

---

Selected Summaries of 2012 Decisions

# Delaware Court of Chancery, Selected Business Valuation Case Summaries

---

## Introduction

The Delaware Court of Chancery is widely recognized as one of the nation's leading business courts in terms of volume of complex business related cases and as a result has developed significant case law in this area.

The high volume of business cases results in the Court issuing numerous opinions, many of which address valuation and damages. In this Court Case Update we focus on 7 opinions from 2012 to highlight how certain valuation and damages analysis topics are viewed by the Court. We chose these 7 opinions based on the valuation themes they represent and depth of analysis contained in the Court's opinions. In our review we have attempted to summarize the salient points related to valuation and damages only. We recommend that interested readers obtain the full Court opinions to obtain a complete understanding of all the issues addressed and each judge's position. We have included the URL for your convenience: <http://www.courts.delaware.gov>

## The cases we have summarized include the following:

*Shifan, et al. v. Morgan Joseph Holdings, Inc.*, C.A. No. 6424-CS (Del. Ch., January 13, 2012). Chancellor Strine

Issues: preferred stock rights

*Zimmerman v. Crothall, et al.*, C.A. No. 6001-VCP (Del. Ch., March 27, 2012). Vice Chancellor Parsons

Issues: preferred stock and entire fairness

*Gerreald, et al. v. Just Care, Inc.*, C.A. No. 5233-VCP (Del. Ch., April 30, 2012). Vice Chancellor Parsons

Issues: projections, DCF, terminal value, discount rate

*Paron Capital Management, et al., v. Crombie*, C.A. No. 6380-VCP (Del. Ch., May 22, 2012). Vice Chancellor Parsons

Issues: lost earnings

*In Re: Appraisal of the Orchard Enterprises, Inc.*, C.A. No. 5713-CS (July 18, 2012).

Chancellor Strine

Issues: liquidation preference, DCF, projections, discount rate

*IQ Holdings, Inc. v. Am. Commercial Lines, Inc.*, Case No. 6369-VCL (Del. Ch., August 30, 2012). Vice Chancellor Laster

Issues: adjustments to valuations

*Americas Mining Corp. v. Theriault*, No. 29, 2012 (Del., August 27, 2012). Chief Justice Steele; Justices Holland, Berger, and Ridgely; President Judge Vaughn

Issues: expert witness

# Case Summaries

*Shiftan, et al. v. Morgan Joseph Holdings, Inc., C.A. No. 6424-CS (Del. Ch., January 13, 2012).*

[Click here to view the opinion.](#)

On December 28, 2010, Morgan Joseph Holdings, Inc. (“Morgan Joseph”) merged with Tri-Artisan Capital Partners, LLC (the “Merger”). The Petitioners in this appraisal matter held Series A Preferred Stock (“Preferred Stock”) in Morgan Joseph prior to the Merger. Had the Merger not occurred, the Preferred Stock would have mandatorily redeemed on July 1, 2011 (“Automatic Redemption”), six months after the Merger at \$100 per share.

In this response to a motion for partial summary judgment the Court addressed two discrete questions: (i) whether the Automatic Redemption was subject to certain requirements, and (ii) “whether the court may properly consider a non-speculative, contractually required redemption event set to occur six months after the Merger when determining the fair value of the Series A Preferred Stock in the Petitioners’ appraisal action.”

On the first question, the Court found that the Automatic Redemption was not subject to certain requirements as argued by the Respondents. On the second question the Court found that it was appropriate to consider the Automatic Redemption for purposes of the appraisal analysis, even though the Merger occurred several months before the right would have been triggered. The Court indicated that the Automatic Redemption was, “not a speculative possibility, but rather a legally required mandate,” of Morgan Joseph’s certificate of incorporation. The Court further stated that in valuing the Preferred Stock, “it must take into account the economic reality that the series A would have been entitled to a mandatory redemption on July 1, 2011, just six months after the Merger.” The Court did not suggest that the value of the Preferred Stock was \$100 per share, but rather stated that the right to the Automatic Redemption was a, “specific, non-speculative contractual right [that] was inarguably an important economic factor bearing on the value of the Series A as of the Merger date that any reasonable investor or market participant would have taken into account.” The Court also noted that this approach does not harm other equity holders, “as that is what you sign up for when you invest in a company with senior security holders entitled to specific preferred rights with economic value.”

---

*Zimmerman v. Crothall, et al., C.A. No. 6001-VCP (Del. Ch., March 27, 2012).*

[Click here to view the opinion.](#)

This Memorandum Opinion responds to a motion for summary judgment by the Defendants involving duty of care, duty of loyalty and breach of contract claims related to an issuance of preferred units and convertible debt by a start-up medical products company. The Court granted summary judgment to the Defendants on the duty of care claims, and denied summary judgment on the duty of loyalty and breach of contract claims.

Adhezion Biomedical LLC (“Adhezion” or “Company”), a medical products company, raised a large portion of its funding from venture capital sources, including Liberty and Originate (collectively, the “VC Investors”). Originate initially invested \$3 million in March 2008 for Series A Preferred Units at \$8 a unit, implying a value of \$8 million for the company. Liberty invested \$1.99 million in October 2008 for Series A Preferred Units at approximately \$7.05 per unit, implying a value of \$10.5 million for the company (per the Memorandum Opinion).

# Case Summaries

The transactions challenged by the Plaintiff related to three subsequent financings between July 2009 and January 2011.

- Adhezion issued \$525,000 of notes (the “2009 Notes”) under a bridge loan to the Defendants and a non-party on July 17, 2009. The 2009 Notes carried a 10 percent annual dividend, warrant coverage, a security interest in the Company’s property, and an automatic conversion feature triggered by a financing transaction greater than \$5 million. The 2009 Notes were convertible into Series A Preferred Units at a price of approximately \$7.05 per unit. On December 15, 2009, Adhezion issued additional 2009 Notes to the same investors who participated in the 2009 issuance and on the same terms.
- On February 17, 2010, Adhezion authorized the issuance of new Series B Preferred Units. The Defendants purchased these units at \$4 per unit. The transaction valued the Company at \$13 million. The Series B Preferred Units were entitled to an annual dividend of 8 percent of the original purchase price and the right to purchase an additional Series B Unit for \$4.
- On January 10, 2011, the Board approved the issuance of up to \$2.5 million in promissory notes convertible into Series B Preferred Units. The January 2011 notes were entitled to 10 percent annually compounded interest, 20 percent warrant coverage to buy additional Series B Preferred Units, and a security interest in all of Adhezion’s property.

The Plaintiff claimed that these transactions were self-dealing and bad faith transactions intended to benefit certain Board members and the VC Investors.

The Court concluded that the transactions were self-dealing and subject to entire fairness review. However, the Court stated that the issue of entire fairness cannot be resolved on summary judgment. The Court cites to *Weinberger v. UOP, Inc.*, 451 A.2d 701, 711 (Del. 1983), which reads: “the test for fairness is not a bifurcated one as between fair dealing and price. All aspects of the issue must be examined as a whole since the question is one of entire fairness.” The Court then cites to *Valeant Pharms. Int’l v. Jerney*, 921 A.2d 732, 746 (Del. Ch. 2007) where it states the court will consider “when the transaction was timed, how it was initiated, structured, negotiated, disclosed to the directors, and how the approvals of the directors... were obtained... as well as whether it was substantively fair by examining the economic and financial considerations” in determining overall fairness.

The Court also noted that neither the Plaintiff nor Defendants offered an expert valuation of the securities in question. The Court stated “[t]here are genuine questions of fact as to whether the 2009 Transactions, as well as the other transactions, involved fair dealing and were at a fair price. Because no expert valuation of the Company has been presented by either side [the Court] cannot find conclusively that \$7.05 was a fair price per share.”

# Case Summaries

*Gerreald, et al. v. Just Care, Inc., C.A. No. 5233-VCP (Del. Ch., April 30, 2012).*

[Click here to view the opinion.](#)

In August 2009, Just Care, Inc. (“Just Care” or the “Company”) merged with GEO – both of which provided prison healthcare services. After a negotiation with members of Just Care’s Board and Just Care’s majority shareholder, Maxor National Pharmacy Corporation, GEO agreed to acquire Just Care for \$40 million in cash. In this appraisal rights matter, the Petitioners are former shareholders and directors of Just Care. The Court held that the Company’s fair value was \$34.2 million, \$5.8 million lower than the transacted value.

The Court reviewed all aspects of the competing experts’ opinions and the calculations used to arrive at each expert’s fair value estimate. The Petitioners contended that the fair value of Just Care was \$55.2 million, while the Respondents arrived at a fair value of \$33.6 million. Petitioners’ expert performed a DCF analysis, trading multiples analysis, and a precedent transaction analysis, relying solely on a DCF analysis for the conclusion. Respondents’ expert performed a DCF analysis, comparable public companies analysis, and a precedent transactions analysis. The Respondent’s expert weighted the DCF analysis at 66.7 percent and the comparable companies analysis at 33.3 percent to arrive at fair value for the Company.

The Court first addressed the credibility issues in the case. The Petitioners contended that the corporate fiduciaries engaged in self-dealing and price fixing; however, the Court rejected that argument since the Respondents did not rely on the merger price as fair value – instead relying on the fair value as determined by an expert witness. Additionally, the Court examined the credibility of the three cases of management projections that were created specifically for the merger, and were not developed in the normal course of business. The Court determined that the management projections were not to be accorded the same deference that they would have been accorded had they been prepared in the ordinary course of business.

The Court examined the inputs for each DCF analysis performed by the experts. As a consequence of the merger, three cases were examined as possible cash flow projections for Just Care: the Static Case, the Georgia Case, and the SVP Case (reflecting the Static Case plus a new facility at the Columbia Center to house sexually violent predators). The Court determined that the Georgia Case was too speculative because “the business must be valued as a going concern based upon the ‘operative reality’ of the company at the time of the merger.” In making its determination the Court also noted that Just Care had no history of expansion into other markets, and Georgia had not issued a Request for Proposals (“RFP”) for care of its inmates. The SVP Case was accepted by the Court with appropriate weighting. Similar to the Georgia Case, there was no RFP for the facility contemplated in the SVP Case at the time of the merger and there was uncertainty about moving forward; however, Just Care had a history of previous expansion at the same Columbia Center, they had the land to move forward with an expansion, and already had housed a similar population to those included in the SVP Case. Due to the uncertainty with the SVP case though, the Court required that the SVP Case be weighted by 66.7 percent.

The Court also evaluated the terminal value used by both experts. The Court used the Respondents’ long term growth rate of 5.5 percent (as opposed to Petitioners’ growth rate of 3.5 percent), since the projections adopted by the Court were more in line with the Respondents’ “view of Just Care’s prospects.”

# Case Summaries

The Court then examined the inputs each expert used in calculating the capital structure to be used in the Weighted Average Cost of Capital (“WACC”). The Court determined that the appropriate structure to adopt was the “capital structure [Just Care] would have maintained as a going concern.” Additionally, the Court opined that Just Care’s preferred stock should be treated as common stock, because “that was the true economic nature of the Company’s preferred stock financing.”

The Court reviewed the cost of equity as calculated by each expert using the Capital Asset Pricing Model (“CAPM”), and issued a determination on beta, equity risk premium, and small stock premium. As it relates to beta, one expert used the sum beta approach while the other did not (though the decision does not disclose what approach was used). The Court accepted the argument that sum beta was the appropriate measure because “it account[ed] for the possibility that price changes for small, thinly-traded stocks may lag the overall market.” The Court also noted that there was little difference between sum beta and the other approach. Next, the experts disputed whether the historical or supply side equity risk premium should be applied. The Court held that the supply side equity risk premium should be applied, because, although the Court had traditionally applied the historical risk premium, there was support for utilizing the supply side premium and, further, there was no financial reason to not accept the Petitioners’ use of it. The Court also addressed the small stock premium. While the experts agreed that Just Care fell into Ibbotson decile 10b, the Petitioners’ expert applied the Ibbotson size premium for decile 10a to eliminate the liquidity effect contained within the size premium. The Court determined that the illiquidity effect contained within the 10b and 10a size premiums was not the liquidity effect that appraisal law prohibited, which the Court noted was the liquidity effect related to transactions between a company’s shareholders and other market participants. Here the liquidity effect that is appropriate to include in the analysis is related to the Company’s ability to obtain capital and to the Company’s “intrinsic value as a going concern.” As a result the Court concluded that decile 10b was appropriate. The Petitioners contended that decile 10a was more appropriate because Just Care’s characteristics made it more comparable to a decile 10a business. However, the Court found that there was not enough evidence to support that contention.

The Court also considered the appropriate cost of debt to use in the analysis. One expert assumed a cost of debt based on the rate for long term BB+ to BB rated debt, while the other expert used the cost of debt based on a financial advisor’s estimate in connection with the transaction. The Court rejected the BB+ to BB rated cost of debt and adopted a cost of debt based on: (i) the financial advisor’s estimate, and (ii) the cost of debt assumed in an analysis by another bidder for the Company. The Court found that the Petitioners’ expert did not undertake a credit analysis for the Company, and the cost of debt had assumed the success of the Georgia Case projections, which the Court found to be speculative.

Ultimately, the Court used: (i) a capital structure of 5 percent debt and 95 percent common equity; (ii) an after-tax cost of debt of 7.04 percent; (iii) a risk free rate of 4.02 percent; (iv) a levered beta of 0.82; (v) a supply side equity risk premium of 5.73 percent; and (vi) a size premium of 9.53 percent to arrive at a WACC calculation of 17.69 percent. Applying that discount rate to Just Care’s cash flow projections (the Static Case and a probability-weighted SVP case), with a long term growth rate of 5.5 percent, the Court found the fair value of Just Care to be \$34,244,570.

# Case Summaries

*Paron Capital Management, et al., v. Crombie, C.A. No. 6380-VCP (Del. Ch., May 22, 2012).*

[Click here to view the opinion.](#)

The case involves the calculation of damages related to fraud and a breach of fiduciary duty.

In 2010, James D. Crombie (“Crombie” or the “Defendant”) sought an equity investment of \$1 million for a 20 percent interest in his company JDC Ventures, which allegedly utilized a futures trading program Crombie had developed. The program allegedly traded futures on intraday trend lines. The Defendant sent marketing materials to the Plaintiffs that included Defendant’s annual and daily returns, potential clients that were considering investing and an independent verification from an accounting firm certifying that the returns Crombie claimed were actual returns. Crombie also made assertions regarding his assets under management.

Plaintiffs performed “extensive” due diligence, including interviewing references, observing Crombie’s program operate in real time, searching industry databases for negative regulatory events, interviewing Crombie’s lawyers about an existing lawsuit and hiring an external company to perform a background search. Plaintiffs formed a business relationship with Crombie on June 2, 2010, founding Paron Capital Management. Plaintiff McConnon made a \$766,000 direct loan to Crombie, which was to be secured by a third mortgage on Crombie’s home. McConnon also made a direct loan of \$300,000 to Paron. Both loans were intended to be used by Crombie to settle a dispute with a former partner in JDC. Crombie and Plaintiffs continued to grow and operate Paron throughout the winter of 2010 to 2011. On March 10, 2011, Paron received an audit request from a regulator, the National Futures Association (“NFA”), which led to the discovery that account statements provided by Crombie were fake and the purported account owner did not even trade in futures. Plaintiffs immediately halted all trading by Paron and contacted the NFA.

The Court found that Crombie committed fraud. Plaintiffs claimed reliance damages, mitigations and lost earnings. The Court granted reliance damages and mitigation damages. As it related to lost earnings, The Plaintiffs’ expert calculated the average of two lost earnings scenarios for each Plaintiff.

- For Plaintiff McConnon, in the first scenario, the expert reviewed McConnon’s historical earnings over a 10-year period and estimated average earnings of \$3.4 million per year for the next 10 years. He also assumed that beginning in 2015, McConnon could begin to mitigate his damages by \$300,000 per year for 10 years. The expert applied a discount rate of 0.4 percent to arrive at a present value of lost earnings of \$32.2 million. In the second scenario, the expert estimated the optimistic case that McConnon could earn \$5 million per year had he gone to another large hedge fund instead of Paron. The expert made the same assumptions regarding mitigation earnings and the discount rate and arrived at a present value of \$47.4 million.
- For Plaintiff Lyons, the expert adopted a similar approach, weighting two scenarios equally. In the base case, the expert utilized a historical average earnings figure of \$188,924 per year, with a reduction for mitigation earnings, to arrive at a present value of \$1.3 million. In the optimistic case, the expert assumed that Lyons could earn \$400,000 per year, and arrived at a present value of \$3.3 million. Weighting the two figures resulted in an estimate of \$2.3 million.

# Case Summaries

The Court found the expert's opinions to be "overly generous." As it related to McConnon, the Court cited that the expert used a base case and a more optimistic case and did not take into account the risk McConnon took when he "decided to leave a stable, extremely well-paying job...to go out on his own." The Court ultimately relied on the base case estimate of \$32.2 million for McConnon. As it related to Lyons, the Court adjusted the expert's optimistic projection downward by 25 percent, assuming that Lyons could eventually earn \$300,000 per year. Applying equal weight to the two scenarios, the Court arrived at lost earnings damages of \$1.9 million.

The Plaintiffs also sought damages on behalf of Paron to compensate for Paron guaranteeing client losses arising from the fraud. The Court found this promise to be a step removed from the fraud and denied the damages.

---

*In Re: Appraisal of the Orchard Enterprises, Inc., C.A. No. 5713-CS (July 18, 2012).*

[Click here to view the opinion.](#)

In this matter the Court addressed valuation-related topics including: (i) how to treat liquidation preference of preferred securities in valuing common stock; (ii) the preference of Discounted Cash Flow ("DCF") analyses over comparable companies and comparable transactions analyses; (iii) the use of hindsight to support management projections; and (iv) the continued trend of support for the use of the Capital Asset Pricing Model ("CAPM").

The case involved Orchard Enterprises, Inc. ("Orchard") which primarily sells licensed music, through online retailers such as iTunes and Amazon, for a variety of artists. In 2010 Orchard accepted an offer for all of its outstanding common shares at \$2.05 per share, when the shares were trading at \$1.34 per share. The common shareholders sought an appraisal by the Court, arguing that each common share was worth \$5.42, not the \$2.05 that was offered. Orchard countered that the merger price was generous and that the shares were worth \$1.53 as of the merger date. The Court evaluated various issues including projections and cost of capital assumptions, to arrive at a value per common share of \$4.67.

The largest difference in value between the two parties in the case stemmed from how liquidation preference was treated. While Orchard argued that the company's preferred stockholders were entitled to the first \$25 million of the company's equity value (and deducted \$25 million from the equity value in their calculation) the Court rejected this approach, noting that the liquidation preference had not been triggered as of the merger date. Furthermore, the Court argued that the possibility that any of the triggering events would have occurred was speculative.

As it relates to valuation approaches and methods, the Court found that the comparable companies and comparable transactions analyses could not reliably be used in this case, giving exclusive weight to the DCF method. The Court stated that "reliance on a comparable companies or comparable transactions approach is improper where the purported 'comparables' involve significantly different products or services than the company whose appraisal is at issue, or vastly different multiples." The Court also noted that one expert did not use the mean or median multiple, but rather picked a "multiple that has no logical relation to either" the mean or median, "inferring that [the comparable companies] are materially different from [the] sample."

# Case Summaries

While the Court rejected the comparable companies and comparable transactions analyses, the door was left open to use these methods in future valuation analyses, particularly in specific industries. For example, the Court singled out fast food restaurant chains, commercial banks, and automobile manufacturers as industries that might be seen as having, “a number of recognizable players who compete in the same markets.”

The Court adopted an approach that weighted DCF projections based on 2 cases: a base case and an aggressive case. The Court weighted the base case 90 percent and the aggressive case 10 percent. The Court noted that the base case projections were supported by the actual financial results for the last twelve months as of the valuation date. While not technically hindsight, it is not clear whether these results were available as of the valuation date. That is, the Court specifically found that the weighting assumption of 90/10 in favor of the base case was appropriate in part because the actual financial results were less than the base case projections, albeit prior to the valuation date.

Finally, the Court addressed cost of capital issues. The Court adopted the CAPM method of estimating the cost of equity, citing that it “is generally accepted, involves less (but still more than comfortable) amounts of subjectivity, and should be used where it can be deployed responsibly.” In terms of the components of the CAPM, the Court adopted the supply-side equity risk premium over the historical equity risk premium. The Court also rejected Orchard’s use of a company-specific risk premium.

In summary, in Orchard the Court rejected the values of both parties (the Petitioner and Orchard), and arrived at a value per common share of \$4.67, more than twice the value of the publicly-traded price prior to the merger. In doing so the Court chose not to apply a liquidation preference, continued its support of DCF analyses, introduced hindsight as support for certain assumptions, and continued its support for CAPM and other cost of capital assumptions.

---

***IQ Holdings, Inc. v. Am. Commercial Lines, Inc., Case No. 6369-VCL (Del. Ch., August 30, 2012).***

[Click here to view the opinion.](#)

On April 12, 2011, IQ Holdings, Inc. (“IQ Holdings”) filed a petition for appraisal of its equity in American Commercial Lines Inc. (“American”). Believing that IQ Holdings improperly revised and supplemented an expert report filed after the discovery cutoff in the case, American moved to strike the revised portions of the report produced by IQ Holdings’ expert.

Expert reports were initially scheduled to be exchanged on February 17, 2012 with rebuttal reports scheduled for March 30, 2012. The parties mutually agreed to adjust the schedule and push back the expert report and the rebuttal report deadlines to March 2 and April 13 respectively. However on May 15, 2012, IQ Holdings delivered an updated version of their expert’s report. American objected to this update but negotiated with IQ Holdings to modify the schedule for expert discovery. The proposal that both parties agreed to was: (i) the Defendant’s expert would be allowed to update her rebuttal report by July 6th, (ii) the Plaintiff’s expert was to stand on the substance of the revised report, (iii) the Plaintiff’s expert would not make any further updates to the report, and (iv) both sides would supplement their reports if required by the Court. In addition to these agreements, the Plaintiff’s expert was permitted to file a further revised report incorporating two changes resulting from his deposition testimony. Those two changes were related to debt and the control premium.

# Case Summaries

On August 3, 2012, IQ Holdings' expert produced a revised report as contemplated in the agreement, though the revised report also included two additional changes beyond the two that were agreed upon. The additional changes related to: (i) changing the discount rate, resulting in an increase in the value of the subject company's equity, and (ii) applying weight to a valuation approach that was initially provided for "illustrative" purposes (the approach was a discounted cash flow with a normalized terminal year).

The Court rejected both of the changes that had not been previously agreed upon. In rejecting the change to the discount rate, the Court noted that IQ Holdings did not indicate why there was good cause to make the change, or why American should be required to incur time and expense of "discovery redo." In rejecting the new valuation weightings the Court rejected IQ Holdings' argument that *In re Orchard Enterprises, Inc.*, 2012 WL 2923305 (Del. Ch. July 18, 2012) established a valuation preference, "bordering on a bright-line rule" that terminal value calculations should always be normalized. The Court noted that early stage ventures and capital-intensive businesses can be known to have extended periods beyond the typical five-year discounted cash flow projection period during which capital expenditures can exceed depreciation. In these situations, the Court stated that "rote normalization after five years would be inappropriate, and Orchard does not require normalization when the operative reality of the company calls for a different approach."

---

*Americas Mining Corp. v. Theriault*, No. 29, 2012 (Del., September 21, 2012).

[Click here to view the opinion.](#)

In 2011, Chancellor Strine ruled on a matter concerning a transaction where Southern Peru Copper Corporation acquired a company owned by Southern Peru's majority shareholder (see Selected Summaries of 2011 Decisions). Chancellor Strine concluded that Southern Peru overpaid and awarded \$2.0 billion in damages. In 2012, the Defendants appealed, arguing, among other things, that the Court of Chancery "essentially became its own expert witness regarding damages by basing its valuation, at least in part, on its own computer models." The Court of Chancery had not adopted the Plaintiff expert's valuation analysis directly, but rather prepared its own estimate of value based on three indications value. The Supreme Court ruled that the Court of Chancery showed "meticulous detail" in explaining its reasons for its damages calculation and provided complete transparency.

For more information about  
Dispute Consulting, visit:

[www.duffandphelps.com/services/  
dispute/pages/default.aspx](http://www.duffandphelps.com/services/dispute/pages/default.aspx)

#### Dispute Consulting Contacts

##### Global Business Unit Leader

Gregory Higgins  
+1 312 697 4748

##### Managing Directors

Atlanta  
Mark Gallagher  
+1 678 916 2581

Boston  
Paul Marcus  
+1 617 378 9470

Chicago  
Roger Grabowski  
+1 312 697 4600

Dallas  
Daniel Beaulne  
+1 469 547 3900

Houston  
Chris Bakewell  
+1 713 237 5336

Los Angeles  
Erik Laykin  
+1 213 270 2370

Morristown  
Allen Pfeiffer  
+1 973 775 8260

New York  
Michael Braverman  
+1 212.871.7000

Toronto, Canada  
A. Scott Davidson  
+1 416 364 9700

Washington, DC  
Bruce Dubinsky  
+1 202 649 1200

#### Contributors

##### Main Contact

Jaime d'Almeida  
+1 617 378 9445  
[Jaime.dalmeida@duffandphelps.com](mailto:Jaime.dalmeida@duffandphelps.com)

Rebecca Levy  
Meredith Roman  
Caitlin Kolb  
Christian Bracy

#### About Duff & Phelps

As a leading global financial advisory and investment banking firm, Duff & Phelps balances analytical skills, deep market insight and independence to help clients make sound decisions. The firm provides expertise in the areas of valuation, transactions, financial restructuring, alternative assets, disputes and taxation, with more than 1,000 employees serving clients from offices in North America, Europe and Asia.

Investment banking services in the United States are provided by Duff & Phelps Securities, LLC; Pagemill Partners; and GCP Securities, LLC. Member FINRA/ SIPC. M&A advisory services in the United Kingdom and Germany are provided by Duff & Phelps Securities Ltd. Duff & Phelps Securities Ltd. is authorized and regulated by the Financial Conduct Authority. For more information, visit [www.duffandphelps.com](http://www.duffandphelps.com).