common WACC model discounts unlevered free cash flows, which ignore any interest expense and associated interest tax shields, using the WACC as the discount rate. The WACC includes the after-tax cost of debt, so that the benefits of future interest tax shields

¹⁰⁸ The valuation textbook that Prof. Cornell cites for use of the APV model acknowledges that: "[i]n practice, managers, analysts, and investors use the WACC valuation method most often and assume that the discount rate is constant." *See* R. Holthausen, M. Zmijewski, <u>Corporate Valuation: Theory, Evidence & Practice</u>, Cambridge Business Publishers, LLC, 2014, p. 177. I am unaware of any Delaware Court of Chancery decision discussing the APV model.

 $^{^{109}}$ As Prof. Cornell notes, both of Clearwire's financial advisors used a WACC model rather than an APV model. *See* Cornell Report, ¶¶52, 55.

are accounted for automatically in the WACC discount rate. The WACC requires the analyst to estimate the cost of debt as well as the (constant) debt-to-value (leverage) ratio, which is the weight given to the after-tax cost of debt in the WACC formula.

69. The APV model uses the same unlevered free cash flows as the WACC model, but instead of discounting at the WACC, the APV model discounts these unlevered free cash flows using the unlevered cost of equity. This provides a present value of the enterprise that ignores the benefits of interest tax shields. The APV model then separately discounts the projected interest tax shields at the same unlevered equity rate, and adds this present value of interest tax shields to the present value of the unlevered business, to yield the present value of the levered business.

70. The present value of the levered business will be the same whether one uses the WACC model or the APV model provided that the (constant) debt leverage ratio used in computing the WACC is consistent with the projected interest payments on which the interest tax shields are based in the APV model, and that the cost-of-debt and other value-driver assumptions are matched.

71. The main situation in which analysts choose the APV model over the morecommon WACC model is when the business being valued is expected to have a variable leverage ratio over the forecast period so that the analyst is uncomfortable assuming a constant leverage ratio, as is required in the WACC model. Of course, the actual leverage ratio of any publicly-traded company can never be expected to be a fixed constant over any forecast period because the company's equity value is constantly changing, whereas its debt level changes much less frequently. But, so long as the *average* debt-leverage ratio over the forecast period is

reasonably modeled as a constant, analysts have come to rely overwhelmingly on the WACC model, rather than the APV model, to do DCF analyses.

72. In contrast, the APV model tends to be used to value targets of highly-levered transactions, where the company being valued will have a very high leverage ratio as a result of the transaction, but is expected to rapidly pay down the debt and reduce its leverage ratio over the forecast period. This is why textbooks so often demonstrate the APV model using a leveraged-buyout ("LBO") type of hypothetical transaction. In LBOs that have very high initial post-transaction leverage that will be declining, the APV model allows the analyst to avoid assuming a constant leverage ratio, by discounting the projected interest payments and associated tax savings separately. Thus, the APV model is commonly used by private-equity buyers to estimate DCF values of their buyout targets, for example.

73. But, if the valuation target is not being valued as an LBO, then in my experience the WACC model is preferred precisely because it requires the analyst to commit to and defend a specific assumption regarding the future debt-leverage ratio when computing the WACC discount rate. In an LBO, the actual leverage ratio is intentionally high and temporary by design, so assuming a constant leverage ratio consistent with that reality is difficult. But, if the valuation target is not being valued as an LBO – even though its expected future leverage ratio will not be literally constant, but will fluctuate around a constant mean ratio – it is common to rely on the WACC approach (which requires the analyst to select a specific assumption regarding the appropriate average future debt-leverage ratio), because this assumption can have a significant impact on the DCF value of the company.

74. In this case, Prof. Cornell's stated basis for using an APV model instead of a WACC model is that "…in situations where the capital structure is changing, the WACC method

becomes unwieldly because the changing capital structure requires a different WACC estimate for each year."¹¹⁰ Prof. Cornell indicates that for his valuation of Clearwire:

Since the SCC projections forecasted a constant amount of debt, an unsustainable capital structure, a funding shortfall that could only be met by issuing equity (therefore changing the capital structure), negative earnings for half the projection period, and usable net operating loss carryforwards, the most appropriate method to value Clearwire is the APV method.¹¹¹

75. Prof. Cornell's statement that "the SCC projections forecasted a constant amount of debt"¹¹² is based on Clearwire's management projections that *simplistically* reflect maintaining a constant \$4.6 billion of debt outstanding from 2013 through 2020, regardless of whether the SCC Projections or the MCC Projections are used.¹¹³ Further, these debt projections imply that Clearwire would refinance its existing \$2.9 billion of debt due in 2015 and \$800 million of debt due in 2016 and 2017 with new debt at the exact same coupons of 12.0% and 14.75% as the then maturing debt, despite evidence that Clearwire had opportunities to refinance at lower rates.¹¹⁴ Thus, these projections of debt costs cannot be relied on as representing the best estimate of Clearwire's future debt costs.

76. Prof. Cornell then asserts that, because the projections reflect maintaining a constant dollar-level of debt, that Clearwire's "funding shortfall... could only be met by issuing equity...."¹¹⁵ But, Prof. Cornell does not discuss that, in addition to forecasting debt balances, the SCC Projections also contain a separate line item for "additional equity" projected to be

¹¹⁰ See Cornell Report, ¶61.

¹¹¹ See Cornell Report, ¶63.

¹¹² See Cornell Report, ¶63.

¹¹³ See Cochran Dep. Ex. 12 at Bates Nos. CLWRDEL-01916569-570.

¹¹⁴ See Jarrell Report, ¶255-257.

¹¹⁵ See Cornell Report, ¶63.

issued in the future,¹¹⁶ and that this line item contemplated *zero* new equity fundraising. Prof. Cornell does not explain the rationale for inferring equity financing from projected debt balances, when explicit forecasts of zero new equity already exist within the same set of management projections. The fact that both the SCC and MCC Projections contain the exact same forecasted interest payments clearly indicates that these forecasts are not intended to reflect any future expected capital-structure policy, because the capital funding required to support the SCC and MCC Projections are so vastly different.

77. In my opinion, Prof. Cornell fails to critically evaluate the reasonableness of the debt projections from which he is making inferences. I believe it is much more likely that, for modeling purposes, Clearwire's management held debt levels constant and set equity financing at zero to make it easier to track the level of the "funding gap"¹¹⁷ and "cash shortfall"¹¹⁸ implied by the projections without attempting the speculative exercise of predicting how much of the gap or shortfall would be funded using debt and/or equity financing. Regardless of the reasons behind these debt and equity "projections" in the SCC and MCC Projections, in my view, neither the projected interest payments nor the projected zero new equity should be relied on when determining the appropriate debt leverage ratio in a DCF model for Clearwire.

78. Moreover, I note that Prof. Cornell's decision to hold the dollar-level of debt constant while Clearwire's future equity value is expected to increase implies that Clearwire's leverage ratio would eventually approach that of an all-equity firm. This unstated implication from Prof. Cornell's APV model is in direct conflict with the Delaware Court of Chancery's

¹¹⁶ See Cochran Dep. Ex. 12 at Bates Nos. CLWRDEL-01916569-570.

¹¹⁷ The model for the SCC Projections explicitly tracked Clearwire's projected "funding gap." *See* Cochran Dep. Ex. 12 at Bates Nos. CLWRDEL-01916569-570.

¹¹⁸ The May 22 Proxy Statement specifically tracked Clearwire's projected "cash shortfall". *See* May 22 Proxy Statement, p. S-34.

preference to use a company's actual leverage ratio for purposes of determining a company's WACC.¹¹⁹

79. As discussed above, I believe that the APV model is better suited than the WACC model when considering the valuation of a leveraged buyout or "LBO" where the company would start out highly levered with the expectation that it would rapidly repay this acquisition-related debt, thereby reducing its leverage over the next few years. Under those circumstances, the APV model better handles significant changes in leverage ratio by directly accounting for large interest tax shields in the early years followed by declining interest tax shields in outer years as debt is repaid. This is not the case, however, for Clearwire because it is not involved in an LBO.

80. In my opinion, an APV model is not necessary to value Clearwire. As I showed in the Jarrell Report, Clearwire's *actual* debt to total capitalization of 36.5% based on the \$5.00 per share deal price is in-line with the Delaware Court of Chancery's preference to use a company's actual leverage ratio and is also consistent with the leverage ratio implied by industry data from Clearwire's SIC Code 489, where Ibbotson reports that the most recent debt to total capitalization ratios as of March 2013 were: 31.1% (median); 36.6% (SIC Composite); and 39.5% (Large Composite).¹²⁰ Clearwire, as a standalone entity as of the Valuation Date, was not subject to a highly leveraged transaction. Therefore, I believe it is more appropriate to use the

¹¹⁹ See In re Radiology Assocs., Inc. Litig., 611 A.2d 485, 493 (Del. Ch. 1991) ("The entire focus of the discounted cash flow analysis is to determine the fair value of Radiology. I am not attempting to determine the potential maximum value of the company. Rather, I must value Radiology, not some theoretical company. ... I will use Radiology's own debt to equity ratio in determining its WACC."). See also Cede & Co. v. JRC Acquisition Corp., 2004 WL 286963, at *7-8 (Del. Ch. Feb. 10, 2004); Hintmann v. Fred Weber, Inc., 1998 WL 83052, at *5 (Del. Ch. Feb. 17, 1998).

¹²⁰ See Jarrell Report, ¶¶249-250.

standard WACC model that assumes a constant, going-concern leverage ratio consistent with its actual leverage ratio at that time.

E. Cornell's WACC-Equivalent Discount Rate

81. Prof. Cornell notes "the APV and the WACC methods are *mathematically identical*."¹²¹ I agree. For every WACC-based DCF valuation, there is also a value-equivalent APV-based DCF valuation and vice versa, provided both models use the same underlying assumptions.¹²² Prof. Cornell, however, does not report the corresponding WACC-equivalent DCF model implied by his APV model. Because I use a WACC model and Prof. Cornell uses an APV model, it is difficult to compare the critical value-driver assumptions that we use. To facilitate comparison, I have computed the value-equivalent WACC model implied by Prof. Cornell's APV model, based on the SCC Projections.

Implied WACC

82. First, although my determination of fair value is based on the June Projections – SoftBank Plan, I note that my DCF analysis based on the SCC Projections uses the exact same set of projected unlevered free cash flows that Prof. Cornell uses for the years 2013 through 2020.¹²³

83. Second, there are two specific components to Prof. Cornell's model that make it an APV-based DCF model, not a WACC-based DCF model. These two components are: (i) the discounting of cash flows using the 12.44% "Unlevered Cost of Equity" (row 17 of Prof.

¹²¹ See Cornell Report, ¶61 (emphasis added).

 $^{^{122}}$ For example, an APV model that calculates the present value of interest tax shields will be mathematically identical to a WACC model if the APV model uses interest expense that is derived from interest rates (*i.e.*, cost of debt) and borrowing levels that are consistent with the cost of debt and debt to total capitalization ratio used when calculating WACC.

¹²³ See Cornell Report, Exhibit 5 (row 13 "Unlevered Free Cash Flow"); Jarrell Report, Exhibit 13-A (row "Free Cash Flow").

Cornell's Exhibit 5) instead of a weighted average of the cost of equity and the cost of debt; and (ii) the addition of the "Present Value of Interest Tax Shield" (rows 24 and 32 of Prof. Cornell's Exhibit 5).

84. In Exhibit 19 (column A), I replicate Prof. Cornell's APV model. Next, when the separately-calculated present value of interest tax shield is set equal to zero (as it would be in a WACC-based DCF model), the discount rate required to offset the removal of the present value of interest tax shield and still yield Prof. Cornell's \$2.13 per share value is a discount rate of 10.92% (*see* Exhibit 19, column B). Therefore, this implied 10.92% discount rate represents the WACC equivalent of Prof. Cornell's 12.44% unlevered cost of equity, and 10.92% can now be compared to my WACC of 10.22% on an apples-to-apples basis (*see* Jarrell Report, Exhibit 11).

85. By not reporting the WACC-equivalent discount rate, Prof. Cornell's APV model did not require him to report a cost of debt or a debt to total capitalization ratio (*see* Exhibit 20, column A for my replication of Prof. Cornell's unlevered discount rate). These WACC-equivalent cost of debt and constant debt-leverage ratios, however, can be derived from Prof. Cornell's APV model.

Cost of Debt

86. For Prof. Cornell's cost of debt, he uses interest expense of approximately \$512 million per year during the projection period as shown in row 21 of his Exhibit 5. This interest expense yields a weighted average interest rate of 11.1% based on the projected debt balance of \$4.6 billion (*i.e.*, \$512 million in annual interest expense \div \$4.617 billion debt balance).¹²⁴ This 11.1% pre-tax cost of debt, together with Clearwire's 38% tax rate, provides the necessary after-

¹²⁴ See Cochran Dep. Ex. 12 at Bates Nos. CLWRDEL-01916569-570 (tab "Financial Summary").

tax cost of debt (*i.e.*, 11.1% pre-tax cost of debt x [1-38% tax rate] = 6.88%) to be used in the WACC equation (*see* Exhibit 20, column B).

Debt to Total Capitalization Ratio

87. Next, the WACC-equivalent debt to total capitalization ratio is algebraically represented by the following formula:

Debt to Total Capitalization Ratio =

(Unlevered Cost of Equity – WACC) \div tax rate \div pre-tax cost of debt.¹²⁵

88. When applied to Prof. Cornell's discount rate assumptions, the WACC-equivalent debt to total capitalization ratio equals $36.0\%^{126}$ (*see* Exhibit 20, column B), which is nearly identical to my debt to total capitalization ratio of 36.5% (*see* Exhibit 20, column F).

Levered Cost of Equity

89. Now that all but one of the components of Prof. Cornell's implied WACC have been identified (*i.e.*, after-tax cost of debt and implied constant debt to total capitalization ratio), I can solve for the last missing component, the implied levered cost of equity.

90. This is done by algebraically rearranging the WACC equation as follows:

$$Cost of Equity_{levered} = \frac{WACC - (After Tax Cost of Debt \times Debt to Total Cap.)}{1 - Debt to Total Cap.}$$

91. When applied to Prof. Cornell's discount rate assumptions, the WACC-equivalent levered cost of equity equals 13.19% (*see* Exhibit 20, column B).¹²⁷ This also implies a WACC-equivalent beta of 1.475 (*see* Exhibit 20, column B).¹²⁸

¹²⁵ See R. Holthausen, M. Zmijewski, <u>Corporate Valuation: Theory, Evidence &</u> <u>Practice</u>, Cambridge Business Publishers, LLC, 2014, p. 175.

 $^{^{126}}$ 36.0% = (12.44% Unlevered Cost of Equity - 10.92% WACC) \div 38% tax rate \div 11.1% pre-tax cost of debt.

 $^{^{127}}$ 13.19% = [10.92% WACC – (6.88% After-Tax Cost of Debt x 36.0% Debt to Total

92. Now that all the components of Prof. Cornell's implied WACC have been revealed, I make three corrections.

Market Risk Premium and Beta

93. Prof. Cornell's 5.50% market risk premium is lower than the 6.11% premium I use, and thereby his DCF value would be lower holding all else constant if he had chosen 6.11%. Instead of using the supply-side market risk premium of 6.11% provided by the authoritative Ibbotson source that I use and that the Delaware Court of Chancery has embraced,¹²⁹ Prof. Cornell selected a number "based on experience and extensive review of academic and practitioner research."¹³⁰ Although my standard practice is to rely on the Ibbotson supply-side market risk premium, if the Court is persuaded by Prof. Cornell that his 5.50% market risk premium is to be used instead of 6.11%, this will have the effect of lowering my WACC and increasing my DCF-based fair value, all else equal.

94. Because Prof. Cornell uses both a different beta and a different market risk premium than I use, and because of the multiplicative relationship between the market risk premium and beta in the cost-of-equity formula, I first look at the difference in the *product* of beta and market risk premium between Prof. Cornell and myself. The product of these two variables for Prof. Cornell is 8.11% (*i.e.*, 1.475 x 5.50%, *see* Exhibit 20, column B) and for myself is 7.70% (*i.e.*, 1.26 x 6.11%, *see* Exhibit 20, column F). Recall that the formula for the cost of equity is:

Capitalization Ratio)] \div (1 – 36.0% Debt to Total Capitalization Ratio).

¹²⁸ When the CAPM formula is algebraically rearranged, the beta of 1.475 equals (13.19% levered cost of equity -3.36% risk free rate -1.72% equity size premium) $\div 5.50\%$ market risk premium.

¹²⁹ See Jarrell Report, ¶275.

¹³⁰ See Cornell Report, Exhibit 4 (row 13).

CAPM Cost of Equity = + risk-free rate + beta multiplied by market risk premium <u>+ equity size premium</u> = cost of equity

95. Holding Prof. Cornell's 8.11% product constant, but using 6.11% market risk premium, Prof. Cornell's implied levered beta is 1.327 (*i.e.*, $8.11\% \div 6.11\%$), compared with my 1.26. Although Prof. Cornell's 1.327 implied same-risk-premium beta is higher than my 1.26 beta, it is not too dissimilar (5% difference).

96. Holding my 7.70% product constant, but using 5.50% risk premium, my implied levered beta is 1.40 (*i.e.*, 7.70% \div 5.50%), compared to Prof. Cornell's implied levered beta of 1.475. Although my 1.40 implied same-risk-premium beta is lower than Prof. Cornell's 1.475 implied beta, it is not too dissimilar (5% difference).

97. Although the difference in implied betas, holding constant the assumed market risk premium, is not too dissimilar, I still believe that my choice of 1.26 for levered equity beta is more appropriate than Prof. Cornell's estimated levered beta of 1.534, for reasons that I discussed in the Jarrell Report and reiterate below.

Corrected Beta

98. Prof. Cornell's cash-adjusted unlevered beta of 1.338 is driven by his decision to start with an adjusted weekly beta of 1.534 measured over the five-year period from October 12, 2007 to October 5, 2012.¹³¹ I explicitly considered and rejected this same 1.534 beta based on five-year weekly data in the Jarrell Report, where I concluded that the best estimate of beta was

¹³¹ See Cornell Report, ¶75. Although Prof. Cornell indicates that he is using the "five years prior to October 10, 2012," Bloomberg calculates weekly betas based on weekly returns that end on Fridays. October 10, 2012 was a Wednesday. Because Prof. Cornell uses Bloomberg, his actual beta measurement period ends on Friday, October 5, 2012.

1.26 based on four-year monthly data.¹³² I will explain why I still believe 1.534 is not as reliable as 1.26.

99. The first problem with Prof. Cornell's 1.534 weekly beta is that, during the first year of Prof. Cornell's five-year beta measurement period (October 2007 to October 2012), Clearwire was involved in a "landmark" transaction in November 2008, where Sprint contributed all of its 2.5 GHz spectrum and WiMAX-related assets to Clearwire in exchange for control of Clearwire.¹³³ As a result, more than one year of weekly return data that pre-dates Sprint's November 2008 investment is included within Prof. Cornell's five-year beta. Cornell's five-year weekly beta of 1.534 drops to 1.32 when using only the 3.9 years of weekly data after Sprint's major investment in Clearwire.¹³⁴ This shift in beta could well constitute a "structural" change.¹³⁵

100. The second problem with Prof. Cornell's 1.534 weekly beta is that its relies on weekly rather than monthly data. Prof. Cornell indicates that he reviewed Clearwire's weekly betas over periods of 2, 3, 4, and 5 years,¹³⁶ but he does not report the results of that analysis. I did report these betas in the Jarrell Report (along with monthly and daily betas that Prof. Cornell

¹³² See Jarrell Report, ¶276-277, 280.

¹³³ See Jarrell Report, ¶¶18-22.

¹³⁴ See Jarrell report, ¶276 (Table 21).

¹³⁵ See Cornell Report, ¶75, footnote 156 (emphasis added) ("The choice of a five-year versus a shorter estimation period such as two years involves a trade-off: '<u>A longer estimation</u> period provides more data, but the firm itself might have changed in its risk characteristics over the time period.' Investment Valuation 3rd Edition, p. 188. Thus, it is important to examine the company's beta over time 'for structural changes or short-term deviations. For instance, changes in corporate strategy or capital structure often lead to changes in risk for stockholders. In this case, <u>a long estimation period would place too much weight on irrelevant data</u>.' Valuation 5th Edition, p. 247.").

¹³⁶ See Cornell Report, ¶75, footnote 156.

apparently ignores).¹³⁷ When I observed weekly betas that ranged from 0.95 to 1.93, I concluded that Clearwire's weekly betas were "too dispersed to provide a reliable indication of Clearwire's beta."¹³⁸ I specifically noted that:

The four-year adjusted weekly beta of 1.6, in particular, is highly unstable. For example, when the 208 observations in this four-year period are slightly reduced to 201 observations (representing the 3.9-year Sprint ownership period), the beta collapses to 1.32. In contrast, when the four-year monthly beta of 1.26 is reduced to the 3.9-year period the beta declines to only 1.20. Likewise, when the four-year daily beta of 0.98 is reduced to the 3.9-year period the beta declines to only 1.20.

101. This wide dispersion in Clearwire's weekly betas can be seen in Chart 3 below.

¹³⁷ See Jarrell Report, ¶276, Table 21.

¹³⁸ See Jarrell Report, ¶277.

¹³⁹ See Jarrell Report, ¶277, footnote 395.

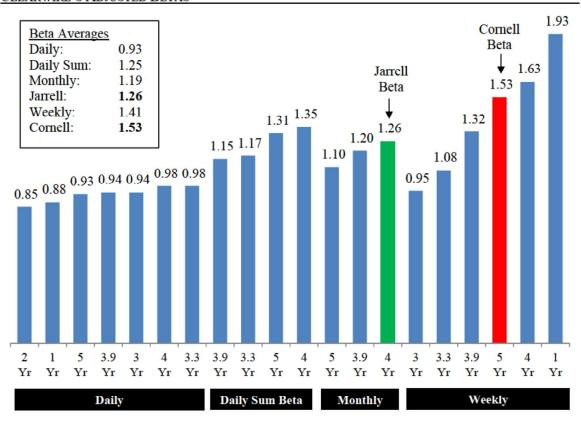


Chart 3 Clearwire's Adjusted Betas¹⁴⁰

102. I note that Prof. Cornell's 1.534 beta is the *third highest* of all 20 betas in Chart 3 above, whereas my 1.26 beta is the *highest* among the monthly betas. My 1.26 four-year monthly beta is also in-line with the 1.32 weekly beta measured over the 3.9-year Sprint investment period. Moreover, this 1.32 weekly beta is nearly identical to Prof. Cornell's Ibbotson-based implied beta of 1.327 that I calculated earlier when using the 6.11% supply-side market risk premium instead of Prof. Cornell's 5.50% (*see supra*, ¶93). Therefore, I continue to believe that my monthly beta of 1.26 is appropriate and reasonable to use to compute Clearwire's future WACC.

¹⁴⁰ See Jarrell Report, ¶276, Table 21; Cornell Report, ¶75.

103. To correct Prof. Cornell's implied 10.92% WACC, I change both his beta and his market risk premium. Changing his WACC-equivalent beta from 1.475 to my beta of 1.26 and also using the 6.11% market risk premium decreases Prof. Cornell's implied WACC from 10.92% to 10.66% (*see* Exhibit 20, column D).¹⁴¹

Corrected Cost of Debt

104. In the Jarrell Report, I used a 9.34% pre-tax cost of debt based on the Bank of

America Merrill Lynch 7-10 year CCC & Lower US High Yield Index as of the Valuation

Date.¹⁴² Prof. Cornell's implied 11.1% pre-tax cost of debt that is impounded within his APV

model is based on Clearwire's prior coupon rates that were mostly set in 2009 and 2010 when

those debt instruments were originally issued, which is several years prior to the Valuation Date.

I believe these coupon rates are too stale to be appropriate for estimating WACC for the

Valuation Date and thereafter.¹⁴³

105. Messrs. Pratt and Grabowski caution against using such an approach:

The business's current interest expense is readily ascertainable from the footnotes to the business's financial statements.... But if the interest rate the business is paying is not representative of a long-term, current market rate, then the analyst should estimate a current market rate for that component of the business's capital structure. The interest rate should be consistent with the financial condition of the subject business, based on a comparative analysis of the subject business's operating ratios. If the business's debt has a debt rating, one can estimate the cost of debt using a yield curve analysis.¹⁴⁴

¹⁴¹ If I use the 5.5% market risk premium along with my 1.26 beta, then Prof. Cornell's corrected WACC would be 10.16%.

¹⁴² *See* Jarrell Report, ¶¶267-268.

¹⁴³ See Jarrell Report, ¶31.

¹⁴⁴ See S. Pratt, R. Grabowski, <u>Cost of Capital</u>, Fifth Edition, John Wiley & Sons, Inc., 2014, p. 522.

106. To correct Prof. Cornell's implied 10.92% WACC, I change his implied cost of debt from 11.1% to my estimate of 9.34%, which is based on the yield to maturity as of the Valuation Date on the Bank of America Merrill Lynch 7-10 year CCC & Lower US High Yield Index. As discussed in the Jarrell Report, this 9.34% yield is *lower* than Clearwire's pre-SoftBank debt yields of approximately 15% from October 10, 2012, when Clearwire's stock price was only \$1.30 per share and its debt to total capitalization ratio was approximately 72%. The 9.34% yield, however, is *greater* than Clearwire's yields on the Valuation Date, *greater* than the refinancing rates highlighted by Centerview of 8.0% to 9.0% proposed by Wall Street firms in the fall of 2012, and *greater* than the refinancing rates offered by JPMorgan of approximately 6% in May 2013.¹⁴⁵

107. Changing the cost of debt from 11.1% to 9.34% (as well as beta and the market risk premium) decreases Prof. Cornell's implied WACC from 10.92% to 10.26% (*see* Exhibit 20, column E), which is within four basis points of my 10.22% discount rate (*see* Exhibit 20, column F).

F. Cornell's Perpetuity Growth Rate

108. Prof. Cornell and I both use a perpetuity constant-growth DCF model for Clearwire's terminal value. Prof. Cornell uses a 3.35% perpetuity growth rate and I use a 4.5% perpetuity growth rate, which difference causes a significant difference in DCF value.¹⁴⁶ The lower the perpetuity growth rate, the lower the DCF value, all else equal.

109. I believe that Prof. Cornell understates Clearwire's terminal value by using an unreasonably low perpetuity growth rate. Although Prof. Cornell's perpetuity growth rate is

¹⁴⁵ See Jarrell Report, ¶¶256-257, 269.

¹⁴⁶ See Cornell Report, ¶70; Jarrell Report, ¶308.

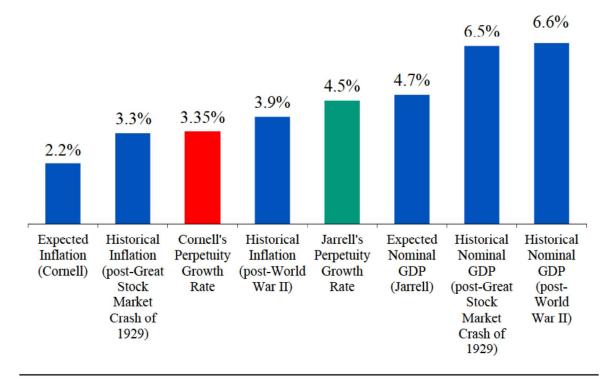
greater than his 2.2% expected inflation rate (as it should be for a going-concern entity), the downward bias in his growth rate is evident when compared to long-term historical measures of inflation. Prof. Cornell's 3.35% perpetuity growth rate is no different than historical inflation of 3.3% since the great stock market crash of 1929, and his growth rate is actually lower than post-World War II historical inflation of 3.9% as shown in Chart 2 below.¹⁴⁷

110. Prof. Cornell's 3.35% perpetuity growth rate is also considerably less than long-term measures of historical nominal GDP of 6.5% and 6.6% as shown in Chart 2 below.

¹⁴⁷ Prof. Cornell's selects his 3.35% perpetuity growth rate based on the midpoint of inflation and GDP (*i.e.*, $3.35\% = [2.2\% + 4.5\%] \div 2$). *See* Cornell Report, ¶70. I note, however, that when long-term historical data is used, the midpoint is 4.9% (*i.e.*, $4.9\% = [3.3\% + 6.5\%] \div 2$), not 3.35%.

Chart 2	
LONG-TERM GROWTH RATES ¹⁴⁸	

Clearwire 2008-2018 Revenue CAGR (June Proj. – SoftBank Plan):	41.5%
Clearwire 2008-2020 Revenue CAGR (SCC Proj.):	22.9%
GDP-Gross Output for Wireless Telecommunications Carriers (1998-2012):	12.1%
Nominal GDP (1998-2012):	4.3%



111. Prof. Cornell's justification for using a perpetuity growth rate less than the longterm growth rate of the overall economy is that "Clearwire's projected operating results are based on the successful implementation of its planned TDD-LTE network (and the market's acceptance of the technology) beyond the end of the explicit forecast period."¹⁴⁹ Uncertainty about the acceptance of new technology, however, does not necessarily entail a lower expected

¹⁴⁸ See Jarrell Report, ¶¶304-308, Exhibit 7; Cornell Report, ¶70; GDP (Bloomberg: GDPACUR\$); Gross Domestic Product-(GDP)-by-Industry Data (Gross Output by Industry), Bureau of Economic Analysis (www.bea.gov/industry/gdpbyind_data.htm).

¹⁴⁹ See Cornell Report, ¶70.

average growth rate into perpetuity. If it did, all high-technology companies would have an expected growth rate below that of the economy as a whole.

112. Moreover, Prof. Cornell's view that Clearwire would grow forever at a rate that is lower than that of the overall economy is inconsistent with projected and historical results. As shown in Chart 2 above, Clearwire's compound annual growth rate ("CAGR") in revenues from 2008 to 2018 based on the June Projections – SoftBank Plan was expected to be 41.5%. Based on the SCC Projections, the same projections that Prof. Cornell uses for determining his fair value, Clearwire's 2008 to 2020 revenue CAGR was expected to be 22.9%. Both sets of projected growth rates greatly exceed any measure of GDP growth rates by a wide margin. Historically, Clearwire's industry grew over the 15 years prior to the Valuation Date at 12.1% annually at a time when GDP only grew 4.3% annually as shown in Chart 2 above. This indicates that Clearwire's industry was growing at nearly three times the rate of the overall economy.¹⁵⁰ While this significantly greater historical growth in Clearwire's industry cannot be reasonably expected to continue into perpetuity, this historical evidence is inconsistent with expecting Clearwire's industry to grow at a significantly *lower* rate than the general economy in the future, as Prof. Cornell assumes with his 3.35% perpetuity growth rate.

113. For these reasons, I believe that Prof. Cornell's 3.35% perpetuity growth rate is too pessimistic and that my 4.5% perpetuity growth rate is appropriate.

¹⁵⁰ See Global GT LP v. Golden Telecom, Inc., 993 A.2d 497, 513 (Del. Ch. 2010) (when selecting a terminal period growth rate, then-Vice Chancellor Strine stated that: "The reasonableness of expecting the Russian telecommunication sector to outpace the overall Russian economy is buttressed by actual history in the United States, where the telecom industry has grown at nearly three times the rate of the United States GDP.").

G. Corrections to Cornell's WACC-Equivalent DCF Model

114. Before making any corrections to Prof. Cornell's DCF analysis, I first replicated his APV model based on the SCC Projections that yields a DCF value of \$2.13 per share, as discussed above (*see supra*, ¶84; Exhibit 19, column A). I then converted his APV model into an equivalent WACC-based model (*see supra*, ¶84; Exhibit 19, column B) that yields the same DCF value of \$2.13 per share.

115. To correct Prof. Cornell's WACC-equivalent DCF model, I replace the SCC Projections, which he uses inappropriately in my view, with the June Projections – SoftBank Plan. I then recalculate Prof. Cornell's DCF value, while keeping all of Prof. Cornell's other assumptions unchanged.¹⁵¹ Based on only this change, the equity value implied by Prof. Cornell's WACC-equivalent DCF model increases from \$2.13 per share to \$8.65 per share (*see* Exhibit 19, column C).

116. Next, I correct Prof. Cornell's use of a 3.35% perpetuity growth rate by replacing it with my 4.5% perpetuity growth rate. Based on this change (as well as the use of the June Projections – SoftBank Plan), the equity value implied by Prof. Cornell's WACC-equivalent DCF model increases from \$2.13 per share to \$10.63 per share (*see* Exhibit 19, column D).

¹⁵¹ I eliminated the years 2019 and 2020 from Prof. Cornell's model because the June Projections – SoftBank Plan contain forecasts that only go through 2018, whereas the SCC Projections end in 2020. I do not assume that Prof. Cornell would use a three-stage DCF model with a transition stage as I do in the Jarrell Report. Because the implied value when using the June Projections – SoftBank Plan is greater than Prof. Cornell's fair value, I also account for the conversion of certain debt instruments that Prof. Cornell did not address in his valuation. I reduce Prof. Cornell's debt by \$629.3 million to reflect the conversion of the 2040 Exchangeable Notes with a conversion price of \$7.08 per share, which then increases Prof. Cornell's shares outstanding by 88.9 million shares. Finally, I also reduce Prof. Cornell's debt by \$240 million to reflect the conversion of the Sprint Notes with a conversion price of \$1.50 per share, which then increases Prof. Cornell's shares outstanding by 160 million shares.

117. This means that Prof. Cornell's use of the SCC Projections and a 3.35% perpetuity growth rate, instead of the June Projections – SoftBank Plan and my 4.50% perpetuity growth rate, accounts for almost all of the difference between Prof. Cornell's \$2.13 per share fair value and my \$11.27 per share fair value. The remaining difference between \$11.27 per share and \$10.63 per share is more than attributable to the difference in our discount rates, as I explain below.

118. Next, I correct Prof. Cornell's WACC-equivalent discount rate of 10.92% by replacing both his beta and his market risk premium. Changing his WACC-equivalent beta from 1.475 to my beta of 1.26, and changing his market risk premium of 5.50% to my supply-side market risk premium of 6.11%, decreases Prof. Cornell's implied WACC from 10.92% to 10.66%. Based on this change (as well as the use of the June Projections – SoftBank Plan and 4.5% perpetuity growth rate), the equity value implied by Prof. Cornell's WACC-equivalent DCF model increases from \$2.13 per share to \$11.31 per share (*see* Exhibit 19, column E).

119. Finally, I correct Prof. Cornell's WACC-equivalent discount rate of 10.92% by replacing his implied 11.1% cost of debt with my 9.34% cost of debt. This reduces Prof. Cornell's previously corrected WACC-equivalent discount rate from 10.66% to 10.26% (*see supra*, ¶¶104-107). Based on this change (as well as the use of the June Projections – SoftBank Plan, 4.5% perpetuity growth rate, my beta, and my market risk premium), the equity value implied by Prof. Cornell's WACC-equivalent DCF model increases from \$2.13 per share to \$12.49 per share (*see* Exhibit 19, column F).

120. A summary of these corrections using the June Projections – SoftBank Plan is shown in Exhibit 21. Corrections using the June Projections – SoftBank Plan, SCC Projections,

the MCC Projections, and the Modified MCC Projections are shown in Exhibits 19-A, 19-B, 19-

C, 19-D, and Table 36 below:

TABLE 36
SUMMARY OF CORRECTIONS TO CORNELL'S DCF ANALYSIS ¹⁵²
(price per share)

<u>Pro</u> Cornell's WACC-Equivalen	SCC jections	MCC <u>Projections</u>	Modified MCC <u>Projections</u>	June Projections - SoftBank <u>Plan</u>
Cornell's 10.92% WACC and 3.35% Perpetuity Growth Rate	\$2.13	\$12.95	\$12.17	\$8.65
Cornell's 10.92% WACC and Jarrell's 4.5% Perpetuity Growth Rate	\$2.80	\$15.14	\$14.38	\$10.63
Cornell's 10.66% Corrected WACC and Jarrell's 4.5% Perpetuity Growth Rate	\$3.06	\$16.00	\$15.24	\$11.31
Cornell's 10.26% Corrected WACC and Jarrell's 4.5% Perpetuity Growth Rate	\$3.50	\$17.46	\$16.72	\$12.49
Jarrell Opinion	\$1.14 ¹⁵	³ \$14.91	\$14.00	\$11.27

H. Excess Spectrum

121. Prof. Cornell adds to his Clearwire DCF of the SCC Projections the potential

proceeds from a DISH December 2012 proposal to buy a portion of Clearwire's spectrum. After

¹⁵² See Exhibit 19; Jarrell Report, Exhibit 13.

¹⁵³ My \$1.14 per share DCF value does <u>not</u> include any value for excess spectrum, whereas Prof. Cornell's \$2.13 per share DCF value includes value with proceeds from a potential spectrum sale.

deducting the present value of spectrum leases associated with this spectrum and deducting taxes

related to this sale transaction, the net proceeds according to Prof. Cornell are \$1.983 billion, or

\$1.34 per share (*i.e.*, \$2.13 - \$0.79).^{154,155}

¹⁵⁴ See Cornell Report, ¶¶90-91, Exhibit 5.

¹⁵⁵ Both of these deductions to the spectrum portfolio's value are inappropriate. Prof. Cornell is double-counting the deduction for the \$277 million present value of spectrum leases because those spectrum leases are already factored in as operating expenses within the SCC Projections in his APV model. *See* Cochran Dep. Ex. 12 at Bates Nos. CLWRDEL-01916569-570.

The \$200 million deduction of taxes related to this sale transaction is also inappropriate, as I explained in the Jarrell Report (see Jarrell Report, ¶350, footnote 483), because: (i) a sale of Clearwire's spectrum assets was not specifically contemplated as of the Valuation Date; (ii) the incurrence of such a hypothetical future tax obligation is inconsistent with the going-concern premise of fair value: and (iii) it is inconsistent with the Delaware Court of Chancery's rulings in other cases. See, for example, Reis v. Hazelett Strip-Casting Corp., 2011 WL 303207 (Del. Ch. Jan. 21, 2011) ("The final step in the analysis is to add the value of non-operating assets.... Although both experts deducted the costs incurred in selling the properties and the taxes to be paid on the gain. Delaware law does not permit these deductions when valuing a corporation as a going concern."); Berger v. Pubco Corp., 2010 WL 2025483 (Del. Ch. May 10, 2010) ("...as to the capital gains tax issue, I conclude it is not appropriate to reduce the value of Pubco's securities portfolio based on projected capital gain tax liability that might (or might not) be incurred if the securities portfolio is in fact ever sold. ... I believe this issue is controlled by Paskill Corp. v. Alcoma Corp., where the Supreme Court held that it was improper to apply a deduction to an asset valuation based on speculative future tax liabilities attributable to sales that were not specifically contemplated at the merger date. The Paskill holding was based on the bedrock principle of Delaware appraisal law that entitles '[t]he dissenter in an appraisal action . . . to receive a proportionate share of fair value in the *going concern* on the date of the merger, rather than value that is determined on a liquidated basis.' Adjusting the value of Pubco's entire portfolio of securities for the taxes Pubco would have to pay if those securities were sold caused plaintiff to receive her proportionate share of the liquidated value of the portfolio, rather than the going concern value of the portfolio."); In re U.S. Cellular Operating Co., 2005 WL 43994, at *17 (Del. Ch. Jan. 6, 2005) ("Sanders' deduction of a capital gains tax from his terminal value, however, was improper. Sanders adjusted his terminal value, which he characterized as a hypothetical sale, for capital gains taxes because 'not all of the proceeds of such a sale would be distributed among a company's shareholders, but rather some would go to the government in the form of a capital gains tax.' This adjustment does not accurately reflect the intrinsic value of the Companies. Such a capital gains tax would be paid to the government by the shareholders, not the Companies. Moreover, such a capital gains tax should not affect the value of the Companies as a going concern. Accordingly, the Court finds the deduction of a capital gains tax from the terminal value improper.").

122. From a methodological standpoint, I agree with Prof. Cornell that an excess asset, such as unutilized spectrum, should be separately added to a DCF analysis that otherwise would ignore such a non-cash flow generating asset.

123. I have been asked to express on a per share basis certain spectrum asset values determined by Plaintiffs' and Petitioners' spectrum expert, Mr. Coleman Bazelon. These calculations of the per share asset values are based on Mr. Bazelon's opined asset values, and I perform no independent verification of his opinion or the bases for his opinion.

124. In the Rebuttal Report of Coleman Bazelon dated October 23, 2015 (the "Bazelon Rebuttal"), Mr. Bazelon opines that Clearwire's spectrum asset value for: (i) just the spectrum contemplated in the DISH December 2012 proposal is \$7.865 billion; and (ii) the minimum amount of spectrum that he concludes would be excess under the SCC Projections is \$10.656 billion.

125. Next, I recalculate Prof. Cornell's \$2.13 per share determination of fair value by replacing the proceeds of a potential spectrum sale of \$1.983 billion with, alternatively, Mr. Bazelon's \$7.865 billion estimate and then his \$10.656 billion estimate.¹⁵⁶ I also recalculate Clearwire's debt and shares outstanding to treat the in-the-money Sprint Notes as if they were converted (and when the 2040 Exchangeable Notes are in-the-money, they also are treated as if they were converted). This yields prices per share of \$5.62 and \$7.29 as shown below in Table 37:

¹⁵⁶ It is my understanding that Mr. Bazelon's estimated spectrum values do not deduct either the present value of spectrum leases associated with this excess spectrum or the taxes related to this sale transaction.

Correction to Cornell's Spectrum Value (in millions, except per share amounts)

	Cornell <u>Opinion</u> ¹⁵⁷	Correction to DISH Spectrum <u>Value</u>	Correction to Excess Spectrum <u>Value</u>
Present Value of Unlevered Firm	\$3,159	\$3,159	\$3,159
Present Value of Interest Tax Shield	\$1,389	\$1,389	\$1,389
Present Value of NOLs	\$620	\$620	\$620
Value of Certain Spectrum	\$1,983	\$7,865	\$10,656
Enterprise Value	\$7,151	\$13,033	\$15,824
Cash	\$605	\$605	\$605
Debt ¹⁵⁸	-\$4,617	-\$4,377	-\$3,747
Equity Value	\$3,140	\$9,262	\$12,682 1,740.5
Shares Outstanding ¹⁵⁹	1,473.3	1,648.1	
Price Per Share ¹⁶⁰	\$2.13	\$5.62	\$7.29

¹⁵⁷ See Cornell Report, Exhibit 5.

¹⁵⁸ Debt of \$4,377 million equals \$4,617 million minus \$240 million Sprint Notes. Debt of \$3,747 million equals \$4,617 million minus \$240 million Sprint Notes minus \$629.3 million 2040 Exchangeable Notes.

¹⁵⁹ 1,648.1 million shares equals 1,473.3 million shares plus 160 million shares from the conversion of the Sprint Notes plus 14.8 million additional shares under Prof. Cornell's treasury method. 1,740.5 million shares equals 1,473.3 million shares plus 160 million shares from the conversion of the Sprint Notes plus 88.9 million shares from the conversion of the 2040 Exchangeable Notes plus 18.4 million additional shares under Prof. Cornell's treasury method.

¹⁶⁰ I have been asked by counsel to alternatively assume that the NPA is rescinded. This would cause Clearwire's cash balances to decrease by \$240 million (*i.e.*, returning loan proceeds) and its fully diluted shares outstanding to decrease by 160 million shares (*i.e.*, \$240 million \div \$1.50 conversion price). Based on this assumption, the \$5.62 per share value would increase to \$6.06 per share and the \$7.29 per share value would increase to \$7.87 per share.

I certify that, to the best of my knowledge and belief:

- the statements of fact contained in this rebuttal report are true and correct;
- the reported analyses, opinions and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial and unbiased professional analyses, opinions and conclusions;
- I have no present or prospective interest in the subject business to this case, and I have no personal interest or bias with respect to the parties involved;
- my compensation is not contingent upon the value reported or upon any predetermined result or value; and
- my compensation is not contingent on an action or event resulting from the analyses, opinions or conclusions in, or the use of, this rebuttal report.

Oct. 23, 2015 Date

Gregg A Jarrell

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List of Exhibits

- 19 Cornell's WACC-Based DCF Equivalent Values
- 20 Corrections to Cornell's Discount Rate
- 21 Summary of Corrections to Cornell's APV Analysis

Exhibit 19

Clearwire Corporation Cornell's WACC-Based DCF Equivalent Values

					\$0.79	\$0.79	(excluding spectrum sale)
\$11.27	\$12.49	\$11.31	\$10.63	\$8.65	\$2.13	\$2.13	Per Share Value of Equity
\$19,778.6	\$21,802.2	\$ 19,739.2	\$ 18,538.2	\$15,064.8	\$3,139.6	\$3,139.6	 Equity Value Number of Shares Outstanding
1,754.6	1,745.6	1,744.8	1,744.3	1,742.4	1,473.3	1,473.3	
\$23,326.6	\$24,944.5	\$22,881.4	\$21,680.5	\$18,207.1	\$7,151.1	\$7,151.1	 Enterprise Value Debt Cash Warrant/Option Proceeds
-\$4,157.7	-\$3,747.5	-\$3,747.5	-\$3,747.5	-\$3,747.5	-\$4,516.7	-\$4,616.7	
\$606.3	\$605.3	\$605.3	\$605.3	\$605.3	\$605.3	\$605.3	
\$3.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
\$42,144.3	\$40,225.0	\$37,613.0	\$36,089.7	\$30,270.3	\$10,412.7	\$8,670.6	 Terminal Value PV of Terminal Value PV of Cash Flows (2013-2018/20) PV of NOLs PV of Interest Tax Shield PV of Potential Spectrum Sale
\$21,367.9	\$24,733.1	\$22,713.7	\$21,540.7	\$18,067.3	\$5,051.7	\$3,825.2	
\$1,600.4	-\$703.3	-\$734.1	\$753.7	-\$753.7	-\$606.1	-\$666.5	
\$358.3	\$914.7	\$901.7	\$893.4	\$893.4	\$722.5	\$620.0	
n/a	n/a	n/a	n/a	n/a	n/a	\$1,389.5	
n/a	n/a	n/a	n/a	n/a	\$1,983.0	\$1,983.0	
10.22%	10.26%	10.66%	10.92%	10.92%	10.92%	12 44%	Discount Rate
4.50%	4.50%	4.50%	4.50%	3.35%	3.35%	3.35%	Perpetuity Growth Rate
\$2,410.7	\$2,317.0	\$2,317.0	\$2,317.0	\$2,291.5	\$788.2	\$788.2	Terminal Year Cash Flow
5.7%	5.8%	6.2%	6.4%	7.6%	7.6%	9.1%	÷ Capitalization Rate
n/a 	-\$213.5 -\$214.0 N/a -\$2,045.3 -\$1,981.0 \$2,335.1 \$2,189.4 \$2,189.4 N/a N/a \$2,217.2	-\$213.5 -\$214.0 N/a -\$2,045.3 -\$1,981.0 \$2,335.1 \$2,189.4 N/a N/a \$2,217.2	-\$213.5 -\$214.0 N/a -\$2,045.3 -\$1,981.0 \$2,335.1 \$2,335.1 \$2,189.4 N/a N/a \$2,217.2	-\$213.5 -\$214.0 N/a -\$2,045.3 -\$1,981.0 \$2,335.1 \$2,189.4 N/a N/a \$2,217.2	-\$172.6 -\$131.9 -\$998.0 -\$68.3 -\$58.3 \$256.9 \$537.5 \$674.7 \$722.3 \$762.6	-\$172.6 -\$131.9 -\$998.0 -\$768.3 -\$768.3 \$256.9 \$537.5 \$762.6 \$762.6	(32013) Q42013 2013 (partial) 2014 2015 2016 2016 2017 2018 2017 2018 2019 2020 Last Projected Year (normalized)
Jarrell Opinion [G]	ik Plan Correct Cost of Debt [F]	June Projections - SoftBank Plan Correct Beta and ty Market C Premium [E]	June F Correct Perpetuity Growth Rate [D]	Change Projections [C]	SCC Projections II's WACC-Based V DCF Iel Equivalent [B]	SCC Pro Cornell's APV Model [A]	

FORENSIC ECONOMICS, INC.

[21] [22] [23] [24]	[19] [20]	[18]	[16]	[15]	[14]	[13]	[12]		[10]	[9]	2	<u>8</u> [[7]	1	[6]	[2]	[4]	[3]	[2]		[1]	USD
Interest Interest Tax Shield Interest Tax Shield Availability Present Value of Interest Tax Shield	Present Value of Unlevered Free Cash I	Discount Factor	Discount Period WACC	Period End Date	Valuation Date	Unlevered Free Cash Flow	Less: Increase in Working Capital	Less: Capital Expenditures	Plus: Non-Cash Expenses	Plus: Depreciation & Amortization		NOPAT	Less: Taxes (@, 38.0%)		EBIT	Less: Depreciation and Amortization	Less: Non-Cash Expenses	Less: Stock Based Compensation	Adjusted EBITDA Excluding Write-Of		Revenue	USD in millions, except per share data
n/a n/a n/a	91% (\$192)	0.99	0.11	09/30/13	07/09/13	(\$214)	(\$14)	(\$206)	\$54	\$190	(+)	(\$238)	80		(\$238)	(\$190)	(\$54)	(\$10)	\$16		\$392	Q3 2013 Q4 2013
n/a n/a n/a	(\$204)	0.95	0.48 10.92%	12/31/13				$\overline{}$	\$54	\$190	(+)	(\$239)	80		(\$239)	(\$190)	(\$54)	(\$10)	\$16		\$392	Q4 2013
n/a n/a n/a	100% (\$1,848)	0.90	0.98	12/31/14		(\$2,045) (\$1,981)	\$12	(\$2,175)	\$190	\$881	()	(\$954)	80		(\$954)	(\$881)	(\$190)	(\$66)	\$184		\$1,964	2014
n/a n/a n/a	100% (\$1,614)	0.81	1.98 10.92%	12/31/15		(\$1,981)	(\$538)			\$1,253	()	(\$84)	80				(\$196)	(\$60)	\$1,425		\$3,466	2015
n/a n/a n/a	100% \$251	0.73	2.98 10.92%	12/31/16 1		\$341	(\$224)	(\$1,800)	\$206	\$1,456		\$704	(\$431)				(\$206)	(\$50)	\$2,847		\$5,240	2016
n/a n/a n/a n/a	\$1,546	0.66	3.98 10.92%	12/31/17		\$2,335		$\overline{}$	\$210	\$1,380	4 × 30 · 0	\$1.640	(\$1,005) (\$1,330)		\$2,645	(\$1,380)	(\$210)	(\$46)	\$4,282		\$6,476	2017
n/a n/a n/a	\$1,307	0.60	4.98 10.92%	12/31/18		\$2,189		\sim	\$213	\$1,436		\$2.170	(\$1,330)			-	(\$213)	(\$43)	\$5,191		\$7,435	2018]
n/a n/a		0.60				\$2,217	(\$120)	(\$1,509)	\$213	\$1,509	*- <u>;</u>	\$2.124	(\$1,302)		\$3,426	(\$1,509)	(\$213)	(\$43)	\$5,191		\$7,435	Terminal
	[41] Equity Value Per Share		[38] Less: Debt [39] Fouity Value	[37] Plus: Cash	Equity Value Per Share Calculation			[34] Proceeds of a Potential Spectrum Sale	[33] Present Value of NOLs	[32] Present Value of Interest Tax Shield	[31] Present Value of Unlevered Firm	Enternrise Value		[30] Present Value of Unlevered Firm	[29] Present Value of Free Cash Flows	[28] Present Value of Terminal Value		[27] Future Value of Terminal Value	[26] Terminal Free Cash Flow Growth Rate	[25] Terminal Free Cash Flow	Value of Unlevered Firm	
	\$8.65	1,742.4	(\$3,747) \$15.065	\$605	\$18 207		\$18,207	n/a	\$893	n/a	\$17,314			\$17,314	(\$754)	\$18,067		\$30,270	3.35%	\$2,217		

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[21] [22] [23] [24]	[19] [20]	[17]	[16]	[14]	[13]	[11]	[10]	[9]	[8]	[7]	[6]	[5]	43	2 [[2]	[1]	USD
Interest Interest Tax Shield Interest Tax Shield Availability Present Value of Interest Tax Shield	Percent of Cash Flow Available Present Value of Unlevered Free Cash I	WACC Discount Factor	Discount Period	Valuation Date Period End Date	Unlevered Free Cash Flow	Less: Capital Expenditures Less: Increase in Working Capital	Plus: Non-Cash Expenses	Plus: Depreciation & Amortization	NOPAT	Less: Taxes (@ 38.0%)	EBIT	Less: Depreciation and Amortization	Less: Non-Cash Expenses	Less Stock Bosed Comparison	Adjusted FRITDA Excluding Write-Of	Revenue	USD in millions, except per share data
n/a n/a n/a	91% (\$192)	10.92% 0.99		07/09/13	(\$214)	(\$206) (\$14)	\$54	\$190	(\$238)	\$0	(\$238)	(\$190)	(\$10) (\$54)	(¢10)	<u>816</u>	\$392	Q3 2013 Q4 2013
n/a n/a n/a	(\$204)	10.92% 0.95	0.48	17/21/13		(\$206) (\$14)		\$190	(\$239)	\$0	(\$239)	(\$190)	(\$54)	(\$10)	<u>816</u>	\$392	Q4 2013
n/a n/a n/a	100% (\$1,848)	10.92% 0.90		12/31/14	(\$2,045) (\$1,981)	(\$2,175) \$12	\$190	\$881	(\$954)	\$0	(\$954)	(\$881)	(\$190)	(\$66)	\$184	\$1,964	2014
n/a n/a n/a	100% (\$1,614)	10.92% 0.81		12/31/15	(\$1,981)	(\$2,807) (\$538)		\$1,253	(\$84)	\$0	(\$84)	(\$1,253)	(\$196)	(\$60)	\$1 425	\$3,466	2015
n/a n/a n/a	100% \$251	10.92% 0.73		17/31/16	\$341	(\$1,800) (\$224)	\$206	\$1,456	\$704	(\$431)	\$1,135	(\$1,456)		(\$50)	\$7 847	\$5,240	2016
n/a n/a n/a	\$1,546	10.92% 0.66		12/31/17		(\$743) (\$153)		\$1,380	\$1,640	(\$1,005)	\$2,645	(\$1,380)	(\$210)	(\$16)	\$4 787	\$6,476	2017
n/a n/a n/a	\$1,307	10.92% 0.60	4.98	17/31/18	\$2,189	(\$1,509)	\$213	\$1,436	\$2,170	(\$1,330)	\$3,499	\sim	(\$213)	(\$/2)	\$5 101	\$7,435	2018]
n/a n/a		0.60			\$2,217	(\$1,509) (\$120)	\$213	\$1,509	\$2,124	(\$1,302)	\$3,426	(\$1,509)	(\$213)	(\$/2)	\$5 191	\$7,435	Terminal
	[41] Equity Value Per Share	[39] Equity Value [40] Shares Outstanding	[38] Less: Debt	Equity Value Per Share Calculation [36] Enterprise Value [37] Plue: Cash		[34] Proceeds of a Potential Spectrum Sale [35] Enterprise Value	[33] Present Value of NOLs	[32] Present Value of Interest Tax Shield	Enterprise Value [31] Present Value of Unlevered Firm		[29] Present Value of Free Cash Flows [30] Present Value of Unlevered Firm	[28] Present Value of Terminal Value	[27] בתושר במומר סד בסווווומו במומר	[20] Inture Value of Terminal Value	[25] Terminal Free Cash Flow Growth Rate	Value of Unlevered Firm	
	\$10.63	\$18,538 1,744.3	(\$3,747)	\$21,680 \$605		n/a \$21,680	\$893	n/a	\$20,787		(\$754) \$20,787	\$21,541		000 953	\$2,217		

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[21] [22] [23] [24]	[19] [20]		[16]		[14]	[13]	[12]	[1]	[10]	[9]			[7]			[5]	[4]	[3]	[2]		[1]	I	USD
Interest Interest Tax Shield Interest Tax Shield Availability Present Value of Interest Tax Shield	Present Value of Unlevered Free Cash I	WALC Discount Factor	Discount Period	Period End Date	Valuation Date	Unlevered Free Cash Flow	Less: Increase in Working Capital	Less: Capital Expenditures	Plus: Non-Cash Expenses	Plus: Depreciation & Amortization		NOPAT	Less: Taxes (@ 38.0%)		EBIT	Less: Depreciation and Amortization	Less: Non-Cash Expenses	Less: Stock Based Compensation	Adjusted EBITDA Excluding Write-Of		Revenue		USD in millions, except per share data
n/a n/a n/a n/a	9170 (\$192)	0.99	0.11	09/30/13	07/09/13	(\$214)	(\$14)	(\$206)	\$54	\$190		(\$238)	\$0		(\$238)	(\$190)	(\$54)	(\$10)	\$16		\$392		Q3 2013 Q4 2013
n/a n/a n/a	(\$204)	10.20% 0.95	0.48	12/31/13		(\$214)	(\$14)		\$54	\$190		(\$239)	\$0		(\$239)	(\$190)	(\$54)	(\$10)	\$16		\$392		
n/a n/a n/a n/a	10070 (\$1,859)	10.20% 0.91	0.98	12/31/14		(\$2,045) (\$1,981)	\$12	$\overline{}$	\$190	\$881		(\$954)	\$0		(\$954)	(\$881)	(\$190)	(\$66)	\$184		\$1,964		2014
n/a n/a n/a n/a	(\$1,633)	10.20% 0.82	1.98	12/31/15		(\$1,981)	(\$538)	(\$2,807)	\$196	\$1,253		(\$84)	\$0		(\$84)	(\$1,253)	(\$196)	(\$60)	\$1,425		\$3,466		2015
n/a n/a n/a n/a	\$255	0.75	2.98	12/31/16		\$341	(\$224)	(\$1,800)	\$206	\$1,456		\$704	(\$431)			(\$1,456)	(\$206)	(\$50)	\$2,847		\$5,240		2016
n/a n/a n/a	10070 \$1,583	0.68	3.98	12/31/17		\$2,335	(\$153)	(\$743)	\$210	\$1,380		\$1,640	(\$1,005)		\$2,645	(\$1,380)	(\$210)	(\$46)	\$4,282		\$6,476		2017
n/a n/a n/a	\$1,346	10.20% 0.61	4.98	12/31/18		\$2,189	(\$120)	(\$1,509)	\$213	\$1,436			(\$1,330)		\$3,499	(\$1,436)	(\$213)	(\$43)	\$5,191		\$7,435		2018]
n/a n/a		0.61				\$2,217	(\$120)	(\$1,509)	\$213	\$1,509		\$2,124	(\$1,302)		\$3,426	(\$1,509)	(\$213)	(\$43)	\$5,191		\$7,435		Terminal
	[41] Equity Value Per Share	[40] Shares Outstanding	[38] Less: Debt	[37] Plus: Cash	Equity Value Per Share Calculation [36] Enterprise Value		[35] Enterprise Value	[34] Proceeds of a Potential Spectrum Sale	[33] Present Value of NOLs	[32] Present Value of Interest Tax Shield	[31] Present Value of Unlevered Firm	Enterprise Value		[30] Present Value of Unlevered Firm	[29] Present Value of Free Cash Flows	[28] Present Value of Terminal Value		[27] Future Value of Terminal Value	[26] Terminal Free Cash Flow Growth Rate	[25] Terminal Free Cash Flow	Value of Unlevered Firm		
	\$12.49	321,802 1,745.6	(\$3,747)	\$605	\$24,944		\$24,944	n/a	\$915	n/a	\$24,030			\$24,030	(\$703)	\$24,733		\$40,225	4.50%	\$2,217			

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		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[24] Present Value of Interest Tax Shield
	Proceeds of a Potential Spectrum Sale	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[23] Interest Tax Shield Availability
SU 20	[42] Equity Value Per Share without		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[22] Interest Tax Shield
			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[21] Interest
\$2.13	[41] Equity value Fer Share with Proceeds of a Potential Spectrum Sale		\$300	\$ 303	\$321	0/1\$	(26)	(9798)	(206%)	(9716)		[20] Present value of Unlevered Free Cash
			100%	100%	100%	100%	100%	100%	100%	100%	91%	
1,473.3	[40] Shares Outstanding	0.49	0.49	0.54	0.60	0.66	0.73	0.81	0.90	0.95	0.99	
\$3,140	[39] Equity Value		10.92%	10.92%	10.92%	10	10	10.92%	10.92%	10.92%	10.92%	[17] WACC
(\$4,617)	[38] Less: Debt		6.98	5.98	4.98	3.98	2.98	1.98	0.98	0.48	0.11	[16] Discount Period
\$605	[37] Plus: Cash		12/31/20	12/31/19	12/31/17 12/31/18		12/31/16	12/31/15	12/31/14	12/31/13	09/30/13	[15] Period End Date
\$7,151	Equity Value Per Share Calculation [36] Enterprise Value										07/09/13	[14] Valuation Date
	2	\$763	\$722	\$675	\$538	\$257	(\$3)	(\$768)	(8998)	(\$132)	(\$173)	[13] Unlevered Free Cash Flow
\$7,151	[35] Enterprise Value	(\$20)	(\$20)	(\$37)	(\$43)	(\$47)	(\$64)	(\$238)	(\$5)	(\$10)	\$23	[12] Less: Increase in Working Capital
\$1,983	[34] Proceeds of a Potential Spectrum Sale	(\$317)	(\$317)	(\$295)	(\$229)	(\$233)	(\$161)	(\$146)	(\$375)	(\$68)	(\$144)	[11] Less: Capital Expenditures
\$722	[33] Present Value of NOLs	\$281	\$281	\$276	\$272	\$266	\$262	\$258	\$254	\$62	\$62	[10] Plus: Non-Cash Expenses
n/a	[32] Present Value of Interest Tax Shield	\$317	\$210	\$217	\$199	\$192	\$482	\$614	\$600	\$138	\$138	[9] Plus: Depreciation & Amortization
\$4,446	[31] Present Value of Unlevered Firm											
	Enterprise Value	\$502	\$568	\$514	\$338	\$79	(\$522)	(\$1,256)	(\$1,472)	(\$255)	(\$253)	
		(\$308)	(\$348)	(\$315)	(\$207)	(\$49)	\$0	\$0	\$0	\$0	\$0	[7] Less: Taxes (@ 38.0%)
\$4,446	[30] Present Value of Unlevered Firm											
(\$606)	[29] Present Value of Free Cash Flows	\$810	\$916	\$829	\$546	\$128		(\$1,256)	(\$1,472)	(\$255)	(\$253)	
\$5,052	[28] Present Value of Terminal Value	(\$317)	(\$210)	(\$217)	(\$199)	(\$192)		(\$614)	(\$600)	(\$138)	(\$138)	[5] Less: Depreciation and Amortization
		(\$281)	(\$281)	(\$276)	(\$272)	(\$266)	(\$262)	(\$258)	(\$254)	(\$62)	(\$62)	[4] Less: Non-Cash Expenses
\$10,413	[27] Future Value of Terminal Value	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)		(\$33)	(\$33)	(88)	(88)	[3] Less: Stock Based Compensation
3.35%	[26] Terminal Free Cash Flow Growth Rate	\$1,440	\$1,440	\$1,355	\$1,049	\$618	\$254	(\$351)	(\$586)	(\$46)	D: (\$44)	[2] Adjusted EBITDA Excluding Write-O
\$763	[25] Terminal Free Cash Flow											
	Value of Unlevered Firm	\$2,732	\$2,732	\$2,576	\$2,288	\$1,977	\$1,611	\$1,145	\$885	\$309	\$312	[1] Revenue
		Terminal	2020	2019	2018	2017	2016	2015	2014	Q3 2013 Q4 2013	Q3 2013	USD in millions, except per share data

 [21] Interest [22] Interest Tax Shield [23] Interest Tax Shield Availability [24] Present Value of Interest Tax Shield 	 [19] Percent of Cash Flow Available [20] Present Value of Unlevered Free Cash (\$1) 	Discount Factor	[16] Discount Period 0.11 [17] WACC 10.02%	[14] Valuation Date 07/09/13 [15] Period End Date 09/30/13	[13] Unlevered Free Cash Flow (\$1	Less: Increase in Working Capital	Less: Capital Expenditures	Plus: Non-Cash Expenses	[9] Plus: Depreciation & Amortization \$1	[8] NOPAT (\$2	Less: Taxes (@ 38.0%)		EBIT	nortization	Less: Non-Cash Expenses	Less: Stock Based Compensation	Adjusted EBITDA Excluding Write-O		[1] Revenue \$3	USD in millions, except per share data Q3 2
n/a n/a n/a	91% 1((\$155) (\$1			9/13 0/13 12/31/13	(\$173) (\$1	\$23 (\$	-		\$138 \$1	(\$253) (\$2				(\$138) (\$1		Ŭ	(\$44) (\$		\$312 \$3	Q3 2013 Q4 2013
n/a n/a n/a	100% (\$126) (0.48		(\$132) ((\$10)			\$138	(\$255) (\$1,472)	0\$		(\$255) (\$		(\$62) (\$309	
n/a n/a n/a n/a	100% (\$902)	0.90	0.98	12/31/14 1	(8998)	(\$5)	(\$375)	\$254	\$600				(\$1,472) ((\$600)	(\$254)	(\$33)	(\$586)		\$885	2014
n/a n/a n/a	100% (\$626)		1.98	12/31/15 12/31/16 12/31/17 12/31/18	(\$768)	(\$238)	(\$146)	\$258	\$614	(\$1,256)	0\$		(\$1,256)	(\$614)	(\$258)	(\$33)	(\$351)		\$1,145	2015
n/a n/a n/a n/a	100% (\$2)		2.98	2/31/16 1	(\$3)	(\$64)	(\$161)	\$262	\$482	(\$522)	80		(\$522)	(\$482)	(\$262)	(\$33)	\$254		\$1,611	2016
n/a n/a n/a n/a	100% \$170	0.66	3.98	2/31/17 1	\$257	(\$47)	(\$233)	\$266	\$192	\$79	(\$49)		\$128	(\$192)	(\$266)	(\$33)	\$618		\$1,977	2017
n/a n/a n/a	100% \$321	0.60	4.98		\$538	(\$43)	(\$229)	\$272	\$199	\$338	(\$207)		\$546	(\$199)	(\$272)	(\$33)	\$1,049		\$2,288	2018
n/a n/a n/a n/a	100% \$363	0.54	5.98	12/31/19	\$675	(\$37)	(\$295)	\$276	\$217	\$514	(\$315)		\$829	(\$217)	(\$276)	(\$33)	\$1,355		\$2,576	2019
n/a n/a n/a n/a	100% \$350	0.49	6.98	12/31/20	\$722	(\$20)	(\$317)	\$281	\$210	\$568	(\$348)		\$916	(\$210)	(\$281)	(\$33)	\$1,440		\$2,732	2020 T
n/a n/a		0.49			\$763	(\$20)	(\$317)	\$281	\$317	\$502	(\$308)		\$810	(\$317)	(\$281)	(\$33)	\$1,440		\$2,732	Terminal
[42] Equity Value Per Share without Proceeds of a Potential Spectrum Sale	[41] Equity Value Per Share with	[40] Shares Outstanding	[38] Less: Debt [39] Equity Value	Equity Value Per Share Calculation [36] Enterprise Value [37] Plus: Cash		[35] Enterprise Value	[34] Proceeds of a Potential Spectrum Sale	[33] Present Value of NOLs	[32] Present Value of Interest Tax Shield	Enterprise Value [31] Present Value of Unlevered Firm		[30] Present Value of Unlevered Firm	[29] Present Value of Free Cash Flows	[28] Present Value of Terminal Value	,	[27] Future Value of Terminal Value	[26] Terminal Free Cash Flow Growth Rate	[25] Terminal Free Cash Flow	Value of Unlevered Firm	
\$1.45	\$2.80	1,474.3 الم	(\$4,617) \$4 123	\$8,135 \$605		\$8,135	\$1,983	\$735	n/a	\$5,417		\$5,417	(\$606)	\$6,023		\$12,415	4.50%	\$763		

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		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[24] Present Value of Interest Tax Shield
	^[+2] Proceeds of a Potential Spectrum Sale	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Equity Value Per Share without		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[22] Interest Tax Shield
			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[21] Interest
	[41] Proceeds of a Potential Spectrum Sale		000	000	÷.	÷	(+-)	(0-04)	(400)	(40)	(0000)	
	Equity Value Per Share with		\$356	\$368	\$325	\$172	(\$2)	(\$629)	(\$904)	(\$126)	(\$155)	
			100%	100%	100%	100%	100%	100%	100%	100%	91%	
	[40] Shares Outstanding	0.49	0.49	0.55	0.60	0.67	0.74	0.82	0.91	0.95	0.99	[18] Discount Factor
	[39] Equity Value		10.66%	10.66%	10.66%	10.66%	10.66%	10.66%	10.66%	10.66%	10.66%	[17] WACC
(\$4,617)	[38] Less: Debt		6.98	5.98	4.98	3.98	2.98	1.98	0.98	0.48	0.11	[16] Discount Period
	[37] Plus: Cash		12/31/20	12/31/19	12/31/13 12/31/14 12/31/15 12/31/16 12/31/17 12/31/18	12/31/17	12/31/16	12/31/15	12/31/14	12/31/13	09/30/13	[15] Period End Date
	[36] Enterprise Value										07/09/13	[14] Valuation Date
	Equity Value Per Share Calculation											
		\$763	\$722	\$675	\$538	\$257	(\$3)	(\$768)	(8998)	(\$132)	(\$173)	[13] Unlevered Free Cash Flow
\$8,522	[35] Enterprise Value	(\$20)	(\$20)	(\$37)	(\$43)	(\$47)	(\$64)	(\$238)	(\$5)	(\$10)	\$23	[12] Less: Increase in Working Capital
\$1,983	[34] Proceeds of a Potential Spectrum Sale	(\$317)	(\$317)	(\$295)	(\$229)	(\$233)	(\$161)	(\$146)	(\$375)	(\$68)	(\$144)	[11] Less: Capital Expenditures
	[33] Present Value of NOLs	\$281	\$281	\$276	\$272	\$266	\$262	\$258	\$254	\$62	\$62	[10] Plus: Non-Cash Expenses
	[32] Present Value of Interest Tax Shield	\$317	\$210	\$217	\$199	\$192	\$482	\$614	\$600	\$138	\$138	[9] Plus: Depreciation & Amortization
	[31] Present Value of Unlevered Firm											
	<u>Enterprise Value</u>	\$502	\$568	\$514	\$338	\$79	(\$522)	(\$1,256)	(\$255) (\$1,472)	(\$255)	(\$253)	
		(\$308)	(\$348)	(\$315)	(\$207)	(\$49)	\$0	\$0	\$0	\$0	\$0	[7] Less: Taxes (@ 38.0%)
	[30] Present Value of Unlevered Firm											
	[29] Present Value of Free Cash Flows	\$810	\$916	\$829	\$546	\$128	(\$522)	(\$1,256)	(\$255) (\$1,472)	(\$255)	(\$253)	[6] EBIT
	[28] Present Value of Terminal Value	(\$317)	(\$210)	(\$217)	(\$199)	(\$192)	(\$482)	(\$614)	(\$600)	(\$138)	(\$138)	[5] Less: Depreciation and Amortization
		(\$281)	(\$281)	(\$276)	(\$272)	(\$266)	(\$262)	(\$258)	(\$254)	(\$62)	(\$62)	[4] Less: Non-Cash Expenses
\$12,937	[27] Future Value of Terminal Value	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(88)	(88)	[3] Less: Stock Based Compensation
	[26] Terminal Free Cash Flow Growth Rate	\$1,440	\$1,440	\$1,355	\$1,049	\$618	\$254	(\$351)	(\$586)	(\$46)	(\$44)	[2] Adjusted EBITDA Excluding Write-O
	[25] Terminal Free Cash Flow											
	Value of Unlevered Firm	\$2,732	\$2,732	\$2,576	\$2,288	\$1,977	\$1,611	\$1,145	\$885	\$309	\$312	[1] Revenue
										,	,	
		Terminal	2020	2019	2018	2017	2016	2015	2014	Q3 2013 Q4 2013	Q3 2013	USD in millions, except per share data

	 Proceeds of a Potential Spectrum Sale 	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n⁄a n⁄a	n⁄a n⁄a	n/a n/a	n/a n/a	n⁄a n⁄a	[23] Interest Tax Shield Availability[24] Present Value of Interest Tax Shield
\$2.16	[42] Equity Value Per Share without		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[22] Interest Tax Shield
			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[21] Interest
\$3.50	[41] Equity value Fer Share with Proceeds of a Potential Spectrum Sale		\$365	\$376	\$331	\$174	(\$2)	(\$633)	(8907)	(\$126)	(\$155)	[20] Present Value of Unlevered Free Cash
			100%	100%	100%	100%	100%	100%	100%	100%	91%	
1,478.6	[40] Shares Outstanding	0.51	0.51	0.56	0.61	0.68	0.75	0.82	0.91	0.95	0.99	
\$5,177	[39] Equity Value		10.26%	10.26%	10.26%	10.26%	10	10.26%	10.26%	10.26%	10.26%	[17] WACC
(\$4,617)	[38] Less: Debt		6.98	5.98	4.98	3.98	2.98	1.98	0.98	0.48	0.11	[16] Discount Period
\$605	[37] Plus: Cash		12/31/20	12/31/19	12/31/16 12/31/17 12/31/18	12/31/17	12/31/16	12/31/15	12/31/14	12/31/13	09/30/13	[15] Period End Date
\$9,189	[36] Enterprise Value										07/09/13	[14] Valuation Date
	Equity Value Per Share Calculation											
		\$763	\$722	\$675	\$538	\$257		(\$768)	(\$998)	(\$132)	(\$173)	[13] Unlevered Free Cash Flow
\$9,189	[35] Enterprise Value	(\$20)	(\$20)	(\$37)	(\$43)	(\$47)		(\$238)	(\$5)	(\$10)	\$23	[12] Less: Increase in Working Capital
\$1,983	[34] Proceeds of a Potential Spectrum Sale	(\$317)	(\$317)	(\$295)	(\$229)	(\$233)	(\$161)	(\$146)	(\$375)	(\$68)	(\$144)	
\$786	[33] Present Value of NOLs	\$281	\$281	\$276	\$272	\$266		\$258	\$254	\$62	\$62	[10] Plus: Non-Cash Expenses
n/a	[32] Present Value of Interest Tax Shield	\$317	\$210	\$217	\$199	\$192		\$614	\$600	\$138	\$138	[9] Plus: Depreciation & Amortization
\$6,420	[31] Present Value of Unlevered Firm											
	<u>Enterprise Value</u>	\$502	\$568	\$514	\$338	\$79	(\$522)	(\$255) (\$1,472) (\$1,256)	(\$1,472)	(\$255)	(\$253)	
		(\$308)	(\$348)	(\$315)	(\$207)	(\$49)	\$0	\$0	\$0	\$0	\$0	[7] Less: Taxes (@ 38.0%)
\$6,420	[30] Present Value of Unlevered Firm											
(\$578)	[29] Present Value of Free Cash Flows	\$810	\$916	\$829	\$546	\$128	(\$522)		(\$255) (\$1,472)	(\$255)	(\$253)	EBIT
\$6,997	[28] Present Value of Terminal Value	(\$317)	(\$210)	(\$217)	(\$199)	(\$192)	(\$482)	(\$614)	(\$600)	(\$138)	(\$138)	[5] Less: Depreciation and Amortization
		(\$281)	(\$281)	(\$276)	(\$272)	(\$266)	(\$262)	(\$258)	(\$254)	(\$62)	(\$62)	[4] Less: Non-Cash Expenses
\$13,836	[27] Future Value of Terminal Value	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(88)	(88)	[3] Less: Stock Based Compensation
4.50%	[26] Terminal Free Cash Flow Growth Rate	\$1,440	\$1,440	\$1,355	\$1,049	\$618	\$254	(\$351)	(\$586)	(\$46)	_	[2] Adjusted EBITDA Excluding Write-O
\$763	[25] Terminal Free Cash Flow											
	Value of Unlevered Firm	\$2,732	\$2,732	\$2,576	\$2,288	\$1,977	\$1,611	\$1,145	\$885	\$309	\$312	[1] Revenue
		Terminal	2020	2019	2018	2017	2016	2015	2014	Q3 2013 Q4 2013	Q3 2013	USD in millions, except per share data

		n/a	n/a	n/a			ı n/a	n/a	n/a	n/a	n/a	
		n/a	n/a	n/a	n/a	ı n/a		n/a	n/a	n/a	n/a	
			n/a	n/a	n/a	ı n/a		n/a	n/a	n/a	n/a	[22] Interest Tax Shield
			n/a	n/a	n/a	ı n/a		n/a	n/a	n/a	n/a	[21] Interest
\$12.75	[41] Equity value Per Snare											
912 07	[11] Fanita Value Des Shane		\$1,397	ŝ	~	ŝ		(\$137)	(\$830)	(\$126)	(\$155)	[20] Present Value of Unlevered Free Cash
			100%	100%				100%	100%	100%	91%	[19] Percent of Cash Flow Available
1,745.8	[40] Shares Outstanding	0.49	0.49	0.54	0.60	0.66	0.73	0.81	0.90	0.95	0.99	[18] Discount Factor
\$22,610	[39] Equity Value		10.92%	10.92%	10.92%	10.92%	10.92%	10.92%	10.92%	10.92%	10.92%	[17] WACC
(\$3,747)	[38] Less: Debt		6.98	5.98	4.98	3.98	2.98	1.98	0.98	0.48	0.11	[16] Discount Period
\$605	[37] Plus: Cash		12/31/20	$12/31/13 \ 12/31/14 \ 12/31/15 \ 12/31/16 \ 12/31/17 \ 12/31/18 \ 12/31/19 \ 12/31/20 $	12/31/18	12/31/17	12/31/16	12/31/15	12/31/14	12/31/13	09/30/13	[15] Period End Date
\$25,752	[36] Enterprise Value										07/09/13	[14] Valuation Date
	Equity Value Per Share Calculation											
		\$3,021	\$2,879		\$2,161	\$1,543	\$1,005		(\$919)	(\$132)	(\$173)	[13] Unlevered Free Cash Flow
\$25,752	[35] Enterprise Value	(\$49)	(\$49)) (\$148)		(\$326)	(\$6)	(\$10)	\$23	[12] Less: Increase in Working Capital
n/a	[34] Proceeds of a Potential Spectrum Sale	(\$704)	(\$704)	(\$664)	(\$567)) (\$461)		(\$188)	(\$375)	(\$68)	(\$144)	[11] Less: Capital Expenditures
\$1,105	[33] Present Value of NOLs	\$281	\$281	\$276	\$272	\$266		\$258	\$254	\$62	\$62	[10] Plus: Non-Cash Expenses
n/a	[32] Present Value of Interest Tax Shield	\$704	\$331	\$310	\$265	\$229	\$493	\$614	\$600	\$138	\$138	[9] Plus: Depreciation & Amortization
\$24,648	[31] Present Value of Unlevered Firm											
	<u>Enterprise Value</u>	\$2,790	\$3,022	\$2,870	\$2,323	\$1,656	\$786	(\$526)	(\$255) (\$1,392)	(\$255)	(\$253)	
		(\$1,710)	(\$1,852)	(\$1,759) (\$1,852)	\$482) (\$1,015) (\$1,424)) (\$1,015)	(\$482)	\$0	\$0	\$0	\$0	[7] Less: Taxes (@ 38.0%)
\$24,648	[30] Present Value of Unlevered Firm											
\$4,636	[29] Present Value of Free Cash Flows	\$4,500	\$4,874	\$4,629	\$3,747	\$2,672	-	(\$526)	(\$1,392)		(\$253)	[6] EBIT
\$20,012	[28] Present Value of Terminal Value	(\$704)	(\$331)	(\$310)) (\$229)		(\$614)	(\$600)	(\$138)	(\$138)	[5] Less: Depreciation and Amortization
		(\$281)	(\$281)	(\$276)	(\$272)	-	(\$262)	(\$258)	(\$254)	(\$62)	(\$62)	[4] Less: Non-Cash Expenses
\$41,250	[27] Future Value of Terminal Value	(\$33)	(\$33)	(\$33)	(\$33)	-		(\$33)	(\$33)	(88)	(88)	[3] Less: Stock Based Compensation
3.35%	[26] Terminal Free Cash Flow Growth Rate	\$5,517	\$5,517	\$5,248	\$4,316	\$3,199	\$2,056	\$378	(\$505)	(\$46)	~	[2] Adjusted EBITDA Excluding Write-O
\$3,021	[25] Terminal Free Cash Flow											
	Value of Unlevered Firm	\$7,040	\$7,040	\$6,640	\$5,666	\$4,608	\$3,415	\$1,875	\$966	\$309	\$312	[1] Revenue
		Terminal	2020	2019	2018	2017	2016	2015	2014	Q3 2013 Q4 2013	Q3 2013	USD in millions, except per share data

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		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[24] Present Value of Interest Tax Shield
		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[23] Interest Tax Shield Availability
			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	[22] Interest Tax Shield
			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
\$15.14	[41] Equity Value Per Share		φ.,	Φ1,100		\$1,022	ΨĴŪO	(1014)	(000)	(0210)	(2010)	
			¢1 207	Q1 13Q	000 13	¢1 000	\$728	(\$127)	(\$\$20)	(8176)	(\$155)	
	,		100%	100%		100%	100%	100%	100%	100%	91%	
1,747.0	[40] Shares Outstanding	0.49	0.49	0.54	0.60	0.66	0.73	0.81	0.90	0.95	0.99	[18] Discount Factor
\$26,457	[39] Equity Value		10.92%	10.92%	10.92%	10.92%	10.92%	10.92%	10.92%	10.92%	10.92%	[17] WACC
(\$3,747)	[38] Less: Debt		6.98	5.98	4.98	3.98	2.98	1.98	0.98	0.48	0.11	[16] Discount Period
\$605	[37] Plus: Cash		12/31/20	12/31/19	12/31/16 12/31/17 12/31/18	12/31/17	12/31/16	12/31/15	12/31/14	12/31/13	09/30/13	[15] Period End Date
\$29,599	[36] Enterprise Value										07/09/13	[14] Valuation Date
	Equity Value Per Share Calculation											
		\$3,021	\$2,879	\$2,672	\$2,161	\$1,543		(\$168)	(\$919)	(\$132)	(\$173)	[13] Unlevered Free Cash Flow
\$29,599	[35] Enterprise Value	(\$49)	(\$49)		(\$133)			(\$326)	(\$6)	(\$10)	\$23	[12] Less: Increase in Working Capital
n/a	[34] Proceeds of a Potential Spectrum Sale		(\$704)		(\$567)		(\$341)	(\$188)	(\$375)	(\$68)	(\$144)	[11] Less: Capital Expenditures
\$1,105	[33] Present Value of NOLs	\$281	\$281		\$272			\$258	\$254	\$62	\$62	[10] Plus: Non-Cash Expenses
n/a	[32] Present Value of Interest Tax Shield	\$704	\$331	\$310	\$265	\$229	\$493	\$614	\$600	\$138	\$138	[9] Plus: Depreciation & Amortization
\$28,495	[31] Present Value of Unlevered Firm											
	Enterprise Value	\$2,790	\$3,022	\$2,870	\$2,323	\$1,656	\$786	(\$526)	(\$255) (\$1,392)	(\$255)	(\$253)	
		(\$1,710)	(\$1,759) (\$1,852)		(\$1,015) (\$1,424)		(\$482)	\$0	\$0	\$0	\$0	[7] Less: Taxes (@ 38.0%)
\$28,495	[30] Present Value of Unlevered Firm											
\$4,636	[29] Present Value of Free Cash Flows	\$4,500	\$4,874	\$4,629	\$3,747	\$2,672		(\$526)	(\$255) (\$1,392)	(\$255)	(\$253)	EBIT
\$23,859	[28] Present Value of Terminal Value	(\$704)	(\$331)	(\$310)	(\$265)	(\$229)	(\$493)	(\$614)	(\$600)	(\$138)	(\$138)	[5] Less: Depreciation and Amortization
		(\$281)	(\$281)	(\$276)	(\$272)	(\$266)	(\$262)	(\$258)	(\$254)	(\$62)	(\$62)	[4] Less: Non-Cash Expenses
\$49,180	[27] Future Value of Terminal Value	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(\$33)	(88)	(88)	[3] Less: Stock Based Compensation
4.50%	[26] Terminal Free Cash Flow Growth Rate	\$5,517	\$5,517	\$5,248	\$4,316	\$3,199	\$2,056	\$378	(\$505)	(\$46)	_	[2] Adjusted EBITDA Excluding Write-O
\$3,021	[25] Terminal Free Cash Flow											
	Value of Unlevered Firm	\$7,040	\$7,040	\$6,640	\$5,666	\$4,608	\$3,415	\$1,875	\$966	\$309	\$312	[1] Revenue
		Terminal	2020	2019	2018	2017	2016	2015	2014	04 2013	Q3 2013 Q4 2013	USD in millions, except per share data

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CONFIDENTIAL Exhibit 19-C Clearwire Corporation Clearwire Corporation % Corrected WACC and Jarrell's 4.5% Pe
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Based on Cornell's 10.66% Corrected WACC and Jarrell's 4.5% Perpetuity Growth Rate WACC Equivalent Using Multiple Customer Case (MCC) Projections

		n/a n/a	n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	 [21] Interest [22] Interest Tax Shield [23] Interest Tax Shield Availability [24] Present Value of Interest Tax Shield
\$16.00	[41] Equity Value Per Share		100% \$1,420	100% \$1,458	100% \$1,305	, 100% \$1,031	100% \$744	100% (\$138)	100% (\$832)	100% (\$126)	91% 1 (\$155)	[19] Percent of Cash Flow Available [20] Present Value of Unlevered Free Cash
\$27,956 1,747.4	[39] Equity Value [40] Shares Outstanding	0.49	10.66% 0.49	10.66% 0.55			1	<u> </u>	10.66% 0.91	10.66% 0.95	10.66% 0.99	
(\$3,747)	[38] Less: Debt		6.98	5.98					0.98	0.48	0.11	_
\$605	[37] Plus: Cash		12/31/20	12/31/16 12/31/17 12/31/18 12/31/19 12/31/20	12/31/18	12/31/17	12/31/16	12/31/14 12/31/15	12/31/14	12/31/13	09/30/13	[15] Period End Date
\$31,098	Equity Value Per Share Calculation [36] Enterprise Value										07/09/13	[14] Valuation Date
		\$3,021	\$2,879	\$2,672	\$2,161	\$1,543	\$1,005	(\$168)	(\$919)	(\$132)	(\$173)	[13] Unlevered Free Cash Flow
\$31,098	[35] Enterprise Value	(\$49)	(\$49)	(\$121)		(\$148)		(\$326)	(\$6)	(\$10)	\$23	_
n/a	[34] Proceeds of a Potential Spectrum Sale	(\$704)	(\$704)	(\$664)			_	(\$188)	(\$375)	(\$68)	(\$144)	_
\$1,115	[33] Present Value of NOLs	\$281	\$281	\$276	\$272			\$258	\$254	\$62	\$62	[10] Plus: Non-Cash Expenses
n/a	[32] Present Value of Interest Tax Shield	\$704	\$331	\$310	\$265	\$229	\$493	\$614	\$600	\$138	\$138	[9] Plus: Depreciation & Amortization
\$29,983	[31] Present Value of Unlevered Firm											
	<u>Enterprise Value</u>	\$2,790			\$2,323			(\$526)	(\$255) (\$1,392)	(\$255)	(\$253)	[8] NOPAT
		(\$1,710)	(\$1,852)	(\$1,759)	(\$1,015) (\$1,424)		(\$482)	\$0	\$0	\$0	\$0	[7] Less: Taxes (@ 38.0%)
\$29,983	[30] Present Value of Unlevered Firm											
\$4,706	[29] Present Value of Free Cash Flows	\$4,500	⇔	\$4,629		\$2,672	\$1,269	(\$526)	(\$1,392)	(\$255)	(\$253)	[6] EBIT
\$25,276	[28] Present Value of Terminal Value	(\$704)			(\$265)				(\$138) (\$600)	(\$138)	(\$138)	
		(\$281)	(\$281)				(\$262)	_	(\$254)	(\$62)	(\$62)	
\$51,256	[27] Future Value of Terminal Value	(\$33)							(\$33)	(88)	(88)	[3] Less: Stock Based Compensation
4.50%	[26] Terminal Free Cash Flow Growth Rate	\$5,517	\$5,517	\$5,248	\$4,316	\$3,199	\$2,056	\$378	(\$505)	(\$46)) (\$44)	[2] Adjusted EBITDA Excluding Write-O
\$3,021	[25] Terminal Free Cash Flow											
	Value of Unlevered Firm	\$7,040	\$7,040	\$6,640	\$5,666	\$4,608	\$3,415	\$1,875	\$966	\$309	\$312	[1] Revenue
		Terminal	2020	2019	2018	2017	2016	2015	2014	Q3 2013 Q4 2013 2014	Q3 2013	USD in millions, except per share data

CONFIDENTIAL Exhibit 19-C Clearwire Corporation % Corrected WACC and Jarrell's 4.5% Pe	
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Based on Cornell's 10.26% Corrected WACC and Jarrell's 4.5% Perpetuity Growth Rate WACC Equivalent Using Multiple Customer Case (MCC) Projections

		n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	 [21] Interest [22] Interest Tax Shield [23] Interest Tax Shield Availability [24] Present Value of Interest Tax Shield
\$17.46	[41] Equity Value Per Share		100% \$1,456	100% \$1,490	\$1,328	\$1,046	100% \$752	(\$139)	100% (\$835)	100% (\$126)	91% 1 (\$155)	[19] Percent of Cash Flow Available [20] Present Value of Unlevered Free Cash
\$30,531 1,748.1	[39] Equity Value [40] Shares Outstanding	0.51	10.26% 0.51	10.26%			-	_	10.26% 0.91	10.26%	0.99	
(\$3,747)	[38] Less: Debt		6.98	5.98	4.98				0.98	0.48	0.11	_
\$605	[37] Plus: Cash		12/31/20	$12/31/14 \ 12/31/15 \ 12/31/16 \ 12/31/17 \ 12/31/18 \ 12/31/19 \ 12/31/20$	12/31/18	12/31/17	12/31/16	12/31/15	12/31/14	12/31/13	09/30/13	
\$73 F73	Equity Value Per Share Calculation										07/09/13	[14] Valuation Date
		\$3,021	\$2,879	\$2,672		~	-		(\$919)	(\$132)	(\$173)	
\$33,673	[35] Enterprise Value	(\$49)	(\$49)	(\$121)	(\$133)	(\$148)	(\$194)	(\$326)	(\$6)	(\$10)	\$23	
n/a	[34] Proceeds of a Potential Spectrum Sale	(\$704)	(\$704)	(\$664)					(\$375)	(\$68)	(\$144)	
\$1,132	[33] Present Value of NOLs	\$281	\$281	\$276	\$272	\$266			\$254	\$62	\$62	[10] Plus: Non-Cash Expenses
n/a	[32] Present Value of Interest Tax Shield	\$704	\$331	\$310	\$265	\$229	\$493		\$600	\$138	\$138	[9] Plus: Depreciation & Amortization
\$32,541	[31] Present Value of Unlevered Firm											
	Enterprise Value	\$2,790	\$3,022		\$2,323			\$\$)	(\$255) (\$1,392)	(\$255)	(\$253)	
		(\$1,710)	(\$1,852)	(\$1,759) (\$1,852)	(\$1, 424)	(\$1,015)	(\$482)	\$0	\$0	\$0	\$0	[7] Less: Taxes (@ 38.0%)
\$32,541	[30] Present Value of Unlevered Firm											
\$4,817	[29] Present Value of Free Cash Flows	\$4,500	Ś	\$4,629	\$3,747		\$1,269	(\$526)	(\$255) (\$1,392)	(\$255)	(\$253)	[6] EBIT
\$27,724	[28] Present Value of Terminal Value	(\$704)							(\$600)	(\$138)	(\$138)	[5] Less: Depreciation and Amortization
		(\$281)	(\$281)				_	(\$258)	(\$254)	(\$62)	(\$62)	
\$54,816	[27] Future Value of Terminal Value	(\$33)	(\$33)		(\$33)	(\$33)	(\$33)		(\$33)	(88)	(88)	[3] Less: Stock Based Compensation
4.50%	[26] Terminal Free Cash Flow Growth Rate	\$5,517	\$5,517	\$5,248	\$4,316	\$3,199	\$2,056	\$378	(\$505)	(\$46)) (\$44)	[2] Adjusted EBITDA Excluding Write-O
\$3,021	[25] Terminal Free Cash Flow											
	Value of Unlevered Firm	\$7,040	\$7,040	\$6,640	\$5,666	\$4,608	\$3,415	\$1,875	\$966	\$309	\$312	[1] Revenue
		Terminal	2020	2019	2018	2017	2016	2015	2014	Q3 2013 Q4 2013 2014	Q3 2013	USD in millions, except per share data

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WACC Equivalent Using Modified Multiple Customer Case (MCC) Projections	Clearwire Corporation Rased on Cornell's 10 92% WACC and 3 35% Pernetuity Crowth Rate	Exhibit 19-D	CONFIDENTIAL
MCC) Projections	Growth Rate		

[21] Interestn/ar[22] Interest Tax Shieldn/ar[23] Interest Tax Shield Availabilityn/ar[24] Present Value of Interest Tax Shieldn/ar	 [19] Percent of Cash Flow Available [20] Present Value of Unlevered Free Cash (\$75) (\$112) 	Discount Factor 0.99	Discount Period 0.11	[14] Valuation Date 07/09/13 [15] Period End Date 09/30/13 12/31/13		Unlevered Free Cash Flow (\$83)	[11] Less: Capital Expenditures (\$54) (\$54) [12] Less: Increase in Working Capital \$23 (\$10)	Plus: Non-Cash Expenses \$62	[9] Plus: Depreciation & Amortization \$138 \$138	[8] NUPAT (\$253) (\$25	Less: Taxes (@ 38.0%) \$0		EBIT (\$253)	Less: Depreciation and Amortization (\$138) ()	(\$62) ([3] Less: Stock Based Compensation (\$8) (\$8)	[2] Adjusted EBITDA Excluding Write-O (\$44) (\$46)	[1] Revenue \$312 \$309	USD in millions, except per share data QS 2013 Q4 2015
n/a n/a n/a n/a n/a n/a n/a n/a	2) (\$820)	-		13 12/31/14			4) (\$364) 0) (\$6)		8 \$600	(\$255) (\$1,392)	0 \$0		(\$255) (\$1,392)		2) (\$254)	-		9 \$966	13 2014
/a n/a /a n/a /a n/a /a n/a	% 100% 0) (\$1,308)			14 12/31/1:		(\$908) (\$1,606)	4) (\$1,626)	4 \$258	0 \$614	(3266) (2					4) (\$258)		5) \$378	6 \$1,875	2015
a n/a a n/a a n/a a n/a	6 100%) \$57	-		12/31/15 12/31/16 12/31/17 12/31/18 12/31/19			(\$1,269)	\$262		98/80) (\$262)		\$2,056	\$3,415	2016
n/a n/a n/a n/a	\$1,264			12/31/17		~	(\$148)		\$229	\$1,626					(\$266)		\$3,199	\$4,608	2017
n/a n/a n/a	100% \$1,295			12/31/18		\$2,169	(\$558)	\$272	\$265	\$2,323	(\$1,015) (\$1,424) (\$1,759) (\$1,852)				(\$272)		\$4,316	\$5,666	2018
n/a n/a n/a	100% \$1,327	0.54	5.98			\$2,466	(\$171)	\$276	\$310	\$2,870	(\$1,759)		\$4,629	(\$310)	(\$276)	(\$33)	\$5,248	\$6,640	2019
n/a n/a n/a	100% \$1,422	10.92% 0.49	6.98	12/31/20		\$2,931	(\$652) (\$49)	\$281	\$331	\$3,022	(\$1,852)		\$4,874	(\$331)	(\$281)	(\$33)	\$5,517	\$7,040	2020
n/a n/a		0.49				\$3,054	(\$652) (\$49)	\$281	\$652	\$2,822	(\$1,730)		\$4,552	(\$652)	(\$281)	(\$33)	\$5,517	\$7,040	Terminal
	[41] Equity Value Per Share	[40] Equity value [40] Shares Outstanding	[38] Less: Debt	[36] Enterprise Value [37] Plus: Cash	Equity Value Per Share Calculation		[34] Proceeds of a Potential Spectrum Sale	[33] Present Value of NOLs	[32] Present Value of Interest Tax Shield	Enterprise Value [31] Present Value of Unlevered Firm		[30] Present Value of Unlevered Firm	[29] Present Value of Free Cash Flows	[28] Present Value of Terminal Value		[27] Future Value of Terminal Value	[26] Terminal Free Cash Flow Growth Rate	<u>Value of Unlevered Firm</u> [25] Terminal Free Cash Flow	
	\$12.17	\$21,235 1,745.4	(\$3,747)	\$24,378 \$605		01 04	n/a	\$1,105	n/a	\$23,273		\$23,273	\$3,049	\$20,224		\$41,688	3.35%	\$3,054	

Based on Cornell's 10.92% WACC and Jarrell's 4.5% Perpetuity Growth Rate WACC Equivalent Using Modified Multiple Customer Case (MCC) Projections	Clearwire Corporation	Exhibit 19-D	CONFIDENTIAL
6 Perpetuity Growth Rate er Case (MCC) Projections			

		n/a n/a	n/a n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a n/a	 [21] Interest [22] Interest Tax Shield [23] Interest Tax Shield Availability [24] Present Value of Interest Tax Shield
\$14.38	[41] Equity Value Per Share		\$1,422	100% \$1,327	100% \$1,295	100% \$1,264	100% \$57	100% (\$1,308)	100% (\$820)	100% (\$112)	91% (\$75)	[19] Percent of Cash Flow Available [20] Present Value of Unlevered Free Cash
1,746.5	[40] Shares Outstanding	0.49	0.49			0.66	0.73		0.90	0.95	0.99	
(\$3,747) \$25,123	[38] Less: Debt [39] Equity Value		6.98 10.92%	5.98 10.92%	4.98 10.92%	3.98 10.92%	2.98	1.98	0.98	0.48	0.11	[16] Discount Period
\$605	[37] Plus: Cash		12/31/20	12/31/19	$12/31/14 \ 12/31/15 \ 12/31/16 \ 12/31/17 \ 12/31/18$	12/31/17	12/31/16	12/31/15	12/31/14	12/31/13	09/30/13	
\$28.266	Equity Value Per Share Calculation [36] Enterprise Value										07/09/13	[14] Valuation Date
		\$3,054	\$2,931	\$2,466	\$2,169	\$1,909	\$78	(\$1,606)	(806\$)	(\$118)	(\$83)	[13] Unlevered Free Cash Flow
\$28,266	[35] Enterprise Value		(\$49)	(\$121)	(\$133)		(\$194)	(\$326)	(\$6)	(\$10)	\$23	[12] Less: Increase in Working Capital
n/a		(\$652)	(\$652)	(\$870)	(\$558)		(\$1, 269)	(\$1,626)	(\$364)	(\$54)	(\$54)	
\$1,105	[33] Present Value of NOLs	\$281	\$281	\$276	\$272		\$262	\$258	\$254	\$62	\$62	[10] Plus: Non-Cash Expenses
n/a	[32] Present Value of Interest Tax Shield	\$652	\$331	\$310	\$265	\$229	\$493	\$614	\$600	\$138	\$138	[9] Plus: Depreciation & Amortization
\$27,161	Enterprise Value [31] Present Value of Unlevered Firm	\$2,822	\$3,022	\$2,870	\$2,323	\$1,656	\$786	(\$526)	(\$255) (\$1,392)	(\$255)	(\$253)	[8] NOPAT
		(\$1,730)	(\$1,852)	(\$1,759) (\$1,852)	(\$1,015) (\$1,424)		(\$482)	\$0	\$0	\$0	\$0	[7] Less: Taxes (@ 38.0%)
\$27,161	[30] Present Value of Unlevered Firm											
\$3,049		\$4,552	\$4,874			\$2,672			(\$1,392)		(\$253)	EBIT
\$24,112	[28] Present Value of Terminal Value	(\$652)	(\$331)	(\$310)	(\$265)	(\$229)	(\$493)	(3614)	(\$600)	(\$138)	(\$138)	[5] Less: Depreciation and Amortization
		(\$281)	(\$281)			(\$266)	(\$262)		(\$254)		(\$62)	
\$49.703	[27] Future Value of Terminal Value	(\$33)	(\$33)			(\$33)	(\$33)		(\$33)			[3] Less: Stock Based Compensation
4.50%	[26] Terminal Free Cash Flow Growth Rate	\$5,517	\$5,517	\$5,248	\$4,316	\$3,199	\$2,056	\$378	(\$505)		(\$44)	[2] Adjusted EBITDA Excluding Write-O
\$3,054	Value of Unlevered Firm [25] Terminal Free Cash Flow	\$7,040	\$7,040	\$6,640	\$5,666	\$4,608	\$3,415	\$1,875	\$966	\$309	\$312	[1] Revenue
		Terminal	2020	2019	2018	2017	2016	2015	2014	Q3 2013 Q4 2013	Q3 2013	USD in millions, except per share data

FORENSIC ECONOMICS, INC.

C.A. 8508-VCL & 9042-VCL

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Clearwire Corporation	CONFIDENTIAL
Based on Cornell's 10.66% Corrected WACC and Jarrell's 4.5%	Exhibit 19-D
e Corporation	IDENTIAL
CC and Jarrell's 4.5%	ibit 19-D

WACC Equivalent Using Modified Multiple Customer Case (MCC) Projections

Perpetuity Growth Rate

[17] [15] [12] [13] [11] [8] $\begin{bmatrix} 5 \\ 5 \end{bmatrix}$ Ξ [23] [24] [21] [22] [18] [19] [20] [16] [14] [10] USD in millions, except per share data [9] Present Value of Interest Tax Shield Interest Tax Shield Interest Period End Date Plus: Non-Cash Expenses WACC Valuation Date Unlevered Free Cash Flow Less: Capital Expenditures NOPAT Revenue Interest Tax Shield Availability Present Value of Unlevered Free Cash Percent of Cash Flow Available Discount Factor Discount Period Less: Increase in Working Capital Plus: Depreciation & Amortization Less: Taxes (@ 38.0%) EBIT Less: Non-Cash Expenses Adjusted EBITDA Excluding Write-O Less: Depreciation and Amortization Less: Stock Based Compensation Q3 2013 Q4 2013 09/30/13 07/09/13 10.66%(\$253) \$138 \$62 (\$253) (\$138)0.11 (\$44) (\$8) \$312 (\$75) 0.99(\$54) \$23 (\$62) (\$83) 91% S n/a n/a n/a n/a 12/31/13 12/31/14 10.66% (\$113) (\$255) (\$118)(\$255)(\$138)100%0.48 \$138 \$62 \$309 0.95 (\$54) (\$46) (\$8) (\$62) (\$10)S n/a n/a n/a (\$1,392) (\$1, 392)10.66% 10.66% 2014 (\$822) (\$364)(\$254)(\$505) (\$600)0.98(\$908) (\$1,606)\$254 \$600 (\$33) \$966 100% 0.91n/a n/a (\$6)S n/a 12/31/15 12/31/16 (\$1,315) \$1,875 (\$1,626)(\$326) (\$526) 2015 (\$526)(\$258) (\$614)100%\$614 \$378 0.82 1.98\$258 (\$33) S n/a n/a n/a 10.66%(\$1,269)\$2,056 \$3,415 \$1,269 2016 (\$194) \$78 (\$482)(\$262) \$493 \$262 \$786 (\$493)(\$33) 100%2.98 0.74 858 n/a n/a n/a n/a 12/31/17 12/31/18 10.66%\$1,656 \$1,276 (\$1,015)\$4,608 \$1,909 \$2,672 \$3,199 2017 (\$148)(\$266) (\$229) 100% \$229 \$266 3.98(\$33) 0.67(\$95) n/a n/a n/a n/a 10.66%\$2,323 (\$1, 424)\$1,310 \$3,747 \$4,316 \$5,666 \$2,169 2018 (\$133) (\$558) (\$272) (\$265) 4.98 \$265 \$272 100%(\$33) 0.60n/a n/a n/a 12/31/19 \$1,346 10.66% \$2,870 (\$1,759) \$5,248 \$6,640 (\$121) \$2,466 \$4,629 2019 (\$870) (\$276) 100%5.98 \$310 \$276 (\$310)(\$33) 0.55 n/a n/a n/a n/a 12/31/20 10.66%(\$1,852) \$3,022 \$5,517 \$7,040 \$1,446 \$2,931 \$4,874 2020 (\$652) (\$281)(\$331) 100%\$331 \$281 6.98 0.49 (\$33) (\$49) n/a n/a n/a Terminal \$2,822 (\$1,730)\$3,054 \$5,517 \$7,040 \$4,552 (\$281) (\$652) (\$652)\$652 \$281 (\$33) 0.49 (\$49) n/a n/a [36] Enterprise V [37] Plus: Cash [41] Equity Value Per Share [35] [32] [33] [30] Present Value of Unlevered Firm [40] Shares Outstanding [39] Equity Value [38] Less: Debt [34] Proceeds of a Potential Spectrum Sale Enterprise Value [31] Present Value of Unlevered Firm [28] Present Value of Terminal Value[29] Present Value of Free Cash Flows [26] Terminal Free Cash Flow Growth Rate[27] Future Value of Terminal Value [25] Terminal Free Cash Flow Value of Unlevered Firm Equity Value Per Share Calculation Enterprise Value Present Value of Interest Tax Shield Enterprise Value Present Value of NOLs \$29,771 \$29,771 \$25,545 \$3,110 \$51,800 \$26,628 (\$3,747) \$28,655 \$28,655 \$1,115 \$15.24 1,747.0 4.50% \$3,054 \$605 n/a n/a

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CONFIDENTIAL Exhibit 19-D Clearwire Corporation Corrected WACC and Jarrell's 4.5%
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USD in millions, except per share data Q3 2013 Q4 2013 2014 Based on Cornell's 10.26% Corrected WACC and Jarrell's 4.5% Perpetuity Growth Rate WACC Equivalent Using Modified Multiple Customer Case (MCC) Projections 2015 2016 2017 2018 2019 2020 Terminal

		n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	 [21] Interest [22] Interest Tax Shield [23] Interest Tax Shield Availability [24] Present Value of Interest Tax Shield
\$16.72	[41] Equity Value Per Share		\$1,483	\$1,375	\$1,334	\$1,294	100% \$58	(\$1,324)	(\$825)	(\$113)	9170 (\$75)	[19] Fercent of Cash Flow Available [20] Present Value of Unlevered Free Cash
\$29,215 1,747.8	[39] Equity Value [40] Shares Outstanding	0.51	10.26% 0.51	10.26% 0.56	_		10.26% 0.75	_	10.26% 0.91	10.26% 0.95	10.26% 0.99	
(\$3,747)	[38] Less: Debt		6.98		4.98	3.98	2.98	1.98	0.98	0.48	0.11	
\$32,3 <i>5</i> 7 \$605	[36] Enterprise Value [37] Plus: Cash		12/31/20	12/31/19	12/31/18	12/31/13 12/31/14 12/31/15 12/31/16 12/31/17	12/31/16	12/31/15	12/31/14	12/31/13	07/09/13 09/30/13	[14] Valuation Date[15] Period End Date
		\$3,054	\$2,931	\$2,466		\$1,909	\$78	(\$908) (\$1,606)			(\$83)	[13] Unlevered Free Cash Flow
\$32,357	[35] Enterprise Value	(\$49)	(\$49)	(\$121)	(\$133)	(\$148)		(\$326)			\$23	[12] Less: Increase in Working Capital
n/a	[34] Proceeds of a Potential Spectrum Sale	(\$652)	(\$652)				S	(\$1,626)	(\$364)	(\$54)	(\$54)	[11] Less: Capital Expenditures
\$1,132	[33] Present Value of NOLs	\$281	\$281			\$266	\$262	\$258	\$254	\$62	\$62	[10] Plus: Non-Cash Expenses
n/a	[32] Present Value of Interest Tax Shield	\$652	\$331	\$310	\$265	\$229	\$493	\$614	\$600	\$138	\$138	[9] Plus: Depreciation & Amortization
\$31,225	[31] Present Value of Unlevered Firm											
	<u>Enterprise Value</u>	\$2,822	\$3,022	\$2,870				S\$)	(\$255) (\$1,392)		(\$253)	
		(\$1,730)	(\$1,759) (\$1,852)	(\$1,759)	(\$1,424)	(\$1,015)	(\$482)	\$0	\$0	\$0	\$0	[7] Less: Taxes (@ 38.0%)
\$31,225	[30] Present Value of Unlevered Firm											
\$3,207	[29] Present Value of Free Cash Flows	\$4,552	\$4,874	\$4,629	\$3,747			(\$526)	(\$1, 392)	(\$255)	(\$253)	[6] EBIT
\$28,018	[28] Present Value of Terminal Value	(\$652)	(\$331)	(\$310)		(\$229)	(\$493)		(\$600)	(\$138)	(\$138)	[5] Less: Depreciation and Amortization
		(\$281)	(\$281)	(\$276)					(\$254)	(\$62)	(\$62)	[4] Less: Non-Cash Expenses
\$55,398	[27] Future Value of Terminal Value	(\$33)	(\$33)	(\$33)			(\$33)	(\$33)	(\$33)	(88)	(88)	[3] Less: Stock Based Compensation
4.50%	[26] Terminal Free Cash Flow Growth Rate	\$5,517	\$5,517	\$5,248	\$4,316		\$2,056		(\$505)	(\$46)		[2] Adjusted EBITDA Excluding Write-O
\$3,054	[25] Terminal Free Cash Flow	0.00 D	\$1,010	0.000	40,000	÷ ,000	<i>40,110</i>	\$1,070	0.000	000	÷.	
	Value of Unlevered Firm	\$7 040	\$7 040	\$6 640	85 666	\$4 608	\$3 415	\$1 875	\$966	60 £\$	\$312	[1] Revenue
			a cho	HOL)	MOTO	LOT 1	FOTO	2010	101	C102 TS C102 CS	(107 CV	

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CLEARWIRE CORPORATION Corrections to Cornell's Discount Rate Corrections shown in shaded cells	COUNT Rate					
	Cornell Opinion	Cornell's WACC Equivalent	Corne	Corrections to Cornell's Implied WACC	cc	Jarrell Opinion
	[A]	[B]	[0]	[a]	Ξ	[7]
Cost of Equity: Risk-free rate @ 7/9/2013	3.36%	3.36%	3.36%	3.36%	3.36%	3.36%
Beta	1.338	1.475	1.327	1.260	1.260	1.260
Market risk premiun	5.50%	5.50%	6.11%	6.11%	6.11%	6.11%
Equity size premiun	1.72%	1.72%	1.72%	1.72%	1.72%	1.70%
Cost of equity	12.44%	13.19%	13.19%	12.78%	12.78%	12.76%
Cost of Debt:						
Tax rate	n/a	38.00%	38.00%	38.00%	38.00%	38.00%
After tax cost of debt	n/a	6.88%	6.88%	6.88%	5.79%	5.79%
Debt to Total Capitalization:	n/a	36.0%	36.0%	36.0%	36.0%	36.5%
WACC	n/a	10.92%	10.92%	10.66%	10.26%	10.22%
Sources: Cornell Report, Exhibit 4; Jarrell Report, Exhibit 11.	Report, Exhibit 1	1.				

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FORENSIC ECONOMICS, INC.

Exhibit 20

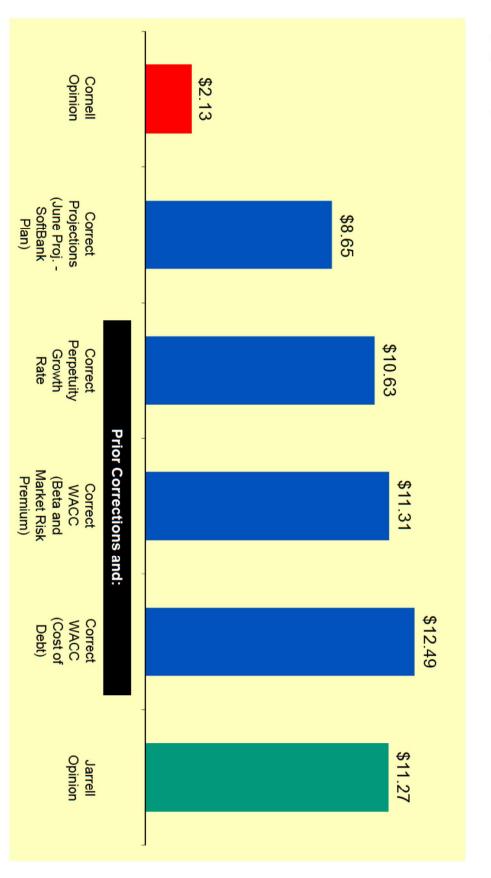
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Exhibit 21

CLEARWIRE CORPORATION

Summary of Corrections to Cornell's APV Analysis

Equity value per share



FORENSIC ECONOMICS, INC.