



IN THE COURT OF CHANCERY OF THE STATE OF DELAWARE
IN AND FOR NEW CASTLE COUNTY

IN RE UNITED STATES CELLULAR)
OPERATING COMPANY) Consolidated C.A. No. 18696-NC

MEMORANDUM OPINION

Submitted: September 9, 2004
Decided: January 6, 2005

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PARSONS, Vice Chancellor

This is a consolidation of two statutory appraisal actions brought pursuant to 8 *Del. C.* § 262. Trial was held on April 14, 2004, followed by post-trial briefing and argument. Petitioners collectively owned 30,328 shares (approximately 3%) of Janesville Cellular Telephone Company, Inc. (“Janesville”) and 13,459 shares (approximately 1%) of Sheboygan Cellular Telephone Company, Inc. (“Sheboygan”) (collectively, the “Companies”). The Companies were merged with and into Respondent, United States Cellular Operating Company, Inc. (“USCOC”), on October 31, 2000 (the “Merger Date”). The mergers were effected through short form mergers under 8 *Del. C.* § 253. The shareholders of Janesville received \$43.85 per share and the shareholders of Sheboygan received \$21.45 per share. For the reasons set forth below, the Court concludes that, as of the Merger Date, the fair value of Janesville was \$54,001,523.91 (\$54.00 per share) and the fair value of Sheboygan was \$30,132,475.98 (\$30.13 per share).

I. FACTUAL BACKGROUND

A. The Parties

1. Janesville

As of the Merger Date, Janesville was a private company engaged in the non-wireline cellular telephone industry.¹ Janesville held the non-wireline cellular telephone license issued by the FCC for the Janesville-Beloit metropolitan statistical area (“MSA”), which consisted of Rock County, Wisconsin. In 1999, the Janesville MSA (“JMSA”) had

¹ For purposes of this Memorandum Opinion, this industry is referred to by the parties and experts and the Court as wireless, cellular, and non-wireline interchangeably.

a population of approximately 151,900, and was ranked 237th out of the 323 MSAs in the United States.²

Compared to the cellular telephone industry in general, Janesville enjoyed positive performance ratios. Despite being one of the smaller MSAs, in 1999 Janesville had a higher level of subscriber penetration compared to the wireless industry (16.6% compared to 10.6%) and a lower monthly churn rate (1.4% compared to approximately 2.0%).³ The JMSA's smaller population and below average population growth, however, could limit its value.

In October 2000, Janesville's main competitor was Ameritech Mobile Communications ("Ameritech"). While Ameritech began serving the JMSA in 1987, it was generally regarded as a weak competitor. As of the Merger Date, however, Ameritech was in the process of merging with SBC Communications, a company reputed to be more aggressive.⁴ Additionally, cellular operators in 2000 faced competition from the emergence of new telecommunications technologies such as Enhanced Specialized Mobile Radio and Personal Communications Services ("PCS") operators.

² JX 98 at 21. The 2000 census figures reported a population of 152,307. JX 1 at 6.

³ "Churn rate" refers to the ratio of subscribers that leave a company to the overall subscription base of the company.

⁴ SBC and Ameritech reported their planned merger in the summer of 2000. Trial transcript ("Tr.") at 89-90. *See* JX 98 at 21.

2. Sheboygan

As of the Merger Date, Sheboygan was a private company engaged in the cellular telephone industry. Sheboygan held the non-wireline cellular telephone license issued by the FCC for the Sheboygan MSA (“SMSA”), which consisted of Sheboygan County, Wisconsin. In 1999, the SMSA had a population of approximately 113,000 and was ranked 290th out of the 323 MSAs.⁵

Like Janesville, Sheboygan enjoyed positive performance figures. Despite its small MSA, Sheboygan had a higher level of subscriber penetration (14% compared to 10.6%) and a lower monthly churn rate (1.4% compared to approximately 2.0%) than the industry. As with Janesville, however, the SMSA’s small population and low population growth could have a negative impact on Sheboygan’s value.

Sheboygan’s main competitor in its MSA was also Ameritech, which then was merging with SBC Communications. In addition to Ameritech, other wireless companies such as Einstein PCS and Sprint PCS, a nationwide operator, were reportedly developing systems in the SMSA.

3. USCOC

USCOC is a cellular company that participates in various MSAs and rural service areas (“RSAs”). USCOC is a wholly-owned subsidiary of United States Cellular Corporation (“US Cellular”). In 1997, as a part of an exchange of cellular properties among BellSouth and others, USCOC acquired majority interests in Janesville and

⁵ Year 2000 census figures listed a population of 112,646. JX 1 at 6.

Sheboygan. After it acquired those interests, USCOC continued to purchase shares of the Companies through independent transactions with specific shareholders. In 1999, USCOC began considering the potential merger of Janesville and Sheboygan into itself. The stated purpose of the merger was to consolidate USCOC's operations and minimize costs.

B. The Industry

USCOC and the Companies were all engaged in the non-wireline cellular telephone industry. The cellular telephone industry consists of wireline and non-wireline carriers operating in approximately 300 MSAs and 400 RSAs. The FCC, in effect, created a duopoly in each MSA and RSA by licensing only two carriers, one wireline and one non-wireline, to provide competing cellular service. Wireline carriers are generally entities that have provided traditional telephone services, whereas non-wireline carriers are generally new entrants into the phone business. Because the FCC now permits telephone companies to acquire non-wireline licenses outside of their wireline service areas and non-wireline companies to control wireline cellular licenses, the practical distinction between wireline and non-wireline licenses has become unimportant. Nevertheless, the terms continue to be used in the industry.

According to a survey conducted by the Cellular Telecommunications Industry Association (“CTIA”), as of June 2000 there were approximately 97 million cellular telephone subscribers. They represent approximately 35% of the total U.S. population and generate approximately \$49.2 billion in annual revenues. CTIA’s survey evidences a 27.2% increase in both subscribers and service revenue over June 1999 figures.

As of 2000, cellular service was available in virtually all MSAs and RSAs. Most cellular systems generate a majority of their revenues by providing service to subscribers within their licensed market areas. Roaming revenues also may contribute significantly to the total revenues of a cellular company. A cellular system generates roaming revenues when it provides service to customers of other cellular systems who are traveling, or roaming, outside of their home MSA or RSA. In some markets, notably those with small populations, roaming revenues may exceed revenues produced by the company's general subscriber base.

The parties hotly contest the prospects of the wireless industry in the fall of 2000. Petitioners argue that the prospects as of October 31, 2000 were very bright. They note, for example, that in August 1999 industry analysts such as J.P. Morgan projected that high penetration rates would cause the industry to almost double by 2005.⁶ USCOC argues that the state of the wireless industry was not so bright. They rely, for example, on the testimony of Neal Logston, the director of partnership relations at USCOC in October 2000, that:

We were expecting that they [the Companies] would continue with good results but not great results. Because of the local marketplace conditions and increased competition, we expected that they would find it more challenging as time went on to compete in the – in the local marketplace because they are small areas.⁷

⁶ See JX 10.

⁷ Tr. at 151. The position of director of partnership relations was, in essence, a liaison position between USCOC and minority shareholders. Logston's

Furthermore, USCOC's expert, Sanders, opined that the wireless industry in "October 2000 was characterized by intense uncertainty in the industry and unprecedented declines in wireless values, consistent with the 'technology bust' that affected many sectors in the United States economy."⁸

After careful consideration of the record, the Court finds that the wireless industry's future was relatively bright in October of 2000, though not as bright as analysts had thought in earlier years. The Court considers it inappropriate to put as much weight on the transient movement of stock prices in the cellular industry as USCOC does in light of the relatively strong fundamentals of the Companies. The drop in stock prices could represent a symptom of more general concerns about the technology sector, rather than "intense uncertainty" about the cellular industry's future. Petitioners' rosy view, however, must be tempered somewhat in light of emerging indicators, such as earnings warnings issued in 2000, which were causing some concern in the industry.

C. The Transaction

Before the Merger Date, USCOC owned over 90% of both Janesville and Sheboygan. In 1999, USCOC began considering a potential merger with Janesville and Sheboygan. In that connection, USCOC engaged Duff & Phelps ("D&P"), an

responsibilities included handling communications with the shareholders of Janesville and Sheboygan.

⁸ JX 99 at 1. *See* Tr. at 206-13; JX 86-88. While acknowledging that stock prices in the wireless industry had declined after the "technology bust" of early 2000, Petitioners contend that the alleged key drivers of the industry, average service revenue per subscriber ("ARPU") and subscriber penetration, remained strong and showed continuing improvement.

independent valuation firm, to conduct a valuation of Janesville and Sheboygan. D&P analyzed the Companies' historical financial results, budgets, bylaws and market information. D&P also interviewed management and collected additional information where needed. On December 29, 1999, D&P issued a written valuation opinion in which it concluded that Janesville was worth \$42.57 per share, and Sheboygan was worth \$19.69 per share.⁹ USCOC, however, did not proceed with a transaction at that time.

In August of 2000, USCOC again engaged D&P to value Janesville and Sheboygan. D&P examined updated financial performance figures of the Companies, discussed the state of their operations and current outlook with their management teams, and looked at current market prices and any potentially comparable sales transactions in the cellular industry. D&P's analysis included a discounted cash flow ("DCF") calculation as well as a comparable transactions approach. On September 13, 2000, D&P issued a written opinion that the fair market value at that time of Janesville was \$43.85 per share and Sheboygan was \$21.45 per share.¹⁰ There is no evidence that USCOC gave D&P any target value numbers in connection with their 1999 and 2000 valuations.

In accordance with 8 *Del. C.* § 253, the USCOC board of directors resolved to merge Janesville and Sheboygan with and into USCOC as of October 31, 2000. Consistent with the values determined by D&P and pursuant to the Merger, USCOC offered shareholders of Janesville \$43.85 per share and shareholders of Sheboygan

⁹ See JX 17.

¹⁰ JX 25-27.

\$21.45 per share. USCOC also advised the Companies' minority shareholders of their right to seek appraisal of their shares pursuant to 8 *Del. C.* § 262 in lieu of the merger consideration. Petitioners properly demanded and perfected their right to seek appraisal by delivering to USCOC written demands for appraisal pursuant to section 262.

D. Experts

The Companies' management teams had no history of making multi-year forecasts. They budgeted only one year into the future. The last budget prepared before the Mergers was for 2000; it was prepared in late 1999. Consequently, the financial experts called by the parties to this dispute did not have the benefit of any significant future projections by management in performing their valuation analyses.

1. Petitioners' expert

Petitioners offer the expert opinion of Richard C. Harris ("Harris"). Harris received a B.S. in accounting from Pennsylvania State University and an MBA in finance from the Wharton School of the University of Pennsylvania. He also obtained CPA certification in the Commonwealth of Pennsylvania. Harris is the president of Harris & Associates, a consulting firm that provides strategic, financial and operating services to companies, primarily in the wireless telecommunications industry. In addition to his consulting, Harris has served as CFO for three different telecommunications companies.¹¹

¹¹ Around the time of the mergers, Harris was serving as an interim CFO for Independent Wireless One, a wireless company that was then conducting a private equity placement.

In determining the fair value of the Companies, Harris performed a DCF analysis and a comparable transactions analysis.¹² Harris' DCF calculation yielded per share values of \$72.70 for Janesville and \$39.64 for Sheboygan. Harris' comparable transactions analysis yielded per share values of \$73.08 for Janesville and \$43.15 for Sheboygan. Harris then gave equal weight to the values obtained from each method, because they were within 10% of each other, and derived a fair value recommendation of \$72.89 per share for Janesville and \$41.39 per share for Sheboygan.¹³

a. Harris' DCF calculation

In his DCF analysis, Harris forecasted revenues and expenses over a ten-year period (the "Forecasting Period"),¹⁴ computed a terminal value, and then discounted all of the projected future cash flows back to the Merger Date.¹⁵ Harris utilized the DCF model

¹² In his report, Harris refers to what the Court generally terms a "DCF analysis" as his "income or investment" approach. What the Court generally terms a "comparable transactions analysis," Harris calls his "market approach."

¹³ JX 1 at 10-12.

¹⁴ Harris adopted D&P's forecasting period which runs from October 31, 2000 to December 31, 2009. Respondent's expert, Sanders, utilized a forecasting period that runs from October 31, 2000 to October 31, 2010. Both experts used the appropriate corresponding method to discount their respective forecasting periods. The Court defines the Forecasting Period as the period between October 31, 2000 and December 31, 2009, thereby encompassing only the time period during which the experts' forecasting periods overlapped. When applying Sanders' forecasted trends, the Court applied them to the 2001-2009 portion of the Forecasting Period. When applying Harris' forecasted trends, the Court applied them to the 2000-2009 portion of the Forecasting Period.

¹⁵ The structure of this analysis comports with the accepted DCF formula using a terminal value. See Shannon Pratt, *The Lawyer's Business Valuation Handbook* 114 (Am. Bar Ass'n 2000).

developed by D&P as a starting point, but changed inputs where he did not agree with D&P's underlying assumptions. Harris' calculations yielded a \$72,703,000 (\$72.70 per share) value for Janesville and a \$39,638,000 (\$39.64 per share) value for Sheboygan.

Revenue Forecast. Harris used a number of inputs to compute future revenue figures for the Companies. His analysis, however, focused mainly on subscriber growth forecasts and revenue per subscriber estimates.

In forecasting subscriber growth, Harris analyzed the numbers that D&P used for population, population growth, incremental penetration, and churn. Harris did not use D&P's population input, but accepted their population growth, incremental penetration and churn assumptions.

The population inputs represent the populations of the JMSA and SMSA. Harris rejected D&P's estimated population inputs in favor of numbers he obtained from census data for the year 2000.¹⁶

The census data showed that the population growth rates for the JMSA and SMSA from 1990 to 2000 were 9.17% and 8.44%, respectively. The population growth percentages D&P used in its analysis forecasted slightly less growth from 2000 to 2009 than in the previous decade. Having found no reason to believe that D&P's original estimates were unreasonable, Harris accepted D&P's projections of population growth for the Forecasting Period and utilized them in his calculations.

¹⁶ JX 1 at 6. Because there was no dispute about it, the Court assumes the census information was known or knowable as of the Merger Date.

Incremental subscriber penetration is the net number of new subscribers added during a year, expressed as a percentage of the total population within an MSA.¹⁷ It is a measurement of a company's ability to garner new subscribers. Based on the incremental penetration averages for the industry, Harris found D&P's incremental penetration assumptions for the Companies reasonable and utilized them in his own calculations.

Churn refers to the average percentage of subscribers who cancel their service with a company. It may be expressed on a monthly or annual basis, and represents a company's ability to retain existing subscribers. After a review of the Companies' historical churn figures, Harris accepted the churn inputs used by D&P as reasonable.

In forecasting revenue per subscriber, Harris looked at two major inputs, ARPU and roaming revenues. Harris rejected D&P's assumptions for both of these inputs because, in his opinion, they were not supported by industry data and recent trends.

ARPU is the average monthly service revenue received per subscriber. In his DCF analysis, Harris forecasted ARPU for 2000 to equal the actual ARPU numbers from the first six months of 2000.¹⁸ He then reduced his year 2000 figures by half a percentage point a per year for the duration of the Forecasting Period. Harris justified this slight decline by noting that, while the historical figures for ARPU declined during the latter

¹⁷ Incremental subscriber penetration is calculated by taking the total number of subscribers added during the year, subtracting those that canceled their service with the company, and then dividing by the population of the MSA.

¹⁸ JX 1 at 7. The specific numbers for 2000 were \$30.06 for Janesville, and \$29.10 for Sheboygan. *Id.* Harris stated that industry statistics showed that results did not change significantly between the first six months of 2000 and the last six months supported his conclusion. *Id.*

part of the 1990s, they stabilized by mid 1999 and actually increased between June 1999 and June 2000.

Roaming revenues are revenues received from subscribers of other carriers when they use a company's services. In accordance with D&P's analysis, Harris incrementally reduced roaming revenues for the first three years of the Forecasting Period. Roaming revenues had declined for a few years before 2000, and Harris believed that decline would continue due to "one-rate plans or bucketed minute plans" that had been introduced by national service companies.¹⁹ Harris also expected, however, that this decline in roaming rates would stabilize over time. Thus, contrary to D&P, Harris held roaming revenues constant for the latter part of the Forecasting Period.

Expense Forecast. In determining the appropriate forecast of expenses, Harris considered the assumptions underlying D&P's general and administrative ("G&A") expense, system operating expense, and cost-per-gross-add ("CPGA") inputs. Harris modified their inputs in all of these categories.

Harris modified D&P's projected G&A expenses, expressed as a percentage of revenue, to reflect a decrease of 1.5% over the Forecasting Period from 19.5% to 18%. Harris made this modification because he projected revenues to increase over time and believed G&A included fixed expense components that would not. Consequently, Harris predicted that G&A would go down as a percent of the revenues.

¹⁹ Tr. at 39; JX 1 at 7.

Harris also reduced the systems operating expense that D&P had forecasted for Sheboygan by 5% so that those figures for Sheboygan would match Janesville's. Harris did this because he "didn't see any reason why [the operating expenses for the two Companies] would be different, particularly since they're operating in the same area."²⁰

The cost incurred to add each new customer, or CPGA, includes sales and marketing expenses. Harris replaced D&P's CPGA with figures derived by Credit Suisse First Boston ("CSFB") in estimating US Cellular's CPGA. Harris made that adjustment because he assumed that the "Janesville and Sheboygan markets should have a similar structure as that of their parent company, U.S. Cellular for marketing, selling and handset subsidy costs."²¹

Additionally, Harris ignored D&P's assumptions with regard to capital expenditures per net addition because "they did not appear to be based on the industry data that [D&P] had accumulated."²² Instead, Harris developed his own input by averaging the ABN and CSFB forecasts included in the D&P work papers and a Lehman Brothers report.²³ Furthermore, while D&P estimated depreciation using a fixed

²⁰ Tr. at 40-41.

²¹ JX 1 at 8.

²² *Id.* at 9.

²³ Harris did not attempt to forecast the capital expenses that would result from implementing either the 2.5G or 3G technologies. As of the Merger Date, the Companies were finishing their conversion to 2G, *i.e.*, the conversion from analog to digital. The designation 2.5G referred to advances within digital technology that enabled companies to offer faster transmission rates and 3G represented the "ultimate high-speed, high-capacity data, video type applications that industry was

percentage of net fixed assets, Harris used a double declining balance method. He based that decision on his understanding that most of the Companies' assets qualified for such treatment under the tax code and would continue to do so during the Forecasting Period.²⁴

Discount rate. Harris criticized D&P's use of a 12% discount rate in its DCF analysis. Harris determined his discount rate by computing the weighted average cost of capital ("WACC") for the Companies. He employed US Cellular's debt figures in his cost of debt calculations.²⁵ Harris used two different methods to calculate the cost of equity: the capital assets pricing method ("CAPM") and the build up method. He then averaged the two resulting WACC values to obtain his discount rate of 11.34%.²⁶

Terminal value. In determining the terminal value for the Companies, Harris utilized a terminal multiple. A terminal multiple is used in valuations to estimate cash flows for a company in perpetuity after the forecasted period.²⁷ Harris calculated a terminal multiple for the Companies by dividing one by the difference between the

working towards." Tr. at 148. At trial, Harris stated that if he had included such 2.5G and 3G implementation costs in his model, he would have had to include corresponding revenue forecasts, as well. *Id.* at 392.

²⁴ Specifically, Harris stated that, "[a]n examination of the 1999 Federal Tax Returns indicates that most of the property employed by these two companies (approximately 83% for Janesville and 55% for Sheboygan) qualified for 5 year recovery periods and 200% DDB." JX 1 at 9.

²⁵ Harris obtained these figures from US Cellular's September 30, 2000 Form 10Q. *Id.*, Ex. I.

²⁶ As Harris noted, D&P appeared to calculate a WACC of 11.08%, using a CAPM method for the equity component, but used a discount rate of 12% without further explanation. *Id.* at 9.

²⁷ *Id.*

WACC and their sustainable growth rate. Harris made the assumption that the sustainable growth rate should equal the “overall economic growth rate.”²⁸ He obtained this rate by taking a 6.3% rate listed in Ibbotson Associates’ “SBBI Valuation Edition 2003 Yearbook” and rounding it to 6.0%.²⁹ Harris then computed the terminal value by multiplying the projected net operating profit after taxes in 2009 by the terminal multiple (18.7). He then discounted the result back to present value.

b. Harris’ comparable transactions approach

In addition to his DCF calculation, Harris used the comparable transactions approach to provide another valuation measure for the Companies. In his comparable transactions analysis, Harris considered comparable transactions from 1998 to 2000 denominated on a per subscriber basis.³⁰ These transactions yielded a per subscriber value of \$2,400 to \$2,500 from 1998 to 2000.

To determine the values of the Companies for comparison purposes, Harris calculated a value per subscriber using a methodology that had been described by J.P. Morgan. He divided one by the churn rate for each of Janesville and Sheboygan to determine the number of months a subscriber would be expected to remain on their

²⁸ *Id.* at 10; Petitioners’ Opening Post-Trial Brief (“POB”) at 21. Citations to the parties’ post-trial answering and reply briefs are in the form “RAB at ___” and “PRB at ___,” respectively.

²⁹ Ibbotson Associates’ SBBI (Stocks, Bonds, Bills, and Inflation) Yearbook is a volume that provides a comprehensive, historical view of the performance of capital markets dating back to 1926. See <http://www.ibbotson.com> (last visited Jan. 5, 2005).

³⁰ Stating the value on a per subscriber basis simply requires dividing the sales price by the number of subscribers.

service. Harris then multiplied the result by the Companies' respective ARPUs to calculate their estimated lifetime revenues per subscriber. Those numbers were \$2,904 and \$2,762 for Janesville and Sheboygan, respectively. Multiplying those numbers, in turn, by the number of subscribers, Harris calculated a value of \$73,081,000 (\$73.08 per share) for Janesville, and \$43,154,000 (\$43.15 per share) for Sheboygan.³¹

2. Respondent's expert

USCOC offers the expert opinion of John S. Sanders ("Sanders"). Sanders has a B.A. in Economics and International Studies from Dickinson College and an MBA from the University of Virginia. He is a principal of the Washington D.C. firm of Bond & Pecaro, which specializes in valuing, appraising, and providing related financial services to firms in the telecommunication industry. Sanders has worked in the cellular telephone industry since 1985, and has been retained to appraise over a hundred cellular systems in different capacities.

Sanders did not base his analysis on the valuation conducted by D&P. Rather, Sanders performed an analysis consistent with the structure and methodology typically employed by his firm to value cellular companies. Sanders began by researching the state of the cellular industry as of the Merger Date as well as various market

³¹ JX 1 at 11. As a reasonableness check to his comparable transactions analysis, Harris applied market multiples for 1999 to the Companies' actual 1999 and projected 2000 financials. *See id.*, Ex. VI. Harris then averaged the mean and median data obtained and determined a value of \$68,748,000 (\$68.75 per share) for Janesville and \$37,725,000 (\$37.72 per share) for Sheboygan. *Id.* at 11; Tr. at 63-68. Harris did not utilize these figures in his calculation of a fair value of the Companies; instead, he referred to them only as a reasonableness check. *See* JX 1 at 11. Therefore, the Court will not attempt to evaluate the reasonableness of Harris' market multiples approach.

demographics of the JMSA and SMSA.³² The demographics that Sanders considered included population, number of households, unemployment rate and commuter times. He used this information to assist him in “making judgments along the way as to whether assumptions ought to be made aggressively, down the middle, or somewhat conservatively.”³³

Similar to Petitioners’ expert Harris, Sanders determined the fair value of the Companies utilizing both a DCF analysis and comparable transactions analysis. He considered characteristics of the JMSA and SMSA markets such as population growth, income growth, retail sales growth, and employment composition.³⁴ Sanders’ DCF calculation yielded values of \$45.11 per share for Janesville and \$22.05 per share for Sheboygan. Sanders used a comparable transactions analysis as a reasonableness check for his DCF calculation. That analysis yielded a range of \$245 to \$324 per capita compared to the per capita values of \$288 for Janesville and \$285 for Sheboygan derived from Sanders’ DCF analysis.³⁵

³² He obtained the demographic information through a company called Market Statistics. Tr. at 213-14.

³³ *Id.* at 221.

³⁴ JX 98 at 8-11, 24-26.

³⁵ Sanders’ fair value determinations per share of \$45.11 for Janesville and \$22.05 for Sheboygan translate into per capita values of \$288 for Janesville and \$285 for Sheboygan. The per capita figures are obtained by dividing the total value of each company by the population of the MSA it serves.

a. Sanders' DCF calculation

In his DCF analysis, Sanders forecasted revenues and expenses over a ten year forecasting period, computed a terminal value, and then discounted all of the projected future cash flows back to the Merger Date.³⁶ Sanders' calculations yielded a value of \$45,107,200 (\$45.11 per share) for Janesville and \$22,050,200 (\$22.05 per share) for Sheboygan.³⁷ Sanders first looked to the Companies' historical data to compile a financial history that he used as a basis for his projections.³⁸

Revenue Forecast. Similar to Harris' DCF calculation, Sanders began by projecting the Companies' future subscriber growth and revenues.

In forecasting subscriber growth, Sanders determined inputs for population, population growth, gross subscriber additions, and churn. He used the 1999 population estimates and projected increases through 2004, as determined by Market Statistics in their demographic research, and then assumed that the projected annual growth rate would continue through the end of the Forecasting Period.³⁹ Sanders found that the Companies' gross subscriber additions and churn rates yielded subscriber penetration

³⁶ The structure of Sanders' DCF analysis, however, differs from Harris' in the way certain items were categorized, particularly roaming revenues.

³⁷ JX 98 at 80.

³⁸ Sanders drew upon financial data contained in the Companies' unaudited income statements for 1997-1999 and the first six months of 2000 and the budget for the full year 2000. Tr. at 222-23.

³⁹ Market Statistics, Demographic USA 2000, County Edition; JX 98 at 38.

rates “well above the industry average.”⁴⁰ Accordingly, Sanders estimated subscriber penetration at a level that would afford continued growth to the Companies. In the later part of the Forecasting Period, however, he projected a decline in the historically high gross subscriber additions and an increase in the historically low churn rates.⁴¹ In making these projections, Sanders gave effect to his view that competition in the Companies’ MSAs would increase in the future.⁴²

In forecasting revenues for the Companies, Sanders first analyzed average revenue per subscriber. Because the revenue per subscriber figures for the Companies historically were stable, Sanders elected to continue that trend throughout the Forecasting Period. In addition, Sanders included equipment sales and roaming revenues in his projected revenues. He projected equipment sales to decline for the first five years, consistent with declining hardware prices, and to remain level for the remainder of the Forecasting Period. Sanders also projected that during the first five years of the Forecasting Period roaming revenues would increase moderately from the historical and budgeted revenues the Companies had produced in 2000. Based on the national trend toward lower roaming rates, resulting from the emergence of seamless coverage areas and one-rate plans, Sanders reduced his projected roaming revenue growth in the later years of the

⁴⁰ JX 98 at 38. *See id.* at 58.

⁴¹ *Id.* at 38-39, 58.

⁴² Tr. at 228-29.

Forecasting Period. Thus, he projected roaming revenues to grow by 3.5% each year from 2001 to 2006, and by only 2.0% each year thereafter.

Expense Forecast. In forecasting expenses for the Companies, Sanders divided their costs into four different areas: maintenance/usage, marketing and selling, G&A, and cost of equipment.

Maintenance/usage expenses included variable and semi-variable expenses consisting of costs such as fees for access to the landline telephone network, utilities, cell site rental, switching costs and site maintenance. Sanders used the maintenance/usage expense budgeted by the Companies for 2000 as a starting point and increased it slightly over the Forecasting Period. He did so to reflect the efficiencies that characterize future technological advances, as well as increased subscriber network utilization and the development of new services.

Marketing and selling costs consist largely of commissions paid to sales personnel and include advertising and sales expenses. Sanders applied the national average marketing and selling costs to his forecasts and held them steady for the Forecasting Period to reflect “the investment that will likely be required as competition in the market becomes more aggressive.”⁴³

G&A expenses include payroll, office rent, utilities, and legal and other related expenses that support the operation of the Companies. Starting with the historical operating expenses of the Companies, Sanders projected a 5% increase during the earlier

⁴³ JX 98 at 47, 65.

years of the Forecasting Period to complement his projected rapid subscriber and revenue growth, and then reduced the projected increase to 3% for the later years to reflect the maturity of the system.⁴⁴

The cost of equipment comes from the industry practice of subsidizing the cost of handsets in order to attract customers. Sanders used historical figures for the Companies to add the costs associated with selling handsets and related equipment to his expense forecasts.

Additionally, Sanders forecasted a capital expenditure of approximately \$13 million for Janesville and \$6.4 million for Sheboygan over the Forecasting Period.⁴⁵ Sanders claimed that this projection reflects \$350 for each net subscriber addition as well as an annual provision of approximately one-eighth of the cost of existing fixed assets. According to Sanders, this projection reflected expenditures needed for routine system replacements, expansion to accommodate new subscribers, and technological upgrades.

To estimate depreciation, Sanders analyzed the cost of buildings, equipment, and related tangible assets found in the Companies' fixed asset records, as well as his projected capital expenditures. He depreciated most tangible assets over a five year period using the modified accelerated cost recovery system ("MACRS") schedules.

⁴⁴ *Id.* at 47.

⁴⁵ Sanders' report stated that he had projected only \$7.7 million and \$3.6 million in capital expenditures for the two markets. *Id.* at 50, 67. In his rebuttal, however, Harris pointed out that these figures should be \$13 million and \$6.4 million. JX 2 at 6, Ex. III. Upon examination of Sanders' calculations, the Court finds that the total capital expenditures he forecasted were approximately \$13 million for Janesville and \$6.4 million for Sheboygan.

Sanders also amortized the Companies' intangible assets, namely their FCC licenses and certain contracts and agreements.

Discount Rate. Sanders used a discount rate of 12%, which he noted is approximately twice the risk rate of U.S. Treasury securities in October of 2000. Sanders also stated that 12% "is generally consistent with prevailing discount rates at the time of the appraisal."⁴⁶ He did not attempt to calculate a WACC or specific discount rate for the Companies.

Terminal Value. Sanders calculated the terminal value of the Companies through a terminal value multiple. He opined that operating profit multiples for mature communications companies typically range from 8 to 12 times cash flow. Sanders used a terminal value multiple of 8 for the Companies to reflect his concerns about below-average growth prospects, historically flat roaming revenues and the prospect of new competitive technologies.

b. Sanders' comparable transactions approach

In addition to his DCF calculation, Sanders used a comparable transactions approach to check the reasonableness of his valuation of the Companies. Sanders took into consideration various cellular company sales prior to the Merger Date. He found that the average MSA cellular company changing hands in 1999 sold for \$340 per capita on a weighted average basis and \$220 per capita on a simple average basis.⁴⁷ In 2000,

⁴⁶ JX 98 at 51.

⁴⁷ *Id.* at 74. At the outset of Sanders' comparable transaction discussion, he noted that, in his opinion, the reported prices of cellular systems tend to be inflated

however, the number of sales of cellular companies fell by approximately 90%.⁴⁸ In 2000, transactions in large and multiple markets were in the range of \$380 to \$600 per capita. While Sanders recognized the Companies' profitability and busy roadways, he believed that their small populations, low population growth and exposure to increased competition limited their value. For those reasons, Sanders considered the Companies more comparable to the individual market transactions involving similar population figures. Specifically, Sanders concluded that the following transactions were comparable to the Merger: ALLTEL's purchase of several systems in Louisiana for \$200 per capita; and Dobson's purchases of the Whitfield, Georgia RSA system with a population of approximately 250,000 for \$258 per capita, the Seminole, Oklahoma RSA with a population of approximately 222,000 for \$324 per capita, and the Tuscola, Michigan RSA with a population of approximately 139,000 for \$245 per capita. Sanders believed that the \$288 per capita (Janesville) and \$285 per capita (Sheboygan) values determined in his DCF calculation were reasonable in comparison to those market transactions as of the Merger Date.

because they include sales on terms, stock transactions, estimated values of swaps and joint ventures. *Id.* at 75.

⁴⁸ In fact, in October of 2000 Verizon announced that it was postponing its initial public offering because of poor market conditions and depressed values. *Id.* at 75. *See also Dobler v. Montgomery Cellular Holding Co.*, 2004 WL 2271592 (Del. Ch. Oct. 4, 2004), *appeal docketed*, No. 496 (Del. Nov. 12, 2004) (discussing the state of the cellular market).

II. THE COURT'S APPRAISAL ANALYSIS

A. Legal Framework of Appraisal Actions

The Delaware General Corporation Law entitles petitioners to their *pro rata* share of the “fair value” of the Companies as of the Merger Date.⁴⁹ The court is given broad discretion to determine fair value.⁵⁰ It should take into account all relevant factors known or ascertainable as of the merger date that illuminate the future prospects of the company.⁵¹ The court must, however, determine the fair value of “the company to the stockholder as a going concern.”⁵² Determining the value of a “going concern” requires the court to exclude synergistic value, “the amount of any value that the selling company's shareholders would receive because a buyer intends to operate the subject company, not as a stand-alone going concern, but as a part of a larger enterprise, from which synergistic gains can be extracted.”⁵³

⁴⁹ See 8 Del. C. § 262(h) (“the Court shall appraise the shares, determining their fair value”).

⁵⁰ *Cede & Co. v. Technicolor, Inc.*, 684 A.2d 289, 299 (Del. 1996).

⁵¹ 8 Del. C. § 262(h); *Weinberger v. UOP, Inc.*, 457 A.2d 701, 713 (Del. 1983) (quoting *Tri-Continental Corp. v. Battye*, 74 A.2d 71, 72 (Del. 1950)).

⁵² *M.P.M. Enter., Inc. v. Gilbert*, 731 A.2d 790, 795 (Del. 1999). See also *Technicolor*, 684 A.2d at 298 (“[T]he Court of Chancery’s task in an appraisal proceeding is to value what has been taken from the shareholder, *i.e.*, the proportionate interest in the going concern.”).

⁵³ *Union Illinois 1995 Inv. Ltd. P’ship v. Union Fin. Group, Ltd.*, 847 A.2d 340, 356 (Del. Ch. 2004).

In an appraisal proceeding, both sides have the burden of proving their respective valuations by a preponderance of the evidence.⁵⁴ The court may consider “proof of value by any techniques or methods which are generally considered acceptable in the financial community and otherwise admissible in court.”⁵⁵ Acceptable techniques include the discounted cash flows or DCF approach and the comparable transactions approach.⁵⁶ If neither party satisfies its burden, however, the court must use its own independent judgment to determine the fair value of the shares.⁵⁷

B. DCF Analysis

While DCF analyses have become the dominant approach in appraisal proceedings since *Weinberger*, the ultimate selection of a valuation framework remains within the court’s discretion.⁵⁸ A DCF analysis requires “projecting operating cash flows for a determined period, setting a terminal value at the end of the projected period, and then

⁵⁴ *M.G. Bancorporation, Inc. v. LeBeau*, 737 A.2d 513, 520 (Del. 1999).

⁵⁵ *Weinberger*, 457 A.2d at 713.

⁵⁶ See *Dobler*, 2004 WL 2271592, at *8. See, e.g., *Cede & Co. v. JRC Acquisition Corp.*, 2004 WL 286963 (Del. Ch. Feb. 10, 2004) (utilizing the discounted cash flow approach); *Gentile v. Singlepoint Fin.*, 2003 WL 1240504 (Del. Ch. Mar. 5, 2003) (utilizing the comparable transactions approach).

⁵⁷ *Taylor v. Am. Specialty Retailing Group, Inc.*, 2003 WL 21753752, at *2 (Del. Ch. July 25, 2003). See also *Gonsalves v. Straight Arrow Publ’rs, Inc.*, 701 A.2d 357, 362 (Del. 1997).

⁵⁸ *Dobler*, 2004 WL 2271592, at *9 (citing Donald J. Wolfe, Jr. & Michael A. Pittenger, *Corporate and Commercial Practice in the Delaware Court of Chancery* § 8-10[d] (2004) and quoting *M.G. Bancorporation*, 737 A.2d at 524).

discounting those values at a set rate to determine the net present value of a company's shares.”⁵⁹

In this case, neither side met their burden of proving their valuation by a preponderance of the evidence. Both experts presented opinion reports that were, at times, unreasonable in their projections and contrary to Delaware case law. Therefore, the Court will make its own independent judgment of the fair value of the Companies by analyzing the evidence that Petitioners and USCOC put forth. This Court repeatedly has recognized that the reliability of a DCF analysis depends on the reliability of the inputs to the model.⁶⁰ As observed in *Prescott and Technicolor*,

[V]aluation decisions are impossible to make with anything approaching complete confidence. Valuing an entity is a difficult intellectual exercise, especially when business and financial experts are able to organize data in support of wildly divergent valuations for the same entity. For a judge who is not an expert in corporate finance, one can do little more than try to detect gross distortions in the experts' opinions. This effort should, therefore, not be understood, as a matter of intellectual honesty, as resulting in the fair value of a corporation on a given date. . . . [A corporation's] value is not a point on a line, but a range of reasonable values, and the judge's task is to assign one particular value within this range

⁵⁹ *Doft & Co. v. Travelocity.com, Inc.*, 2004 WL 1152338, at *5 (Del. Ch. May 20, 2004). Operating profit is a measure of the financial efficiency of a business. For purposes of a DCF analysis, operating cash flow is defined as revenues less expenses, not including interest, depreciation, amortization and income taxes.

⁶⁰ *See, e.g., Dobler*, 2004 WL 2271592, at *9; *Travelocity.com*, 2004 WL 1152338, at *5.

as the most reasonable value . . . based on considerations of fairness.⁶¹

Because, in this case, there were no management forecasts and the number of transactions had decreased dramatically in 2000, the Court's, as well as the experts', valuations were made especially difficult. In the past, this court has recognized the difficulty that the lack of contemporaneous management projections creates in forecasting future cash flows.⁶² Because D&P had contact with and received guidance from the Companies' management when making their projections in 1999 and 2000, the Court has found their forecasts helpful in determining fair value in those instances where the experts have not persuaded the Court otherwise or satisfied their respective burdens.

1. Disputed Inputs

The parties disagree about a number of inputs to the DCF analysis. The Court addresses each of those disputed inputs below.

a. G&A expenses

D&P assumed that G&A expenses would remain at a constant 19.5% of revenues. Harris reduced D&P's projected G&A expenses *as a percentage of revenue* (i.e., as a function of actual G&A expense/revenue) from 19.5% to 18%. Harris reasoned that G&A expenses, when expressed as a percentage of revenues, should decrease because the

⁶¹ *Prescott Group Small Cap, L.P. v. Coleman Co.*, 2004 WL 2059515, at *31 (Del. Ch. Sept. 8, 2004) (quoting *Cede & Co. v. Technicolor, Inc.*, 2003 WL 23700218, at *2 (Del. Ch. Dec. 31, 2003)).

⁶² *See Dobler*, 2004 WL 2271592, at *11 (recognizing that the lack of management projections complicates performing a DCF analysis); *Gholl v. eMachines, Inc.*, 2004 WL 2847865, at *12 (Del. Ch. Nov. 24, 2004) (same).

ratio of fixed expense components of G&A to revenues would decline over time. USCOC criticizes Harris' analysis, claiming that decreasing G&A expenses would not take into consideration variable components of G&A that would increase in relation to the high subscriber growth that Harris, himself, forecasted. They further argue that Sanders' forecasted increase in *actual* G&A expenses is more realistic. Both sides seem to agree that as the number of subscribers increase certain components of G&A would increase. The issue, however, is whether total G&A expenses expressed *as a percentage of revenue* are likely to remain relatively constant or decrease.

Having reviewed the evidence, I find that Harris' opinion is more reliable. Both experts agree that revenues will increase during the Forecasting Period. Although it is reasonable to believe that at least some of the G&A expenses are variable and will increase with increasing revenues, there is no evidence to suggest that those G&A expenses would increase as a percentage of revenues beyond the historic 19.5% level. Furthermore, it is reasonable to expect, as Harris posits, that certain other G&A expenses will remain essentially fixed as the number of subscribers increases. Examples of such costs include office rent, utilities, and legal expenses. These G&A expenses can be expected to decrease as a percentage of revenues. Therefore, the Court finds that it is appropriate to use Harris' G&A expense forecast, because it takes into account the effects of both the fixed components and variable components of G&A.

b. Average revenue per user

Harris forecasted ARPU to decline from \$30.06 to \$28.73 for Janesville and \$29.10 to \$27.82 for Sheboygan.⁶³ In making these projections, Harris used the Companies' actual ARPU from the first six months of 2000 as the ARPU for the whole year. He then decreased those estimates by half a percentage point a year for the Forecasting Period. USCOC argues that, based on industry data, Harris' assumption that the second half of the year's ARPU figures would be the same as the first half is incorrect. In support of their argument, USCOC points to Logston's testimony that costs in the second half of the year generally tend to be higher because of the increase in customers during the holiday retail season. Furthermore, management's budgeted full year 2000 figures were available; they budgeted the average local service revenue per customer for 2000 to be \$28.83 for Janesville and \$27.87 for Sheboygan.⁶⁴ In these circumstances, the Court disagrees with Harris' decision to use actual ARPU figures from the first six months of 2000 for the entire year.

USCOC further argues that Sanders' projections of a steady \$29 ARPU for Janesville and \$28 ARPU for Sheboygan are consistent with the Companies' performances over recent years, and should be utilized by the Court. Petitioners challenge Sanders' projections because Sanders forecasted 2001 inputs that were below actual 1999 and first half of 2000 ARPU numbers, even though, in Petitioners' opinion,

⁶³ These figures are in comparison to D&P's forecasts of decreases from \$29.32 to \$26.28 for Janesville and from \$30.00 to \$26.25 for Sheboygan. JX 25-27.

⁶⁴ See JX 21, 22.

ARPU figures in both the industry and the Companies' markets were increasing at the time of the Mergers. The Court finds Sanders' use of \$29 and \$28 figures for ARPU through 2001 more consistent with management's budgeted year 2000 figures and the Companies' historical data.⁶⁵ Thus, the Court will use those numbers as year 2000 and 2001 inputs to its DCF analysis.

The Court further finds, however, that Harris' half-percent reduction in ARPU per year in the Forecasting Period after 2001 is both reasonable and realistic. As discussed *supra*, both D&P and Harris determined that ARPU was likely to fall during the Forecasting Period. After consideration of the Companies' ARPU trends between 1996 and 1999, the Court finds that a slight decline should be expected during the Forecasting Period. Therefore, the Court will incorporate Harris' half a percentage point annual reduction of ARPU in its calculations.

c. Roaming revenue

Harris adopted D&P's initial roaming revenue figures of \$7.55 per subscriber for Janesville and \$5 per subscriber for Sheboygan. However, he reduced D&P's projected

⁶⁵ In appraisal actions, Delaware courts generally accord greater weight to contemporaneous management forecasts prepared in the ordinary course of business. *See, e.g., Technicolor*, 2003 WL 23700218, at *7 (holding that “[w]hen management projections are made in the ordinary course of business, they are generally deemed reliable.”); *Cede & Co. v. Technicolor, Inc.*, 1990 WL 161084, at *23 (Del. Ch. Oct. 19, 1990) (“As a general rule, I am of the view that management projections done for real-world purposes are deserving of substantial weight.”), *rev'd on other grounds*, 634 A.2d 345 (Del. 1993); *Travelocity.com*, 2004 WL 1152338, at *5 (“Delaware law clearly prefers valuations based on contemporaneously prepared management projections because management ordinarily has the best first-hand knowledge of a company's operations.”).

decline and held the numbers constant after the first three years of the Forecasting Period. USCOC argues that projecting roaming revenues on a per subscriber basis is improper because such revenues are not based on subscribers, but rather on entries of non-subscribers into the market. As discussed previously, roaming revenues are generated when a cellular company provides service to customers of other cellular companies who travel outside their home MSA or RSA. Thus, roaming revenues do not depend on the number of subscribers a company has. Resort communities and areas that lie between major metropolitan markets provide good examples of that phenomenon. Such areas often have relatively small populations but high roaming revenues due to the relatively high volume of transient traffic. The Court finds, however, that expressing roaming revenues on a per subscribers basis, while perhaps questionable from an analytical perspective, is not necessarily improper.⁶⁶ In any event, Harris' use of that approach provides little assistance to the Court in determining a reliable projection of roaming revenues.

As an alternative, USCOC offers Sanders' projection of \$240,000 per month in roaming revenues for Janesville and \$100,000 per month for Sheboygan. Sanders projected annualized increases of 3.5% in the first half and 2% in the second half of the Forecasting Period. In developing his projections of roaming revenues, Sanders took into consideration the national trend toward lower roaming revenue growth rates and the

⁶⁶ Harris relied upon D&P's methods of calculating fair value, and D&P projected roaming revenue on a per subscriber basis. Unfortunately, the record does not reflect D&P's reasoning for using that approach. It may have been done for ease of calculation or readability.

Companies' relatively stable historical roaming revenues, balanced by subscriber growth and increased minutes of use.⁶⁷ The Court finds that USCOC has proven Sanders' forecasted increases in net roaming revenues by a preponderance of the evidence.⁶⁸

d. Cost per gross addition

Initially, when calculating cost per gross add, Harris discarded D&P's analysis and relied instead on projections made by CSFB for US Cellular as a whole. At trial, Harris testified that he assumed the Companies' costs would be equal to or less than US Cellular's because of the relatively small size of the JMSA and SMSA markets. USCOC criticized this approach, arguing that Harris should have considered factors specifically related to the Companies' cost structures, such as the method of cell phone handset sales. Moreover, contrary to Harris' theory, Logston testified that "the size of the market does not actually correlate to cost per gross add."⁶⁹

In his rebuttal report, Harris combined the assumptions used by Sanders for marketing and selling expense and handset subsidies to develop a table showing that Sanders would project a cost per gross add trend from \$380 to \$346 for Janesville and

⁶⁷ See JX 98 at 41-42.

⁶⁸ Petitioners' arguments against Sanders' projections of roaming revenues are half-hearted and unpersuasive. They argue only that the differences between the two experts' numbers are slight (they differ by 2.6% for Janesville and less than 1% for Sheboygan) and that roaming revenues represent less than 25% of total revenues. Assuming those statements are true, they do not change the Court's conclusion.

⁶⁹ Tr. at 140.

\$363 to \$326 for Sheboygan over the Forecasting Period.⁷⁰ Petitioners, through Harris, continued to question the reasonableness of those projections, but failed to produce evidence sufficient to support their competing projections. Because the projections of CPGA based on Sanders' assumptions account for issues unique to the Companies, the Court finds those projections more reasonable.

e. Operating expense and operating profit margin

In forecasting operating expenses, Harris reduced the operating expense that D&P had forecasted for Sheboygan by 5% to equal its operating expense forecast for Janesville. Harris decided to use the lower of D&P's two projections of operating expenses because he found no factual or record support for D&P's use of different projections. Harris chose to use many of D&P's other projections, however, and D&P had greater and more timely access to the Companies' management. In these circumstances, the Court is not persuaded by Harris' conclusory justification for altering D&P's projection for Sheboygan. By Harris' logic, it would have made just as much sense to increase Janesville's operating expense by 5% to match Sheboygan's. Therefore, the Court will not incorporate Harris' alteration in its DCF analysis.

With regard to operating profit margin, Harris' expense and revenue projections yielded operating profit margins of 51.5% (Janesville) and 52.5% (Sheboygan) in 2009 compared to Sanders' projections of 44.6% (Janesville) and 43.4% (Sheboygan). USCOC argues that Harris' profit margins comport "with the most aggressive

⁷⁰ JX 2 at 5.

assumptions in the industry.”⁷¹ Petitioners defend Harris’ projections as consistent with analyses performed by industry analysts such as Donaldson Lufkin and Jenrette (“DLJ”), JP Morgan, and CSFB for the Forecasting Period.

Both experts agree on the likely range of industry profit margins, but disagree as to where within that range the Companies should fall.⁷² In Sanders’ opinion, however, the Companies’ lower roaming revenues and slower MSA population growth should put them at the lower end of the acceptable range.

The Court’s decisions regarding G&A expense, cost per gross add, roaming revenues, and ARPU all affect operating profit margins. Taking into account my decisions to accept Harris’ projected G&A expense, apply Harris’ percent reduction per year to Sanders’ ARPU figures after 2001, use Sanders’ projected increases in roaming revenue, and incorporate Sanders’ assumptions regarding the cost per gross add figures, the projected operating profit margins for 2009 would be 48.6% for Janesville and 50.8% for Sheboygan. These profit margins fall generally within the agreed upon industry profit margin range. They also are consistent with the Court’s conclusion that the outlook for the cellular telephone industry in the Forecasting Period is brighter than Sanders

⁷¹ Tr. at 270.

⁷² *See, e.g., id.* at 101 (Harris) (in many cases industry projections of operating profit margins exceeded 40-45% according to analyses of CSFB, DLJ and J.P. Morgan), 270, 338-40 (Sanders) (Harris’ margins of over 50% were aggressive, but CSFB report projected operating profit margins of 52%; Sanders’ projected margins were at the lower end of the range). Sanders admits that the range of operating profit margins forecasted by the industry is between approximately 40% and 50%. JX 98 at n.2.

projected, but not as bright as Harris claimed.⁷³ Thus, the profit margins derived above provide a useful reasonableness check and validation of the Court’s decisions on those issues.

f. Capital expenditures

Harris ignored D&P’s assumptions with regard to capital expenditures per net addition because “they did not appear to be based on the industry data that they had accumulated.”⁷⁴ Instead, Harris developed his own inputs by analyzing industry reports. Harris testified that he did not attempt to forecast the capital expenditures that would result from implementation of 2.5G and 3G technologies, because if he had included such upgrade costs, he would have had to include corresponding revenue forecasts as well. Additionally, Harris argued that the timing of any such upgrade was speculative. USCOC challenges Harris’ approach as ignoring the “market realities that were driving wireless values throughout the industry – namely, the fact that it was becoming increasingly evident that substantial additional capital expenditures were going to be required across the board.”⁷⁵

Logston testified that capital expenditures are typically “driven by what the market place needs are competitively and what we need to do in terms of either adding capacity

⁷³ Indeed, when the projected profit margins are further modified to incorporate the Court’s conclusions regarding the projections of subscriber penetration rates, discussed *infra*, they very closely approach Harris’ projections.

⁷⁴ JX 1 at 9.

⁷⁵ RAB at 21.

to our network or offering new services.”⁷⁶ Harris concedes that as of October 2000, the cellular industry was considering converting to 2.5G or 3G technology. Moreover, the Companies knew this and “anticipat[ed] further advances in technology in terms of 2.5G and 3G down the road.”⁷⁷

In determining fair value, the Court must take into account all factors known or knowable as of the Merger Date that relate to the future prospects of the Companies.⁷⁸ It should avoid, however, speculative costs that are not part of the Companies’ “operative reality.”⁷⁹ This is not a situation where projecting capital expenditures to account for conversion to 2.5G and 3G is speculative. Industry reports included such expenditures and the Companies themselves “anticipated” it. Therefore, Harris should have incorporated the effects of this expected capital improvement in his projections.

Sanders’ capital expenditure projection reflects \$350 for each net subscriber addition as well as an annual provision of approximately one-eighth of the cost of existing fixed assets. Sanders opined that these provisions adequately reflected expenditures needed for routine system replacements, expansion to accommodate new subscribers and technological upgrades, including the possibility of implementing 2.5G

⁷⁶ Tr. at 146-47.

⁷⁷ *Id.* at 147-48.

⁷⁸ *See* 8 *Del. C.* § 262(h); *Weinberger*, 457 A.2d at 713.

⁷⁹ *Paskill Corp. v. Alcoma Corp.*, 747 A.2d 549, 552 (Del. 2000).

and 3G.⁸⁰ As Harris pointed out in his rebuttal report, however, Sanders' projections yielded total expenditures of \$13 million for Janesville and \$6.4 million for Sheboygan. These figures are almost twice as much as the Companies' historical capital expenditure outlays, which were approximately \$6.8 million at Janesville and \$3.6 million at Sheboygan over more than a decade before the Merger Date. Moreover, during that time period the Companies made capital expenditures associated with their conversion to 2G. Sanders forecasted capital expenditures to be 9% of Janesville's and Sheboygan's revenues in 2005. Industry reports, however, predicted that capital expenditures over the longer term would reach approximately 6% of revenues.⁸¹

Because Sanders' capital expenditure forecasts substantially exceed the Companies' historical outlays and industry forecasts, they are not supported by the record. Therefore, the Court will not use either Harris' or Sanders' forecasted capital expenditures. Instead, the Court will use D&P's forecasts, which were based on discussions with management, a review of historical outlays of the Companies and trends in the industry.⁸² Furthermore, the capital expenditures forecasted by D&P generally fall between the questionable projections of the two litigation experts.

⁸⁰ Sanders stated that his capital expenditure projection did not provide for a 2.5G/3G specific expenditure, but rather represented a "reasonable provision to keep the system competitive" which would take into account conversion to 2.5G and 3G. Tr. at 253-54.

⁸¹ The 6% figure represents the average of Goldman Sachs and CSFB's 2005 capital expenditure forecast for US Cellular, DLJ's 2004 capital expenditure forecast and Lehman Brothers' forecast. JX 91.

⁸² Bayston Dep. at 83; JX 26-27.

g. Discount rate

There is considerable support for using a company's WACC as the discount rate for a DCF analysis.⁸³ In calculating his discount rate of 11.34%, Harris computed the WACC of the Companies, employing US Cellular's debt figures and capital structure in his calculations.⁸⁴ USCOC criticizes Harris' use of US Cellular's historical cost of debt, claiming that a proper WACC calculation utilizes a "theoretical buyer" as opposed to an actual buyer. Instead, they offer Sanders' 12% discount rate, which represents approximately two times the risk-free rate of U.S. Treasury securities.

The Court's task is to determine the fair value of the Companies as a going concern.⁸⁵ Therefore, a potential, or even an actual, acquirer's cost of debt is not as informative to the Court as the surviving company's cost of debt, when that cost is available. Accordingly, the Court rejects Sanders' 12% discount rate selected without regard to the specific cost of debt information for the Companies. For the same reason, I find that USCOC's cost of debt, rather than US Cellular's, should be utilized to determine an appropriate discount rate. Logston testified that USCOC borrowed only from US Cellular and generally at a rate of prime plus 1.5%.⁸⁶ Furthermore, because evidence

⁸³ See Bradford Cornell, *Corporate Valuation* 111 (McGraw-Hill 1993); Pratt, *supra* note 15 at 128.

⁸⁴ Harris obtained these figures from US Cellular's September 30, 2000 Form 10Q. JX 1, Ex. I.

⁸⁵ See *M.P.M.*, 731 A.2d at 795; *Technicolor*, 684 A.2d at 298.

⁸⁶ Tr. at 165. As Sanders points out in his rebuttal report, prime rates in October 2000 were 9.5%. JX 99 at 7.

regarding USCOC's capital structure was not presented to the Court, I consider Harris' decision to use the capital structure of US Cellular, which wholly owned USCOC, to calculate the WACC for the Companies reasonable. Thus, substituting USCOC's cost of debt for US Cellular's cost of debt in Harris' WACC calculation, the Court finds that the appropriate discount rate is 11.82%.

2. Subscriber growth and penetration percentages

Harris accepted D&P's incremental market penetration assumptions and used penetration rates increasing from 21.50% to 29.25% for Janesville and 16.86% to 24.74% for Sheboygan. Harris also projected growing profit margins. USCOC argues that Harris' assumption that the Companies could enjoy increasing profit margins while continuing to expand with a "mature customer base ignores the competitive nature of the cellular phone industry, and the nature of the Sheboygan and Janesville markets [SMSA and JMSA]."⁸⁷ USCOC bases their argument on what Sanders considered the likelihood of future competition entering the JMSA and SMSA. Specifically, Sanders identified SBC's acquisition of Ameritech in 2000 and the possibility of increased competition from new technologies such as PCS. Petitioners argue that Sanders' own projection of 27% market penetration of the JMSA after 10 years, a figure only 8% lower than Harris' projection, refutes the characterization of the JMSA as a "mature" or "moribund" market.⁸⁸ Harris admitted, however, that he did not take into account SBC's acquisition

⁸⁷ RAB at 23.

⁸⁸ PRB at 15.

of Ameritech in his subscriber growth and penetration forecasts.⁸⁹ As of the Merger Date, SBC's acquisition of Ameritech was known or, at least, knowable.⁹⁰

In determining the fair value of a company a court should consider all relevant factors known or knowable at the time of the merger.⁹¹ A change in competitors is one such factor. Because Sanders took the prospect of increased competition in the future into consideration, and Harris evidently did not, the Court finds Sanders' projection of market penetration more credible and will use it to determine the Companies' fair value.⁹²

3. Terminal value multiple

Harris calculated a terminal value multiple for the Companies by dividing one by the difference between their WACC and the sustainable growth rate of the Companies. Harris used a sustainable growth rate of 6%, which he justified in his expert report as equaling the "overall economic growth rate."⁹³ At trial, however, Harris claimed that the 6% rate represented the "real growth rate expected for the company in its period

⁸⁹ "Q. I take it you [Harris] did not factor that [possibility of increased competition from the SBC/Ameritech merger] in any way in your assessment of the subscriber growth going forward? A. My assessment was relative to [JMSA's and SMSA's] superior penetration to that date, and that competition had been limited up until that time." Tr. at 90.

⁹⁰ SBC and Ameritech reported their merger in the summer of 2000. Tr. at 89-90.

⁹¹ *See supra* note 78.

⁹² Petitioners' argument that Sanders used 1999 instead of 2000 penetration figures for Sheboygan is not clear and appears to be incorrect. Some of the confusion may stem from the different time periods for which Sanders made his forecasts, compared to Harris' forecasts. In any event, Petitioners have failed to demonstrate any material flaw in Sanders' penetration projections.

⁹³ JX 1 at 10.

subsequent to the forecast period plus an inflation rate that is also expected in that period.”⁹⁴ USCOC criticizes Harris’ use of a 6.0% growth in perpetuity rate based on an “overall economic growth rate” as illogical and contrary to Delaware law. In addition, USCOC argues that Harris’ 6% rate is unreasonable because it is more than twice his own projected free cash flow growth (2-3%) in the final years of the Forecasting Period.

The Court rejects Harris’ computation of terminal value as unsupported by the evidence. First, to the extent Harris based his 6% growth rate on the “overall economic growth rate,” as stated in his expert report⁹⁵ and represented in Petitioners’ Opening Post-Trial Brief,⁹⁶ the Court finds it unreasonable. This Court previously has held that “[w]ithout a valid explanation, the use of a generic growth rate is ‘inherently flawed and unreasonable.’”⁹⁷ Second, if Harris’ 6% figure reflects the Companies’ forecasted rate of growth in perpetuity plus an inflation rate, the record contains no satisfactory explanation for the addition of inflation in his terminal value calculation. The possibility of inflation must be dealt with consistently within a DCF calculation. For example, if cash flows are

⁹⁴ Tr. at 55. *See also id.* at 400-01.

⁹⁵ In his report, Harris claims that “Ibbotson has estimated this rate [overall economic growth rate] at 6.3%” and cites to page sixty-four of Ibbotson Associates SBBI Valuation Edition 2003 Yearbook. JX 1 at 10. This reference, however, cites to tables listing the long and intermediate-term government bond coupon rates through 2002. Thus, the Court assumes that by “overall economic growth rate” Harris means the national economic growth rate.

⁹⁶ POB at 21.

⁹⁷ *Dobler*, 2004 WL 2271592, at *10 (quoting *Technicolor*, 2003 WL 23700218, at *15). In *Dobler*, as in *Technicolor*, the Court rejected the experts’ assumption that the companies’ long term growth would equal such a generic growth rate. *Id.*

stated in nominal terms (without being adjusted for inflation) then the discount rate must be stated in nominal terms as well.⁹⁸ A DCF calculation utilizing real (adjusted for inflation) numbers as opposed to nominal numbers would not necessarily change the resulting present value of a company. Consequently, Harris' comment that adding inflation to his Forecasting Period cash flows "would have, of course, increased the valuations that I determined,"⁹⁹ and his decision to include inflation in his terminal value calculation only are illogical and contrary to accepted valuation principles.

Sanders determined the terminal value of the Companies through applying what he claimed was an appropriate terminal value multiple. According to Sanders, operating profit multiples for mature communications companies typically range from 8 to 12 times EBITDA. Sanders used a terminal value multiple of 8 for the Companies based on what he considered their below-average growth prospects, historically flat roaming revenues and exposure to new competitive technologies. After applying the terminal value multiple and obtaining a terminal value, Sanders equated that value to proceeds of a hypothetical sale of the Companies and deducted capital gains taxes.¹⁰⁰

Petitioners contend that Sanders' terminal value multiple of 8 was too low in comparison to the 10-12 multiples that Harris claimed "industry observers were using."¹⁰¹

⁹⁸ See Richard A. Brealey & Stewart C. Myers, *Principles of Corporate Finance* 124-26 (6th ed. 2000).

⁹⁹ See Tr. at 400-01.

¹⁰⁰ *Id.* at 257-58.

¹⁰¹ *Id.* at 400; PRB at 15-16.

The Court agrees that use of a terminal value multiple of 8 overstates the maturity of the Companies and the impact of new competition. Therefore, the Court finds that a terminal value multiple of 10 times EBITDA is appropriate in this case.

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."¹⁰² 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.¹⁰³ Accordingly, the Court finds the deduction of a capital gains tax from the terminal value improper.

4. Resulting DCF fair value

The foregoing decisions regarding various inputs and component rates of the DCF analyses for the Companies yield a fair value of approximately \$57,141,685.58 (\$57.14 per share) for Janesville and \$28,251,951.26 (\$28.25 per share) for Sheboygan.

¹⁰² RAB at 26.

¹⁰³ In addition to challenging Sanders' subtraction of a capital gains tax, Petitioners also seem to argue that the treatment of the terminal value as a sale is generally incorrect. PRB at 16. "The only 'sale value' that Section 262 and the case law proscribe are valuation techniques that improperly include synergistic elements of value and minority and illiquidity discounts." *Prescott*, 2004 WL 2059515, at *26.

C. Comparable Transactions Analysis

A comparable transactions analysis requires finding similar transactions, quantifying those transactions through financial metrics, and applying those metrics to the company at issue in order to arrive at a value.¹⁰⁴ Even in circumstances where the court accepted a comparable transactions analysis, the approach's ability to contribute to an appraisal of fair value has been recognized as limited by the "similarity between the company the court is valuing and the companies used for comparison."¹⁰⁵ In this case, neither party has met its burden of proof with regard to its comparable transactions analysis. Therefore, the Court will use its own independent judgment to assess the fair value of the shares under such an analysis.¹⁰⁶

In his analysis, Harris considered comparable transactions from 1998 to 2000 denominated on a per subscriber basis.¹⁰⁷ The comparable transactions analyzed by Harris yielded an average per subscriber value of \$2,400 to \$2,500 from 1998 to 2000.

¹⁰⁴ *Dobler*, 2004 WL 2271592, at *8.

¹⁰⁵ *Lane v. Cancer Treatment Centers of Am., Inc.*, 2004 WL 1752847, at *34 (Del. Ch. July 30, 2004) (quoting *In re Radiology Assocs., Inc. Litig.*, 611 A.2d 485, 490 (Del. Ch. 1991)).

¹⁰⁶ In connection with their comparable transactions analyses, neither USCOC nor Petitioners argued to adjust the values derived from the comparable transactions for any kind of control premium. Accordingly, I have treated the comparable transaction values presented to the Court as not requiring any adjustment of that nature.

¹⁰⁷ A per subscriber value is calculated by dividing the sales price of a transaction by the number of subscribers acquired. Harris claims he used the measure of price "per subscriber" because industry analysts, such as J.P. Morgan, have noted that the use of values per subscriber are particularly relevant with respect to the assessment of subscriber quality and growth. *See* JX 1 at 11.

Harris determined the per subscriber value by calculating estimated lifetime revenues per subscriber through multiplying the reciprocal of each Companies' churn rate, which gives an expected subscriber life in months, by their ARPU. Based on the resulting per subscriber values of \$2,904 and \$2,762 for Janesville and Sheboygan, respectively, Harris calculated values of \$73,081,000 (\$73.08 per share) for Janesville and \$43,154,000 (\$43.15 per share) for Sheboygan.¹⁰⁸

USCOC argues that Harris' analysis fails to take into account the Companies' low roaming revenues, increased competition, and the small population and population growth of the JMSA and SMSA. Also, Sanders concluded that the transactions Harris considered were not comparable because the companies being bought possessed licenses for highly populated areas or were markets that had large roaming revenues.

Sanders based his comparisons of identified transactions on the POPs metric rather than per subscriber value. As recognized in prior cases, POPs (the census population of a geographic area) is "an industry standard metric that is widely used in valuing cellular companies."¹⁰⁹ Sanders found that the typical MSA cellular company that changed hands in 1999 sold for an average of \$220 per capita while, in 2000, transactions in large and multiple markets were in the range of \$380 to \$600 per capita. Because of the small populations and low growth potential of the JMSA and SMSA, Sanders opined that the

¹⁰⁸ *Id.* at 11.

¹⁰⁹ *Dobler*, 2004 WL 2271592, at *18. *See also In re Mobile Communications Corp. of Am. Consol. Litig.*, 1991 WL 1392, at *4 (Del. Ch. Jan. 7, 1991) (characterizing the valuation of a wireless telecommunications company "based on population covered by licenses" as "industry standard").

Companies were more comparable to individual market transactions involving similarly sized populations. Specifically, Sanders concluded that Alltel's purchase of several systems in Louisiana for \$200 per capita and Dobson's purchase of the Whitfield Georgia RSA, Seminole Oklahoma RSA, and Tuscola Michigan RSA for \$258, \$324, and \$245 per capita, respectively, were comparable to the Mergers of the Companies. Harris questions the comparability of these transactions because the RSAs all possessed lower population density and median household incomes, which, in his opinion, reduces their fair value.

The Court, in *Dobler*, explained that MSAs are more valuable than RSAs because an "MSA will usually have a higher penetration rate due to its demographics, such as higher income people and people more receptive to wireless devices . . . [and] usually have a lower cost structure because it does not need to build as many cell towers for the same number of users."¹¹⁰ In *Dobler*, the Court accepted an expert's comparable transactions analysis in which he used only RSA transaction data because there were no transactions involving MSAs with comparable POPs figures. The Court, however, assigned that analysis only a 15% weight based on "the inherent valuation differences between RSAs and MSAs."¹¹¹ For similar reasons, Sanders' comparable transactions analysis, which involved three RSA transactions and one MSA transaction, must be adjusted to take into account the valuation differences between RSAs and MSAs.

¹¹⁰ *Dobler*, 2004 WL 2271592, at *1.

¹¹¹ *Id.*, at *15.

Of the two methodologies for analyzing comparable transactions presented by the parties, the Court finds Sanders' approach more reliable. It is consistent with the approach taken in a number of other comparable transactions analyses and takes account of an industry standard metric, POPs. Harris' approach, on the other hand, makes use of a technique reportedly used by J.P. Morgan that focuses on the metrics of ARPU, subscriber penetration and churn rate. Harris' description of his methodology, however, was fairly cursory and unenlightening. Furthermore, the Court agrees with USCOC that population is an important factor in determining comparability. Indeed, with that in mind, the Court found only two of the twenty transactions Harris identified actually to be comparable. Therefore, Petitioners and Harris have failed to persuade me that their approach, based on the price per subscriber acquired, is sufficiently reliable that it should be used instead of Sanders' more established approach.

Of the transactions presented to the Court, I find two comparable MSAs and three comparable RSAs. Only three of the MSA transactions presented by Harris were for populations under 1 million people. Of those three, one MSA was Myrtle Beach, a resort area that enjoys much higher roaming revenues than either Janesville or Sheboygan. Thus, the Court does not find the Myrtle Beach transaction comparable. The remaining two MSA transactions, which are comparable, were: (1) the 1998 Wireless One Network acquisition of Pensacola/Ft. Walton, with a population of approximately 557,823, for \$294 per capita; and (2) the 1999 Regional Telco acquisition of Intercel, with a population of approximately 269,697, for \$330 per capita. The average of the per capita values of the comparable MSAs is \$312. The Court is mindful, however, that the

populations involved in the comparable MSA transactions are significantly larger than the JMSA and SMSA.

The Court finds the three RSA transactions presented by Sanders comparable because of the small populations involved.¹¹² The average of the per capita values of the comparable RSAs is \$275. The weight accorded to the RSAs values, however, must be adjusted to account for the previously discussed valuation difference between RSAs and MSAs. Based on the evidence presented, the Court gives the average comparable MSA transaction value of \$312 per capita an 85% weight and the average comparable RSA transaction value of \$275 per capita a 15% weight. The resulting comparable transaction value is \$306.45 per capita.¹¹³ When this per capita value is applied to the populations of the JMSA and SMSA, a fair value of \$46,674,480 (\$46.67 per share) for Janesville and \$34,520,367 (\$34.52 per share) for Sheboygan is generated.

III. THE COMPANIES' FAIR VALUE

This Court has previously emphasized that the reliability of DCF analyses is dependent on the reliability of the inputs to the model.¹¹⁴ Similarly, the usefulness of

¹¹² The Whitfield, Georgia RSA system had a population of approximately 250,000 and was valued at \$258 per capita; the Seminole Oklahoma RSA had a population of approximately 222,000 and was valued at \$324 per capita; and the Tuscola Michigan RSA had a population of approximately 139,000 and was valued at \$245 per capita. JX 98 at 76-77.

¹¹³ The Court will not address the comparable financials analysis performed by Harris as a reasonableness check to his comparable transaction analysis because Petitioners did not rely on it as an independent basis to determine fair value.

¹¹⁴ *See, e.g., Dobler*, 2004 WL 2271592, at *9 (“[M]ethods of valuation, including a discounted cash flow analysis, are only as good as the inputs to the model.”).

comparable transactions analyses in appraising fair value has been recognized as limited by the “similarity between the company the court is valuing and the companies used for comparison.”¹¹⁵ In this case, the Court finds the DCF analysis more reliable because of the availability of the Companies’ historical financial data and various industry forecasts. The Court has somewhat less confidence in the comparable transactions analysis. There were only two comparable MSA transactions, neither of which were in 2000 or had populations particularly close to the JMSA and SMSA. Therefore, the Court will accord the fair value determination resulting from its DCF calculation a 70% weight and its comparable transaction calculation a 30% weight. This weighting produces a fair value of \$54,001,523.91 (\$54.00 per share) for Janesville and a fair value of \$30,132, 475.98 (\$30.13 per share) for Sheboygan.

IV. INTEREST

Finally, Section 262(h) requires the Court to determine a “fair rate of interest, if any, to be paid upon the amount determined to be the fair value.” In making this determination, “the Court may consider all relevant factors, including the rate of interest which the surviving or resulting corporation would have had to pay to borrow money during the pendency of the proceeding.”¹¹⁶ Each party bears the burden of proving an

¹¹⁵ *See supra* note 105.

¹¹⁶ 8 *Del. C.* § 262(h).

appropriate rate of interest under the circumstances.¹¹⁷ If the parties fail to fulfill their burden of proof, the court may award the legal rate of interest.¹¹⁸

“An interest award in appraisal cases has two purposes. The first is to require the respondent to disgorge any benefit it received from its use of the Petitioner’s funds. The second is to compensate the Petitioner for the loss of use of its money.”¹¹⁹ Most recently, the Court has found that these purposes are fulfilled by equally weighting the respondent’s actual cost of borrowing and the prudent investor rate where no special circumstances exist.¹²⁰

Harris calculated an interest rate of 10.1% by averaging the prudent investor rate and the Companies’ cost of equity, calculated under the CAPM method. Harris did this because he felt that investors in the Companies “exhibit a high risk/high return profile.”¹²¹ “Although the Court may look at the actual cost of borrowing by the

¹¹⁷ *Grimes v. Vitalink Communications Corp.*, 1997 WL 538676, at *9 (Del. Ch. Aug. 26, 1997).

¹¹⁸ *See Dobler*, 2004 WL 2271592, at *18.

¹¹⁹ *Prescott*, 2004 WL 2059515, at *33 (citing *Gonsalves v. Straight Arrow Publ’rs, Inc.*, 2002 WL 31057465, at *12-13 (Del. Ch. Sept. 10, 2002)). *See also Cede & Co. v. MedPointe Healthcare, Inc.*, 2004 WL 2093967, at *20 (Del. Ch. Sept. 10, 2004).

¹²⁰ For example, in *Chang’s Holdings v. Universal Chems. & Coatings*, where there was argument over the effect of delay caused by a party, the court commented that “[i]nstead of denying interest for the delay in this appraisal action, I will employ a sliding scale that alters the relevance of the prudent investor rate and the cost of borrowing rate according to the relative fault of the parties in causing the delay.” 1994 WL 681091, at *2 (Del. Ch. Nov. 22, 1994).

¹²¹ JX 1 at 12.

respondent company, the Court determines the petitioner's opportunity cost based on an *objective* standard.”¹²² Therefore, it was improper for Harris to substitute cost of equity for cost of borrowing to account for his opinion regarding the subjective investor’s risk preferences. Moreover, Harris’ use of the cost of equity is not in conformity with recent opinions of the Court that focus on an appropriate weighting of the respondent’s actual cost of borrowing and the prudent investor rate.¹²³ Thus, Petitioners have failed to meet their burden of establishing an appropriate interest rate.

Sanders calculated interest of 3.1% by averaging his calculations of the prudent investor rate and US Cellular’s cost of debt at four different points in time: the day before the Merger Date (*i.e.*, October 30, 2000), December 31, 2001, December 31, 2002, and March 30, 2004 (the date of his report regarding interest). Sanders calculated USCOC’s cost of debt at the rate US Cellular, USCOC’s parent corporation, borrowed on its existing revolving credit facility, 6.8%. At trial, however, Logston testified that while USCOC borrowed funds from US Cellular, and no one else, they did so at a rate of prime plus 150 basis points.¹²⁴ While Sanders presented evidence regarding the changing nature of US Cellular’s cost of borrowing during the relevant period, he did not provide the Court with evidence of the changes, if any, to USCOC’s cost of borrowing. USCOC,

¹²² *Gonsalves*, 2002 WL 31057465, at *12 (emphasis added) (citing *Grimes*, 1997 WL 538676, at *10 and *Chang's Holdings*, 1994 WL 681091, at *4).

¹²³ *See, e.g.*, *JRC*, 2004 WL 286963, at *12; *Ryan v. Tad's Enter., Inc.*, 709 A.2d 682, 705 (Del. Ch. 1996); *Prescott*, 2004 WL 2059515, at *33.

¹²⁴ Tr. at 165.

not US Cellular, is the “surviving or resulting corporation” referred to in § 262(h). Thus, the Court finds Sanders’ use of the rate at which US Cellular borrowed, which differed from USCOC’s cost of borrowing, inappropriate.

There are various other problems with Sanders’ prudent investor calculation, as well. While the Court agrees with Sanders’ effort to determine a rate of return over the relevant time period (*i.e.*, from the Merger Date to at least the date of the expert reports), his methodology seems flawed. Averaging the prudent investor rate determined at various points in time *within* the relevant time period does not equate to determining the prudent investor rate *for* the relevant period. While a less accurate “inclusion” of factors may be acceptable when dealing with future forecasts in a DCF analysis, there is no need to rely on such imprecise methodology where, as in the case of the prudent investor rate, definite returns for a particular period may be obtained and then annualized. The Court also questions Sanders’ decision to average his four determinations of the prudent investor rate equally despite the fact that they represent different lengths of time, and his use of what appear to be historical returns in his calculation of the prudent investor rate as of October 30, 2000.

Because Sanders incorrectly used US Cellular’s cost of borrowing and a questionable method of determining the prudent investor rate of return over the relevant period, the Court finds that USCOC also failed to meet its burden of proof regarding an appropriate interest rate. Consequently, the Court will rely on the legal rate of interest, specified in 6 *Del. C.* § 2301(a) as 5% over the Federal Reserve discount rate.

Neither side has the luxury of knowing how long a controversy will continue when they decide to litigate or defend an appraisal action. Some cases have remained in dispute for over a decade, while others are resolved much more quickly. Because the duration of an appraisal action is unknown, it is difficult for parties to accurately hedge a fixed interest award at the beginning of the case. Because of this difficulty and because the parties have failed to prove an appropriate rate of interest, I believe that an award of interest at the legal rate applied on a variable basis¹²⁵ best satisfies the dual purposes of interest in this case. In other words, on the facts presented, the Court will award interest at a floating rate equal to the legal rate, because such an award appears to best serve the dual purposes of disgorging any benefit received by USCOC from its use of the Petitioners' funds and compensating Petitioners for the loss of use of their money during the pendency of this action.¹²⁶

In addition to determining the appropriate rate of interest on the appraisal award, the Court also must determine the appropriate form, *i.e.*, whether such interest should be simple or compound. The Delaware courts have recognized that “in today’s financial markets a prudent investor expects to receive a compound rate of interest on his

¹²⁵ *I.e.*, “[i]n calculating the amount of interest due, the parties shall apply to the amount of the appraisal award each specific legal rate that was in effect during the post-merger period or periods that that rate was actually in effect.” *Prescott*, 2004 WL 2059515, at *34.

¹²⁶ The record with regard to applicable legal interest rates since October 31, 2000 is insufficient at the present time for the Court to calculate the precise amount of interest due to Petitioners. Therefore, the parties are directed to cooperate to calculate interest according to the Court’s decision.

investment,” and in recent decisions frequently have awarded compound interest.¹²⁷ For these reasons, the Court determines that compounding is appropriate in this case. This Court also has opined that “[i]n appraisal actions, the appropriate compounding interval for the legal rate of interest is quarterly.”¹²⁸ Therefore, I find that the appropriate compounding interval in this action is quarterly.

V. CONCLUSION

Both parties have failed to meet their burden of proof regarding the fair value of the Companies. Thus, the Court has made an independent valuation of the Companies and found that the fair value for Janesville is \$54,001,523.91 (\$54.00 per share) and for Sheboygan is \$30,132,475.98 (\$30.13 per share) as of the Merger Date. The parties shall cooperate to determine the interest award in accordance with the Court’s decision regarding interest and present an order of final judgment in conformity with this opinion within 10 days.

IT IS SO ORDERED.

¹²⁷ *LeBeau v. M.G. Bancorporation*, 1998 WL 44993, at *12 (Del. Ch. Jan. 29, 1998), *aff’d*, 737 A.2d 513 (Del. 1999); *Prescott*, 2004 WL 2059515, at *34.

¹²⁸ *Dobler*, 2004 WL 2271592, at *19 (citing *Travelocity.com*, 2004 WL 1152338, at *12, for the proposition that quarterly compounding is most appropriate when applying the legal rate because “the legal rate of interest most nearly resembles a return on a bond, which typically compounds quarterly”).