UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF NEW YORK

In re: LYONDELL CHEMICAL COMPANY, *et al.*, Debtors.	**FOR PUBLICATION** Chapter 11 Case No. 09-10023 (CGM) (Jointly Administered)
EDWARD S. WEISFELNER, AS LITIGATION TRUSTEE OF THE LB LITIGATION TRUST, Plaintiff, v. LEONARD BLAVATNIK, *et al.*, Defendants.	Adv. Pro. No. 09-01375 (MG)
EDWARD S. WEISFELNER, AS LITIGATION TRUSTEE OF THE LB LITIGATION TRUST, Plaintiff, v. NAG INVESTMENTS LLC, Defendant.	Adv. Pro. No. 11-01844 (MG)

MEMORANDUM OPINION AND ORDER AFTER TRIAL

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MARTIN GLENN
UNITED STATES BANKRUPTCY JUDGE

I. INTRODUCTION

Edward S. Weisfelner, as Litigation Trustee of the LB Litigation Trust[1] (the "Trustee"), seeks to recover billions of dollars from Access,[2] related entities, and employees, in this litigation on behalf of LyondellBasell creditors. The Trustee's claims arise out of the merger of Lyondell and Basell, orchestrated by Len Blavatnik's Access.

The parties narrowed the issues to be tried upon the submission of a joint pre-trial order. (ECF Doc. # 848.) The Trustee brings claims alleging: (i) actual fraudulent transfer; (ii) constructive fraudulent transfer; (iii) avoidable preference; (iv) breach of contract; and (v) breach of fiduciary duty and tort claims under Luxembourg law, with aiding and abetting under Texas law. Opening arguments took place on October 17, 2016. At trial, direct testimony was offered, primarily by written declarations with in-court cross examination, but also through live witnesses and deposition designations. After trial, the Trustee and the Defendants submitted detailed proposed findings of fact and conclusions of law. (*See* ECF Doc. ## 906–09.) The Court heard closing arguments on February 2, 2017.

A. Blavatnik, the Companies, and the Merger

Len Blavatnik is the founder and chairman of Access, and the owner (either directly or indirectly) of 100% of Access and numerous related companies. The Access group of companies acquired Basell, a Netherlands-based petrochemicals company, in 2005. The parties disputed

[1] The LB Litigation Trust was created under the plan of reorganization in the main bankruptcy case, which was confirmed on April 23, 2010, and became effective on April 30, 2010. (*See* Case No. 09-10023, ECF Doc. # 4418 (findings of fact, conclusions of law, and order confirming the third amended joint chapter 11 plan of reorganization for the LyondellBasell Debtors).) The LB Litigation Trust has been designated to prosecute claims assigned to it by the former chapter 11 debtors in possession, including LyondellBasell Industries AF S.C.A. ("LBI") and Lyondell Chemical Company ("Lyondell"). (*Id.*)

[2] All capitalized terms not otherwise defined in the Introduction are defined below.

Basell's exact equity value at trial, but Basell was undisputedly worth billions of dollars. Soon after acquiring Basell, Blavatnik began to pursue combining Basell with an American refining company, with the goal of developing Europe-based Basell into a global petrochemical and refining company. Blavtnik and his associates identified Lyondell as a compelling target.

Numerous Defense witnesses testified that the "industrial logic" and "strategy" of the Basell-Lyondell merger were sound: Basell was the world's largest supplier of polypropylene and advanced polyolefin products, and a European leader in production of polyethylene. Lyondell was the largest U.S. producer of ethylene and had recently assumed full ownership of a large oil refinery in Houston. Access and Basell considered Lyondell a good strategic fit for a combination with Basell, and anticipated significant synergies upon combining the two companies.

Access and Basell made an offer to acquire Lyondell in 2006, which was rejected. After unsuccessfully bidding on Lyondell's competitor Huntsman in 2007, Blavatnik and Access again focused on acquiring Lyondell. On May 9, 2007, an Access affiliate acquired a toehold position in Lyondell stock in advance of a potential merger. In June 2007, Blavatnik met with Lyondell CEO Dan Smith to discuss the proposed merger; after discussions between the two executives and within Basell management, Blavatnik eventually offered $48 per share to acquire Lyondell. In July 2007, Lyondell provided non-public due diligence materials, including refreshed projections, to Access, Basell, and a group of financing banks. Over several days in July, including all-day meetings over the weekend of July 14 and 15, Access, Basell, and the Banks conducted due diligence on the potential merger and received presentations from Lyondell management about its business and the refreshed projections. By this time, Access, Basell, and the Banks had already been monitoring Lyondell's performance for at least a year in connection with a possible merger.

On July 16, 2007, the Merger Agreement was signed and the Banks committed to fund the merger at a price of $48 per share. Access would contribute all of Basell's equity to the Merger, and Basell and Lyondell would be combined to form LyondellBasell Industries AF S.C.A. ("LBI"). In August 2007, an Access affiliate acquired additional Lyondell stock, bringing the total toehold position to 9.84% of Lyondell's outstanding shares. In September 2007, several months after the signing of the deal, Lyondell disclosed that it would miss its EBITDA projections for the third and fourth quarters, primarily because of rising feedstock prices. But Access, Basell, and the Banks were all satisfied that the fundamentals of the Merger remained sound, particularly because Basell was outperforming its own projections.

The Merger closed on December 20, 2007. The Merger financing totaled $20.3 billion, and left LBI with approximately $2.3 billion of liquidity at the Closing Date.

LBI was buffeted by a series of unplanned and, to some extent, unforeseeable events in the year after the Merger, including a deadly crane collapse and two unusually destructive hurricanes at its Houston refinery, wildly fluctuating oil prices, and the effects of the Great Recession at the end of 2008. LBI filed for bankruptcy protection under chapter 11 on January 6, 2008.

B. The Trustee Failed to Establish that Lyondell was Insolvent on Two Key Dates

The Trustee argues that the payments made to Blavatnik-owned entities on account of the pre-merger Toehold investment Blavatnik made in Lyondell stock are constructively fraudulent transfers. The Trustee also argues that loan repayments made in October 2008 on a drawn-down revolving credit facility, totaling $300 million, were preferential transfers. Essential to the

Trustee's constructive fraudulent transfer claims and preference claim are proving that LBI was insolvent on December 20, 2007, when the Merger closed, as well as on October 16, 17 and 20 of 2008, when the loan repayments were made. So naturally, questions of solvency and capital adequacy were a central focus of this trial. The cornerstone of the Trustee's case is the assertion that the refreshed projections, prepared in response to Blavatnik's acquisition of the Toehold position, were fraudulently prepared and wildly inflated, and resulted in a combined company that was predestined to fail. In essence, the Trustee argues that a merger based on these refreshed projections necessarily left LBI with inadequate capital. The Trustee, however, failed to prove his case.

1. The Trustee Failed to Prove Insolvency on December 20, 2007

At trial, the Trustee called both industry experts, who attempted to cast the refreshed EBITDA projections as egregiously overstated, and financial experts, who attempted to paint the entire merger as doomed from the very beginning. But as evidence was presented at trial, serious flaws with the Trustee's experts were exposed, rendering the Trustee's experts' testimony largely unreliable. First, the Trustee's industry experts, CMAI, utilized modeling technology that was aptly characterized by the Defendants as a "black box" that contained hidden assumptions and "proprietary" elements that precluded the Defendants' experts, and the Court, from fully apprising the methods and merits of the model. The Trustee's financial experts, in turn, relied on the questionable analysis performed by the industry experts, but also offered suspect testimony of their own. One of the Trustee's solvency experts, in concluding that LBI was inadequately capitalized, cherry-picked a small subset of the many projections that were prepared by the financing banks, and manipulated them in a manner that both contradicted the consensus views of the banks, and misrepresented the actual purpose of those cherry-picked projections themselves. And further, some of the Trustee's experts' credibility suffered from the fact that these experts represented different parties at different times throughout the case, and reached fundamentally different conclusions that were in some instances inconsistent, and in others flatly contradictory. On the whole, the Court finds the expert testimony offered by the Trustee to be largely unreliable, and the Trustee's case floundered without credible expert testimony on these critical issues.

The Defendants' experts, on the other hand, presented credible testimony and financial projections largely in line with the views of the banks that financed the merger. And indeed, the Court finds the views and analyses of the financing banks to be of great value in this case, just as other courts have looked to sophisticated market participants as persuasive evidence in circumstances such as these. The financing banks risked billions of dollars of their own money on the future of LBI. Testimony at trial established that at least several of the banks had longstanding relationships with Lyondell and Basell, had been tracking the companies for years, and were intimately familiar with the businesses and the industry at large. When the merger eventually came to fruition, the banks supplemented their institutional knowledge of the companies and the industry with non-public information, and each bank employed masses of analysts to scrutinize the merits of the deal. Ultimately, each bank found the merger to be worthy of investment, and received approval from the requisite management and investment higher-ups. The views of these sophisticated investors provided perhaps the clearest indication that the combined company was left with sufficient capital upon the merger closing, given that the financial projections prepared by both Lyondell management and the banks all reasonably showed LBI to be solvent on the closing of the merger.

Moreover, that LBI ultimately failed in a colossal manner just one year after the merger does not necessitate a finding that, under the circumstances, LBI was insolvent at the close of the merger, or thereafter. A number of intervening events ravaged LBI, including the tragic collapse of a large crane at the Houston refinery, two hurricanes, and of course, the Great Recession. While unplanned outages are bound to occur at a refinery sooner or later, the Great Recession took a severe toll on LBI that it simply could not survive. Plunging demand and liquidity issues directly related to the recession were not foreseen by anyone, and indeed, to a large extent, were unforeseeable. Lyondell, Access, the Banks, and industry experts fully appraised the merits of the merger based on droves of public and non-public information, and decades of industry experience. LBI failed miserably, but the Trustee simply has not met his burden of proof that LBI was insolvent on the date of the merger closing.

2. The Trustee Failed to Prove Insolvency in Mid-October 2008

The Trustee also alleges that three payments totaling $300 million, made on October 16, 17, and 20, 2008, were preferential transfers. The transfers were made in repayment of a $300 million draw on an unsecured revolving credit facility from LBI's affiliate Access. The draw was made on October 15, 2008, and repaid on the following three business days. Crucial to the Trustee's preference claim is that he had to show that LBI was insolvent on the dates of the repayment in mid-October 2008. The Trustee's solvency expert, Maxwell, made a series of severe missteps that significantly undermined his testimony. The Trustee's insolvency case crumbled under the weight of Maxwell's errors.

Perplexingly, Maxwell relied on internal LBI projections that were not presented until *December* 2008 to value the company as of *October* 2008. That the fortunes of the United States economy, and LBI in particular, changed drastically in those two months is to put it mildly. Maxwell acknowledged at trial that the Great Recession caused a dramatic decline in LBI's performance in November and December 2008. Maxwell assumed that the December 2008 projections must have been fully drafted by mid-October 2008—despite failing to identify a single draft before December. Maxwell further assumed that even if projections were drafted in October, those projections would not have been updated by December. The Court finds that it strains credulity to believe that LBI would have fully drafted its projections in October (without producing any record of such drafts), watched the Great Recession begin to unfold all around it, discussed in December the dramatic decline of its business, and yet used the exact same numbers it drafted in October without a single change to reflect the economic decline of the last two months.

Maxwell's use of anachronistic projections might have been independently fatal to his October 2008 opinion, but he made additional errors that further undermined his credibility. Notably, Maxwell was retained in 2009 by the Creditors' Committee to critique a valuation conducted by Duff & Phelps in connection with LBI's proposed DIP financing. Maxwell found a significantly higher DCF value for LBI in 2009, on behalf of the Creditors' Committee, than he did in 2011, on behalf of the Trustee. Using his 2009 DCF value, LBI was solvent; by 2011, when Maxwell was working on this litigation, he had completely changed his opinion to conclude that LBI was insolvent. Maxwell never adequately explained this inconsistency at trial, attributing the difference in value to a disclaimer in his 2009 work on behalf of the Creditors' Committee that he was operating on a compressed timeframe. But Maxwell's change of tune cannot be explained simply by having more time to work—he made significant changes to his methodology, with the result that his opinion had completely changed for litigation purposes.

Combined with additional weaknesses in Maxwell's testimony described more fully below, the Court has determined that Maxwell's testimony is unreliable. Without Maxwell's testimony, the Trustee has no means to prove that LBI was insolvent under the required balance-sheet test. A few emails mentioning the abstract possibility of bankruptcy do not an insolvent balance sheet make. And without proving insolvency, the preference claim fails.

C. The Trustee Also Failed to Establish that an Actual Fraudulent Transfer Occurred

With respect to the Trustee's actual fraudulent transfer claim, the Trustee relied on a novel theory of the "collapsing doctrine," attempting to prove a fraudulent intent on the part of pre-merger Lyondell's CEO Dan Smith, and then impute Smith's intent horizontally to Basell and its ultimate owner, Blavatnik. The Trustee, however, failed to prove actual fraudulent intent by Smith, and accordingly no amount of mental gymnastics can substantiate a recovery on an intentional fraudulent transfer claim brought against Blavatnik, the person who himself lost billions on LBI's failure.

The crux of the intentional fraudulent transfer claim is that the refreshed projections, prepared by a Lyondell corporate development employee at the behest of Lyondell's CEO, were completely bogus, and prepared with the intent to defraud creditors. But the evidence at trial established that, while the refreshed projections were prepared over several days with limited input from others at the company, there was simply no basis to conclude that the refreshed projections or any other aspect of the merger were carried out with any intent to delay, defraud, or hinder anyone.

Blavatnik held himself out to be a long-term investor interested in sustained growth over many years. And to be sure, he contributed billions of dollars to the merger in the form of Basell's equity value. Blavatnik and others at Access stood to manage one of the largest petrochemical and refining companies in the world if the transaction succeeded, but lose big if it failed. He had every reason to scrutinize Lyondell's refreshed projections and, indeed, testified that it is his experience that sellers' projections tend to be optimistic.

LBI's titanic collapse in the wake of the Great Recession was monumental. But no convincing evidence at trial has persuaded the Court that Lyondell's former CEO, or anyone else, intentionally sabotaged the combined company with baseless financial projections. Smith, who even asked to stay on as CEO of LBI after the merger, cannot be said to have held the requisite intent to support an intentional fraudulent transfer claim. Tellingly, the Trustee gave no legitimate reason why Smith would volunteer to captain a ship he had engineered to sink. And the Trustee asks the Court to believe that the financing banks invested billions of dollars in the doomed company despite seeing an iceberg on the horizon.

Because the Court finds that the Trustee failed to prove any actual fraudulent intent on the part of Smith, it is unnecessary to untangle the Trustee's wholly unprecedented application of the collapsing doctrine across the table to Blavatnik, Smith's deal counterparty, who would have ultimately been the victim of any fraudulently prepared projections. The Trustee's intentional fraudulent transfer claim necessarily fails.

D. The Bulk of the Trustee's Remaining Claims Fail

The Trustee threw the kitchen sink at the Defendants, alleging breaches of Luxembourg, Texas, and New York law. The Trustee alleges that Blavatnik and other Basell and Access managers breached their duties to pre-merger Basell and post-merger LBI under Luxembourg fiduciary duty and tort law, and that AIH and AI Chemical aided and abetted those breaches under Texas law. The Luxembourg claims fail for the same essential reasons as the constructive fraudulent transfer claims: the Trustee did not prove that LBI was insolvent at the Closing Date, nor even that it was insolvent ten months later in October 2008. Without a showing that the combined company was insolvent, and with no additional evidence that the Defendants mismanaged the companies by pursuing the Merger, the Trustee cannot prove the essential element of "fault." And without an underlying Luxembourg violation, the aiding and abetting claims must also fail.

Finally, the Trustee alleges breach of contract under New York law, based on Access's refusal to fund LBI's request to draw down the full amount of the Access Revolver in December 2008. The breach of contract claim—in contrast to the Trustee's other claims—does not require a showing of insolvency or fraudulent intent. The parties dispute only whether the Access Revolver's MAC clause excuses Access's non-performance, and if not, the amount of restitutionary damages available. The Access Revolver contained a MAC clause, but, crucially, not an ongoing solvency requirement. The Court has seen no evidence at trial that would warrant rewriting the MAC clause to include insolvency, when the parties clearly did not. Accordingly, the Trustee is entitled to recover restitutionary damages in the amount of $7.2 million, representing the Access Revolver Commitment Fee, minus the benefit paid for and received by LBI.

II. PROCEDURAL HISTORY

The Trustee filed the second amended complaint on September 29, 2011 (the "Second Amended Complaint" or "SAC," ECF Doc. # 598).[3] The Trustee also filed a complaint against NAG (the "NAG Complaint," Case No. 11-01844, ECF Doc. # 1), grounded in a common set of facts and tried together in connection with these proceedings. The Second Amended Complaint originally contained 21 counts against a variety of defendants, but has since been shaped down to 9 counts, all against Access-related entities and personnel. The original 21 claims variously charge breaches of fiduciary duty; the aiding and abetting of those alleged breaches; intentional

[3] The Trustee initiated this adversary proceeding by filing a complaint against numerous defendants on July 22, 2009. (ECF Doc. # 1.) The Trustee filed an amended complaint on July 23, 2010 (ECF Doc. # 381), but at present, the only claims against the Defendants are the remaining claims in the Second Amended Complaint.

and constructive fraudulent transfers; unlawful dividends; and a host of additional bases for recovery under state law, the Bankruptcy Code, and the laws of Luxembourg, under which several of the Basell entities were organized. The Complaint also seeks to equitably subordinate Defendants' claims that might otherwise be allowed.

Summary judgment on Count 1, a claim for constructive fraudulent transfer related to the Toehold Payments (as defined below), was granted with respect to Toehold Payment 2, and only a potential recovery on Toehold Payment 1 remains. (See *Order Granting in Part Nell Limited and Len Blavatnik's Motion for Summary Judgment on Count 1 and Motion for Partial Summary Judgment on Count 1 of the Amended Complaint*, ECF Doc. # 772.) Count 2, a claim for intentional fraudulent transfer, was dismissed and later reinstated after Judge Cote's July 27, 2016, decision in *Weisfelner v. Hofmann (In re Lyondell Chem. Co.)*, No. 16-00518, 2016 WL 4030937, at *3 n.5 (S.D.N.Y. July 27, 2016) [hereinafter "*Hofmann*"].

Certain Lyondell directors and officers and the Trustee entered into a settlement and stipulation dismissing the Trustee's claims against them, resulting in the dismissal of Counts 3, 5, 8, 20 and 21. (*See* ECF Doc. # 813.) Likewise, Alan Bigman, and Diane Currier, as Executor of the estate of Richard Floor, entered into a stipulation with the Trustee resulting in the dismissal of the claims against them. (*See* ECF Doc. # 825.) Motions to dismiss Counts 4, 14, 15, 16 and 17 were also granted. (*See* ECF Doc. ## 696, 697, 700.) A motion to dismiss Count 12, the breach of contract claim related to the Access Revolver, was denied with respect to restitutionary damages, but granted with respect to other types of damages. (ECF Doc. # 697 (the "Count 12 Order").)

At the commencement of trial, the remaining counts in the Second Amended Complaint were as follows:[4]

- Count 1: Constructive fraudulent transfer claims seeking to avoid and recover Toehold Payment 1.
- Count 2: Intentional fraudulent transfer claim seeking to avoid and recover Toehold Payments 1 and 2.
- Counts 6 and 7: Claims under Luxembourg law for tort and "de facto manager" actions
- Count 9: Preference claim seeking to avoid and recover the October repayments under the Access Revolver.
- Count 10: Equitable subordination claim seeking to subordinate AI International's unsecured claim under the Access Revolver.
- Count 11: Constructive fraudulent transfer claim seeking to avoid and recover fees paid to Nell and Perella Weinberg.
- Count 12: Breach of contract claim seeking restitutionary damages for AI International's refusal to lend under the Access Revolver in December 2008.
- Count 18: Aiding and abetting breach of fiduciary duty claim against Access (and AI Chemical)
- NAG Complaint: Constructive fraudulent transfer claims against NAG seeking to recover an extraterritorial dividend.

III. JURISDICTION AND VENUE

This Court has subject matter jurisdiction under 28 U.S.C. §§ 157 and 1334(b). Venue of this adversary proceeding is proper under 28 U.S.C. § 1409(a). This adversary proceeding is a core proceeding pursuant to 28 U.S.C. § 157(b)(2)(F),(H), and (O). Plaintiff and all defendants

[4] The joint pre-trial order (ECF Doc. # 848) does not include in the issues to be tried Count 17 of the Second Amended Complaint, a claim for constructive fraudulent transfer based on the Access Revolver (defined below). Nor did the Trustee address Count 17 at trial or in its post-trial brief. Accordingly, the Court deems Count 17 waived and will not further address it in this Opinion.

that remained parties at the time of trial consented to the bankruptcy court entering final orders and judgments. (ECF Doc. # 848 at 3 (Joint Pre-Trial Order).)

This opinion sets forth the Court's findings of fact and conclusions of law pursuant to Rule 52(a) and (c) of the Federal Rules of Civil Procedure, made applicable to adversary proceedings in bankruptcy by Rule 7052 of the Federal Rules of Bankruptcy Procedure. The results in this case are very fact-dependent. Therefore, the Court provides extensive findings of fact, including the Court's resolution of credibility questions. While it is fair to say that none of the participants in these transactions distinguished themselves, at bottom the results in these cases are driven by the Trustee's failure to prove his claims (except for breach of contract).

IV. FINDINGS OF FACT[5]

LBI was a result of the merger of Lyondell with Basell B.V. and its subsidiaries (collectively "Basell" and, such transaction, the "Merger") on December 20, 2007 (the "Closing Date"). Negotiation of the Merger took place in summer 2007, and a merger agreement was signed on July 16, 2008. (*See infra* Section IV.G.) Lyondell shareholders were paid $48 per share, totaling $12.5 billion. (Bigman Decl. ¶ 82.) Financing for the Merger, totaling $20,313,391,500, was provided by a syndicate of banks led by Goldman Sachs, Merrill Lynch, Citibank, and ABN AMRO. (*See infra* Section IV.J.1.) Additional financing was provided by UBS. (*See infra* Section IV.L.) Between the July 16, 2007, signing of the merger agreement and the December 20, 2007, merger closing, market conditions grew increasingly volatile. Crude oil prices—a major driver of costs in the chemical industry—rose from about $65 per barrel to about $95 per barrel. (Bigman Decl. ¶ 74.) As crude oil prices rose, Lyondell's need for liquidity—

[5] The Court uses the following citation conventions in this Opinion: (i) PX refers to the Trustee's trial exhibits; (ii) DX refers to the Defendants' trial exhibits; (iii) JX refers to joint exhibits; and (iv) CX refers to certain exhibits introduced by the Defendants during the cross examination of Ralph Tuliano.

but also its ability to borrow under its secured credit facilities—increased. (*Id.* ¶ 107.) As discussed below, at the Closing Date, the evidence shows that LBI had total liquidity of $2.3 billion. (*See infra* Section IV.J.2.) The evidence shows that this amount was sufficient for LBI to conduct its business. But during 2008, the world economy foundered. Oil prices rose to just above $145 per barrel and quickly plummeted to less than $40 per barrel, depleting LBI's secured borrowing base and tightening its access to credit. (*See infra* Section IV.K1.) Additionally, LBI suffered a series of business setbacks, including a deadly crane collapse and two destructive hurricanes at its Houston refinery. LBI's liquidity dwindled as 2008 came to a close, and LBI filed for chapter 11 protection in this Court on January 6, 2009.

A. Access and Leonard Blavatnik

Defendant Leonard Blavatnik founded Access Industries, Inc. ("Access Industries" or "Access"), a New York-based corporation organized under Delaware law, in 1986, and serves as its chairman. (10/21 Trial Tr. (Blavatnik) at 1016:10–22; 1069:12–14; 1079:4–23; 1082:9–12; 1083:23–1084:6.) Blavatnik directly or indirectly owns and controls 100% of Access, including its numerous subsidiaries and affiliates. (*Id.* at 1069:15–17.) Blavatnik maintains that Access is a long-term investor and typically favors long-term value over short-term gains. (Blavatnik 2009 Decl. ¶ 5.)

Blavatnik employs a number of individuals at Access who testified at trial. As discussed below, these employees played different roles in analyzing, and in some cases approving, the Merger. Defendant Philip Kassin was the Head of Mergers and Acquisitions and Financing and an Executive Vice President at Access when Access acquired Basell, and when the Merger took place. (10/21 Trial Tr. (Kassin) at 986:20–24.) After the Merger, Kassin was on the supervisory board of LBI. (Kassin Decl. ¶ 2.) Defendant Lincoln Benet was the Chief Executive Officer of

Access during the Merger. (Benet Decl. ¶¶ 2, 5.) After the Merger, Benet was on the supervisory board of LBI. (*Id.* ¶ 4.)

During their depositions and at trial, board members of Basell entities were unsure which board they sat on. (11/1 Trial Tr. (Benet) at 2013:9–14:5 (Benet was "not sure what the formal name of the [Basell] entity [he was sitting on the board of] was"); 10/31 Trial Tr. (Kassin) at 1751:25–52:10 (Kassin was "not sure" whether, prior to the merger, he was a member of the managing board of Basell GP); 11/2 Trial Tr. (Thorén) at 2419:24–20:8 (Thorén couldn't recall whether he was "a manager or an executive vice president of [Access Industries Management, LLC]" and whether he was a manager at any time of Basell Funding S.a.r.l.); 11/2 Trial Tr. (Thorén) at 2421:14–21 (Thorén didn't recall whether he was a manager of NAG Investments, LLC or Basell Funding S.a.r.l.); A. Blavatnik Dep. Tr. at 38:3–20 (Alex Blavatnik saying "Yes, I think I'm—I was or maybe still—I think I was the manager for [Basell Funding S.a.r.l].").)

Blavatnik, as the ultimate owner of Access and Basell, exercised substantial power over business decisions. Ajay Patel was the former Vice President of Access and worked on matters involving leveraged finance.[6] Patel credibly testified on a number of issues regarding Access and the Merger, including some of the internal mechanics of the Access business and how decisions were made. Patel testified that, though Blavatnik was the ultimate boss, he listened to Access staff, Basell management, and financial advisors such as Merrill Lynch. (10/20 Trial Tr. (Patel) at 876:1–10.) Other Access personnel testified that when Access would provide funds to affiliates and subsidiary companies, relatively small dollar amounts could be approved by the CFO of Access, Richard Storey, without Blavatnik's approval. However, when transactions

[6] Patel appeared at trial by subpoena and without an attorney, though he was formerly represented by counsel to Access.

involved $500,000 or more, Blavatnik's approval was required. (11/2 Trial Tr. (Storey) at 2203:4–12.)

B. Access Acquires Basell

In August 2005, Nell,[7] an Access subsidiary, acquired Basell, a Netherlands-based producer of commodity petrochemicals, including polypropylene and polyethylene, for roughly €4.5 billion. At that time, Basell was the world's largest supplier of polypropylene and advanced polyolefin products, a leading European producer of polyethylene, and a leader in the development and licensing of polypropylene and polyethylene processes and technology. Access affiliates contributed about €860 million in cash for the acquisition, which constituted 20% of the purchase price. The remaining 80% of the purchase price was financed with debt. (Blavatnik 2009 Decl. ¶ 3.) Prior to the Merger, Basell owned no refining facilities, though Basell committed to purchase the Berre refinery in France prior to the Closing Date. (10/21 Trial Tr. (Blavatnik) at 993:16–94:10, 1060:21–62:5; *see also* PX-793.)

Basell B.V. was run by a management board (the "Management Board") and a supervisory board (the "Supervisory Board"). (Trautz Dep. Tr. at 26, 28–29.) In 2007, Volker Trautz, the CEO of Basell B.V., and Bigman, the CFO, were members of the Management Board, and the Supervisory Board consisted of Blavatnik, as Chairman, Benet, Kassin, and two independent members, Richard Floor and Kent Potter. (Bigman Decl. ¶¶ 28–29, 31.)

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[7] Defendant Nell Limited ("Nell") is an entity organized under the laws of Gibraltar and owned, indirectly, by Blavatnik. (10/21 Trial Tr. (Blavatnik) at 1077:17–19; JX-32 (Management Agreement between Basell AF and Nell, dated 12/11/07 ("2007 Management Agreement")) ("Nell Limited, a Gibraltar company"); JX-40 ("Nell Limited, a company registered under the laws of Gibraltar") at .001.) Nell is one of several holding companies through which Blavatnik owned Basell AF. (Castiel Dep. Tr. at 28:18–30:14.) Cheam Directors was the sole director of Nell. (Castiel Dep. Tr. at 14:15–19.)

In connection with Nell's acquisition of Basell, certain newly created Luxembourg holding companies, including BIS and Basell AF, were established as part of the corporate ownership link between Nell and Basell B.V. The manager of Basell AF was Basell AFGP S.a.r.l. (the "GP"), and the managers of the GP were Bigman, Floor, Kassin, and Potter, each of whom was on the Management or Supervisory Boards of Basell B.V. (*Id.* ¶ 30.)

Following Nell's acquisition of Basell, Basell appreciated in value, and paid off over €1 billion of debt. (Blavatnik 2009 Decl. ¶ 4; Bigman Decl. ¶ 42; Benet Decl. ¶ 5; Melvani Decl. ¶ 34.) There are differing calculations of Basell's equity valuation, but it is undisputed that Basell's equity was worth billions of dollars when the merger with Lyondell was arranged. While Basell did not contribute cash toward the Merger, its equity value supported the equity of the combined companies.

Blavatnik testified that Basell's equity was worth three to six billion dollars just before the Merger. (10/21 Trial Tr. (Blavatnik) at 1126:17–22.) In late 2006, Goldman Sachs calculated that Basell's equity value was about €2.948 billion. (DX-29 at .008.) In early 2007, Merrill Lynch reached a similar conclusion, estimating a value between $3.9–$4.6 billion. (DX-59 at .008.) In July 2007, Citibank valued Basell's equity at over $6 billion. (DX-102 at .007.)

C. Access's Early Interest in Merging Basell with a Refining Company

In 2006, Access and Basell began to evaluate a potential transaction involving Lyondell, believing that a merger between Lyondell and Basell would provide great benefits for the combined company. (Blavatnik 2009 Decl. ¶¶ 8–9; Benet Decl. ¶ 7; Bigman Decl. ¶¶ 36–37.) Trautz described Lyondell as a "perfect fit" for Basell "from a strategic perspective." (Trautz Dep. Tr. at 43:17–23, 46:8–47:10.) Access anticipated that a merger would provide value on account of a more diversified portfolio and a larger global footprint. (Young 2009 Report, DX-

804 at 49–54.) Numerous parties, including James Gallogly, who became LBI's CEO during the chapter 11 cases and retired in 2015, credibly testified that the industrial logic of the Merger was sound. (Gallogly Decl. ¶¶ 3, 11–15; 11/4 Trial Tr. (Gallogly) at 2775–79, 2782, 2784–89, 2792, 2799–2800; *see also* Frangenberg Decl. ¶¶ 5–11, Kassin Decl. ¶ 5, Vaske Decl. ¶¶ 22–23.) Patel explained credibly at trial that "it made sense to combine the companies." (10/20 Trial Tr. (Patel) at 899:7–13.)

Lyondell was the largest U.S. producer of ethylene and offered Basell diversification through its polypropylene oxide business and its large refinery and fuels operation. Lyondell was a public company with 253,625,523 shares of common stock outstanding before the Merger, and was traded on the New York Stock Exchange. (PX-362 (Lyondell Proxy Statement, dated 10/12/07 ("Lyondell Proxy")) at .006–007.) The company pre-merger was made up of three primary business segments: Ethylene Co-Products and Derivatives ("EC&D"); (2) Propylene Oxide and Related Products ("PO&RP"); and (3) Refining. (PX-434 (Lyondell 2007 10-K) at .005.)

Lyondell's refining division was comprised of a refinery in Houston (the "Houston Refinery") located on the Gulf Coast of Texas. The Houston Refinery was capable of refining high-sulfur "heavy" crude oil into gasoline, diesel, and other products. Further, the Houston Refinery had been operated as a joint venture between Lyondell and CITGO Petroleum Corporation ("CITGO") since 1993. (PX-362 (Lyondell Proxy) at .0022; PX-254 (Lyondell Management Presentation 7/14/07) at .011; DX-174 (Goldman Credit Memo, 9/07) at .006.)

1. Early Offers to Acquire Lyondell

In the early months of 2006, Merrill Lynch began to advise Access regarding a potential acquisition of Lyondell. (*See* Frangenberg Decl. ¶ 5; 10/21 Trial Tr. (Blavatnik) at 1003:17–1004:7.) Frangenberg and other members of the Chemicals Group at Merrill Lynch, based on assumptions provided by Access, constructed a model "designed to project the future operating profit and cash flows of Lyondell and, later on, a combined Lyondell-Basell entity." (Frangenberg Decl. ¶ 12.)

In April 2006, Access offered a purchase price of $24 to $27 per share of Lyondell stock. (10/21 Trial Tr. (Blavatnik) at 992:6–14; PX-362 (Lyondell Proxy) at .0022; *see also* Smith Dep. Tr. at 69:19–23.) In May 2006, Smith advised the Lyondell board of directors of Access's interest in Lyondell and the offer, but Lyondell's board rejected the offer, and Smith communicated the rejection to Blavatnik. (PX-362 (Lyondell Proxy) at .0022; Smith Dep. Tr. at 69:19–70:3.) Access remained interested in acquiring the Houston Refinery.

On July 12, 2006, Blavatnik spoke to Smith and indicated Access's continuing interest in Lyondell and the Houston Refinery. (10/21 Trial Tr. (Blavatnik) at 994:25–996:15; PX-362 (Lyondell Proxy) at .023.) Soon thereafter, on July 20, 2006, Lyondell and CITGO announced that they were no longer exploring the sale of the Houston Refinery to a third party. (PX-362 (Lyondell Proxy) at .023.) Later, on August 16, 2006, Lyondell acquired the 41.25% interest in the Houston Refinery that it had not previously owned, making the Houston Refinery wholly-owned by Lyondell. (PX-68 (Lyondell 2006 10-K) at .008.) Access continued to analyze the possibility of acquiring Lyondell. (PX-45 (E-mail from Benet to Kassin, Patel, et al., re: Hugo Sensitivity Analysis to Downside, dated 7/24/2006).)

On August 10, 2006, Blavatnik and Trautz sent a letter to Smith proposing an acquisition of Lyondell by Basell Holdings at a cash price of $26.50 to $28.50 per share; this offer was also rejected. (JX-2 (Letter from Blavatnik and Trautz to Smith, dated 8/10/2006 (the "2006 Offer Letter")); Smith Dep. Tr. at 71:2–19; PX-362 (Lyondell Proxy) at .023–024.)

In early 2007,[8] Blavatnik and members of his team at Access again began evaluating a potential acquisition of Lyondell, this time at $38 per share. (DX-44 (Presentation to Athens Regarding Project Hugo, dated 3/19/2007) at .003 ("As discussed, we have analyzed a potential acquisition of Hugo at $38.00 / share").) In connection with a potential $38 per share offer, Access, through Merrill Lynch, analyzed how the combined company would perform in a variety of scenarios. (*See*, *e.g.*, DX-56 (ML Supplemental Hugo Analysis, 4/1/07), DX-66 (ML Credit Stress Test, 4/10/07), DX-69 (Presentation to Athens Executive Summary, dated 4/10/2007 (the "Toehold Presentation")).) At Access's request, Merrill Lynch ran, among other things, a "credit stress test case" that was intended to "illustrate how – how deep would the [combined] business have to sink to not be able to – to cover its debt service." (11/1 Trial Tr. (Frangenberg) at 2094:12–16.) The "credit stress test" was run using a share price of $38 per share. (DX-66 (ML Credit Stress Test, 4/10/07) at .015.) In the "credit stress test," Merrill Lynch tried to model "trough" conditions worse than the 2002 to 2003 trough. (11/1 Trial Tr. (Frangenberg) at 2095:4–6.)

On March 18, 2007, Blavatnik asked Bigman, Kassin and Patel to "give quick comments" regarding the $38 per share offer. (DX-43 (E-mail from Blavatnik to Bigman, Kassin and Patel, Fw: Project Hugo, dated 3/18/2007) at .002.) The next day, Bigman told Blavatnik that with respect to the acquisition at $38 per share, he thought, "the leverage is aggressive," because "[i]n the downside case we would barely have cash to cover interest in the trough, and if working capital went up (e.g. because of an increase in oil prices) we would be in

[8] At around this time, Access was also exploring a potential transaction with Huntsman Chemical Company. On June 25, 2007, following negotiations, a merger agreement between Basell and Huntsman was signed. (PX-321 (Huntsman Proxy) at .013.) After a competing bidder presented a higher offer, Access was notified that the Huntsman merger agreement was terminated, resulting in Basell receiving a $200 million termination fee. (10/21 Trial Tr. (Blavatnik) at 1031:11–20; PX-321 (Huntsman Proxy) at .019.)

financial distress." (DX-43 (E-mail from Bigman to Blavatnik, re: Project Hugo, dated 3/19/2007) at .001.) Similarly, Kassin asked Blavatnik why $38 per share for Lyondell made sense when $28 per share had not. Kassin does not appear to have received a response from Blavatnik, and he did not press the issue and decided to "let sleeping dogs lie." (10/31 Trial Tr. (Kassin) at 1795:18–1796:1; PX-87 (E-mail Bigman to Kassin re: Deal at $38/share, dated 3/19/2007) at .002.) Trautz also questioned Blavatnik's willingness to purchase Lyondell at $38 per share in an email to Kassin, remarking that "[i]t is not easy to explain Len's love for [Lyondell]" in response to Kassin's question regarding "why Len likes this at $38??" (PX-94 (E-mail from Trautz to Kassin re: Important Call/ Meeting re Project Hugo - Tuesday 27th 1015am EDT, dated 3/24/2007) at .0001.)

On April 1, 2007, Kassin reported Blavatnik's willingness to go forward with the deal despite the opposition to it. "Also, Len exploring re launching bid for Hugo (which has taken up my entire weekend) against the wisdom of Volker, Access IC (we had face to face last week) and me." (10/31 Trial Tr. (Kassin) 1800:1–15; PX-102 (E-mail from Kassin to Lukatsevich re: Welcome Back, dated 4/1/2007) at .0001.)

Despite substantial analysis and modeling on a proposed merger at $38 per share, no deal was consummated at this price.

D. Access Acquires the Toehold Position and Enters into Negotiations with Lyondell

Blavatnik was not prepared to accept Lyondell's "no" to his $38 per share offer. To up the pressure on Lyondell to negotiate, Blavatnik acquired a substantial position in Lyondell's stock. An Access affiliate, AI Chemical, acquired the "Toehold Position" in Lyondell on or around May 9, 2007. Specifically, AI Chemical entered into a forward contract with Merrill Lynch (the "ML Forward Contract") to acquire 20,990,070 shares of Lyondell common stock at

$32.11 per share, for a total of about $674.3 million. (Benet Decl. ¶ 15; JX-5.) The ML Forward Contract gave AI Chemical until May 2008 (or any time before then) to elect either to physically settle the contract or cash out its value. (*See* JX-5 (Merrill Lynch Share Forward Agreement).)

To consummate the acquisition of the Toehold Position, Blavatnik transferred his 100% interest in AI Chemical to Nell as a capital contribution. AI Chemical's sole assets were the shares that constituted the Toehold Position, which had a gross value of $1,198,131,360 and a net value, after settlement of the ML Forward Contract, of $523,803,305. Settlement of the acquisition of the Toehold Position was in two payments. The first payment of $523,803,305 ("Toehold Payment 1") was transferred from non-debtor Basell Funding to Nell pursuant to a Stock Purchase Agreement under which Basell Funding purchased Nell's 100% equity interest in AI Chemical subject to the terms of the ML Forward Contract. A second payment of $674,328,055 ("Toehold Payment 2") was paid by LB Finance to Merrill Lynch to settle the ML Forward Contract. (*See* Reiss 2011 Report, DX-814 Ex. 4-A.) On May 11, 2007, Blavatnik and AI Chemical jointly filed a Schedule 13D disclosing the beneficial ownership of 20,990,070 shares of Lyondell shares (the "13D"). (PX-132 (13D).)

E. Lyondell Produces the Refreshed Projections

A central focus of the Trustee's theory of the case is refreshed projections prepared by Lyondell, at Smith's direction. The Trustee contends that these refreshed projections were manufactured by Lyondell in reckless disregard for the truth, and that they showed billions of dollars of unrealistic future earnings. The Trustee blames Smith for ordering the unrealistic numbers to support a higher acquisition price. It is the alleged misconduct in preparing these refreshed projections that the Trustee seeks to horizontally impute to Blavatnik, even though the Trustee offered no proof that Blavatnik, or anyone associated with him or Basell, had any knowledge of the alleged misconduct. To put the facts regarding the refreshed projections into context, it is important to understand Lyondell's planning and projections process.

1. The LRP

Each year, company personnel[9] and consultants at Lyondell prepared a long-range plan ("LRP") to collect data on recent business performance, analyze industry trends, and review corporate strategy, among other things. (PX-66 (2006 LRP).) The LRP would also "define the budget for the coming year, which was the first year of the plan." (Dineen Dep. Tr. at 35:8–21, 45:9–13.)

The process by which Lyondell prepared the LRP involved an analysis of each individual business segment. The heads of individual business segments, BPAR, the Board of Directors, and others worked together throughout the year to prepare the LRP, but each particular business was responsible for developing projections for costs, margins, prices, volumes, and capital expenditures to assess the performance of the business through a "bottoms-up" approach. (Smith Dep. Tr. at 35–36; DeNicola Dep. Tr. at 30–31; Phllips Dep. Tr. at 24–26; *see also* Twitchell Decl. ¶¶ 11–13; *see also* PX-66.) Ultimately, data from Lyondell's different business segments was collected and put into a comprehensive document. (*Id*.)

Throughout 2006, Lyondell worked to create the 2007 LRP, and on December 6, 2006, the Lyondell Board of Directors adopted the 2007 LRP (PX-66.), which was the last official LRP produced prior to the Merger. The 2007 LRP, which included EBITDA projections for both the EC&D and Refining segments through 2011, included the following EBITDA forecasts (in millions of dollars):

[9] The Business Performance, Analysis and Reporting Group ("BPAR") was responsible for assessing business performance internally and for overseeing the LRP process. (Twitchell Decl. ¶ 12.)

	2007	2008	2009	2010	2011
EC&D	$1,465	$1,295	$599	$564	$518
Refining	$1,333	$1,324	$1,375	$1,110	$931

(PX-66 at .002.)

2. The "Refreshed" Projections

On May 15, 2007, following Access's acquisition of the Toehold position, , Lyondell CEO Dan Smith met with Robert Salvin, a member of Lyondell's corporate development group. (Salvin Dep. Tr. at 30:15–31:6, 41:24–42:3, 179:7–19.)[10] Smith, during this one-on-one meeting, asked Salvin to review the 2007 LRP, and prepare updated projections after collecting information from other Lyondell employees. (*Id.* at 395–96.) The "refreshing" process came in response to "some of the external events that were going on" (Dineen Dep. Tr. at 40:21–41:25), possibly including "a lot of [merger and acquisition] activity in the industry." (*Id.* at 58:24–59:6.) The revised projections were not, however, meant to entail the same "bottoms-up" or detail-oriented analysis that was involved in the production of the LRP. (PX-145 (E-mail from Salvin to Tanner, re: LRP Assumptions, dated 5/15/2007) at .0001.)

Salvin maintains that, among other things, he endeavored to review the then-current EBITDA projections in Lyondell's refining business, as Lyondell had recently assumed a 100% ownership interest in the Houston refinery. Salvin explained at trial that Lyondell "had changed the way [they] were running the refinery and [they] wanted to take another look at those

[10] Salvin's handwritten notes from the May 15, 2007, meeting with Smith include a notation reading "1.5-1.6B." (PX-134 (Salvin's handwritten notes) at .0009.) Salvin stated that he was uncertain what this notation represented, but denied that Smith told him an EBITDA figure to obtain in the refreshing process. (Salvin Dep. Tr. at 395:4–96:10.) All of Salvin's handwritten notebooks were not initially produced in discovery, but ultimately were turned over to the Trustee. (Salvin Dep. Tr. at 458:12–20.)

EBITDA projections" to determine if they should be adjusted.[11] (Salvin Dep. Tr. at 396:11–96:25.)

The refreshing process took place over a compressed timeframe of several days, and involved far fewer employees than the LRP process. (Phillips Dep. Tr. 50:18–54:6; Dineen Dep. Tr. 61:5–65-22.) Salvin, who was not an expert in either the refining or petrochemical fields and did not participate in preparing EBITDA projections for the LRP, claims to have consulted with members of the Lyondell refining and petrochemicals businesses while preparing the revised projections, and the revised projections appear to incorporate at least some information relating to the actual performance of the Houston refinery, in addition to certain assumptions used in the preparation of the 2007 LRP. (Salvin Dep. Tr. 387:5–89:6; *see id.* at 396:20–25 ("One of the key areas . . . was refining . . . . [W]e had changed the way we were running the refinery and we wanted to take another look at those EBITDA projections that were developed, again, six, seven months earlier.").)

The Trustee, however, has raised questions about the legitimacy and thoroughness of the refreshed projections and the refreshing process through the deposition testimony of Smith, Salvin, and a number of other Lyondell employees involved in corporate development and finance. (ECF Doc. # 909 at 53–68.) A major thrust of the Trustee's theory of the case was that the refreshed projections were directed by Smith to support the transaction at an inappropriate and inflated price that materially resulted in bankruptcy. (*Id.*) The refreshed projections are

[11] Neither Salvin nor Smith testified in court during trial, but the parties designated and the Court admitted into evidence deposition designations and counter-designations from both witnesses. The Trustee settled with Smith and apparently had a cooperation agreement that would have required Smith to appear in person as a witness at trial. The Defendants asked the Court to draw an adverse inference from the Trustee's failure to call Smith as a witness at trial. The Court declines to draw any adverse inference. Based on all of the evidence at trial, the Court finds that Smith did not engage in any wrongdoing in connection with the refreshed projections. Requesting refreshed projections in light of the acquisition offers was reasonable. It is unreasonable to expect that the year-long process would or could be replicated in preparing refreshed projections during the back and forth of acquisition negotiations.

discussed further below in Section VI.B.1. The testimony in the record establishes that while Salvin did contact other employees on an advisory basis while preparing his refreshed projections over the several days following his May 15, 2007, meeting with Smith, other former Lyondell employees who were deposed disclaimed involvement in the process of refreshing the projections. (*See, e.g.,* Phillips Dep. Tr. at 72:14-24; Teel Dep. Tr. at 101:5-102:5, 163:12-17; Dineen Dep. Tr. at 65:9–74:15.)

Ultimately, Salvin prepared the revised EBITDA projections over the course of several days, and the revised projections were included in a presentation given by senior Lyondell personnel to certain financing banks in July 2007. (DX-100; *see* 11/2 Trial Tr. (Jeffries) at 2230–31.) The revised projections include the following EBITDA figures:

	2007	**2008**	**2009**	**2010**	**2011**
EC&D	$950	$1,150	$800	$600	$600
Refining	$1,568	$1,700	$1,600	$1,500	$1,300

(DX-100 at .081.)

F. Access Offers $48 per Share for Lyondell

In June 2007, Trautz met with Smith to discuss a merger. (Trautz Dep. Tr. at 42:18-25.) Smith suggested a price of $48 per share, and Trautz reported this price to Blavatnik. (PX-190; Trautz Dep. 66:10–68:15.)

On July 9, 2007, Blavatnik, on behalf of Basell AF, met with Smith to discuss the purchase of Lyondell. (10/21 Trial Tr. (Blavatnik) at 1034:2–9; PX-362 at .026–027 (Lyondell Proxy).) No other parties, aside from Blavatnik and Smith, were present at this meeting. (10/21 Trial Tr. (Blavatnik) at 1035:3–6.) During a phone conversation later that day between Blavatnik and Smith, Blavatnik communicated the $48 per share offer to purchase Lyondell, and

Smith agreed to convey this offer to the Lyondell board. (*Id*. at 1035:21–36:19; PX-362 at .027 (Lyondell Proxy).)

That same day, Kassin told Patel that Blavatnik "wants to do Hugo . . . by Monday," to which Patel answered "[y]ou're joking right?" (PX-210 (E-mail from Kassin to Patel, dated 7/9/2007).) According to Kassin, despite advising Blavatnik to take more time to get a deal done, Blavatnik insisted on moving forward with his schedule. (10/31 Trial Tr. (Kassin) at 1804:5–12.) Blavatnik referred to the deal as "the $48 handshake deal that I had made with Dan Smith of Lyondell." (Blavatnik 2009 Decl. ¶ 17.) Blavatnik testified that it was ultimately his decision, but that he would not have proceeded if the Management Board objected. (10/21 Trial Tr. (Blavatnik) at 1055:14–19; *see also* A. Blavatnik Dep. Tr. at 16:23–17:4 (Blavatnik makes the ultimate decision).) Blavatnik did not have any written approval from Basell BV or Basell AF, nor from the board of the GP or of Basell BV to enter into an agreement with Smith or to offer the $48 per share price. (10/21 Trial Tr. (Blavatnik) 1039:15–25; *see also* 10/31 Trial Tr. (Kassin) at 1787:24–88:24.)

After learning about Blavatnik's $48 per share offer to Smith, Kassin informed Blavatnik he "thought the price was too high." (10/31 Trial Tr. (Kassin) at 1790:15–22.) Kassin acknowledged that despite his opposition to the deal, the decision was Blavatnik's to make: "My job is to sign this up . . . I will make it happen if I have to kill myself . . . the real problem is – I hate the deal at $48 and am scared to death that the banks will ALL want new cash equity . . . I am trying to separate my two roles – one deal weasel who will get this signed up in record time . . . vs. Board member with fiduciary role for the shareholder . . . this one will be tough." **(**PX-235 (E-mail from Kassin to Benet, re: are the Hugo guys here on Fri night - maybe for dinner?, dated 7/12/2007).) Kassin later testified that Blavatnik had "drawn a line in the sand" that the transaction would go forward at $48 a share. (10/31 Trial Tr. (Kassin) at 1809:18–10:5.) Kassin testified that he had no idea what went on in his mind and how Blavatnik and Smith had the back and forth to get to 48, but that "Mr. Blavatnik wanted to do it in a very expedited manner." (*Id.* at 1790:10–24.)

On July 10, 2007, Bigman expressed his concern regarding the $48 per share offer to Blavatnik, telling him "I know you've made up your mind, but I am uncomfortable with the valuation - it's almost $ 5 billion more than we were offering a year ago and over $ 2 billion more than we were discussion just a few weeks ago." (DX-114 (E-mail from Bigman to Blavatnik, re: Hugo - Financing, dated 7/10/2007).) The same day, Blavatnik responded "[j]ust see if it's a good deal now." (*Id*.)

The financial analysis performed by Access and Basell, as well as the work of their advisors and banks, "indicated that [LBI] would generate sufficient cash flow to pay interest and make required debt repayments and, indeed, to make substantial voluntary debt repayments during the five-year period covered by [the companies'] forecasts—and would in fact be able to do so even under reasonably anticipated 'trough' conditions." (Blavatnik 2009 Decl. ¶ 15; *see* Bigman Decl. ¶¶ 61, 65.)

Testimony regarding concerns about acquiring Lyondell at a $48 per share price, according to Blavatnik and others, "related to the possibility that a $48 price gave too much of the potential upside of the merger transaction to the Lyondell shareholders and created a possibility that [Access] would be working for the banks rather than generating a sufficient equity return." (Blavatnik 2009 Decl. ¶ 15; *see* Benet Decl. ¶ 8; Bigman Decl. ¶¶ 51–52, 63–64; Kassin Decl. ¶¶ 6, 68–72.) As to the concerns over maximizing returns, the Access and Basell teams ultimately became comfortable with the proposed acquisition despite the fact that it was regarded as paying a full price for Lyondell. (Benet Decl. ¶¶ 18–19; *see* Trautz Dep. Tr. at 76:9–11 ("We all thought you give away a substantial part of the upside, but okay, it's the best fit.").) The issue here, of course, is not whether equity returns would be minimal or none, but whether the combined company, with the proposed capital structure, was or was likely to become insolvent.

G. The Merger Agreement is Executed

The Merger Agreement was signed on July 16, 2007. (JX-8 (the "Merger Agreement") at .001.) Under the Merger Agreement, Lyondell shareholders were to receive $48 per share. (JX-8 at .010.) The parties to the Merger Agreement were Basell AF, BIL Acquisition Holdings Limited, and Lyondell. (JX-8 at .008.) Approval of the Merger by Basell GP was memorialized by written resolutions. (JX-7 (Basell GP Resolution, dated 7/15/2007).) The managers of Basell GP did not hold a meeting regarding the Merger. By letter dated July 16, 2007, Goldman Sachs, Merrill Lynch, and Citibank committed to participate in the financing of the Merger. (JX-11 (Project Hugo Commitment Letter, dated 7/16/2007 (the "Commitment Letter")).)

H. Post-Execution, Pre-Closing Developments

On September 11, 2007, Blavatnik became aware that Lyondell would miss its third and fourth quarter earnings projections by a significant margin. (*See* PX-315 (E-mail from Smith to Blavatnik, re: Ebitda, dated 9/11/2007) (informing Blavatnik that "3Q is about 700mm and 4Q virtually the same but with different mix").) Kassin subsequently informed Blavatnik that the original Lyondell EBITDA projections for the third quarter were $818 million. (*Id*.; 10/31 Trial Tr. (Kassin) at 1845:19–46:14.) Blavatnik responded to Smith that same day, commenting that it was "Quite a change from your team's projections . . . ." (PX-319 (E-mail from Blavatnik to Smith, re: Ebitda, dated 9/11/2007) (ellipsis in original).) Bigman testified that Blavatnik demanded a personal explanation from Smith as to Lyondell's miss on its projections. (10/24 Trial Tr. (Bigman) at 1287:18–88:1.)

Around this time, Trautz turned down the position of Chairman of LBI because, in part, he believed that the board would defer to Blavatnik rather than to him were he to take the position of chairman. In his deposition, Trautz stated: "[W]hen we came to the chairman position, I said to Len, 'Len, this is a privately owned company who has an owner, and it doesn't make sense to me to sit at the head of the table as chairman and you as the owner sit in the room and discuss something, because it's natural that everybody would look at you at the end and not at me.'" (Trautz Dep. Tr. at 121:22–22:9.)

I. The Merger/LBO Financing

On or about August 14, 2007, pursuant to the ML Forward Contract, AI Chemical irrevocably exercised its physical settlement option to acquire 20,990,070 shares of Lyondell's common stock. (JX-5; Benet Decl. ¶ 24) On August 21, AI Chemical disclosed the purchase of an additional 3,971,400 shares in the open market at an average price of $44.21 per share. (*see* Benet Decl. ¶ 24) Together with the 20,990,070 shares subject to the ML Forward Contract, AI Chemical held beneficial ownership of 24,961,470 shares, representing 9.85% of all outstanding shares. (JX-16 at .002.)

1. Synergies

After the Merger Agreement was executed, Basell and Lyondell met to discuss synergies. Basell had been estimating $200 million of annual synergies—a "conservative estimate" that was "always considered to be a placeholder until the two management teams from Lyondell and Basell had spent sufficient time together in order to understand their respective cost structures, where their businesses overlap, how to cut head count, how to purchase more efficiently and other potential synergies." (Melvani Decl. ¶ 42.) After Lyondell missed its third quarter projections, and in anticipation of missed fourth quarter projections, the Merger teams took a collaborative "detailed look," and the synergy estimate was increased to $420 million annually (Trautz Dep. Tr. at 109:20–10:18, 117:8–18:17)—a number that was still regarded as "conservative" and that was "expected to get more granular over time." (Melvani Decl. ¶ 42; *see* Bigman Decl. ¶ 38; Potter Dep. Tr. at 83:7–86:3 ("I think they were being too conservative in their estimates of synergies . . . . I do not believe they were overstating the synergy estimates at all. Quite to the contrary, I was an advocate of higher synergy capture."); Trautz Dep. Tr. at 222:16–23:4 ("And the reality is already today much higher and will be higher when we finish the merger.").)

Patel, former Vice President of Access, testified on the distinction between "hard synergies," representing tangible benefits such as cutting labor costs, and other synergies, relating to less tangible items like the benefits of making bulk purchases. (10/20 Trial Tr. (Patel) at 914:2–17.) Patel's testimony came in response to questions about emails from July 12, 2007, where Patel told Blavatnik, Benet, and Kassin that the synergy number presented to the financing banks "can be a 'reach' number because this is not in any covenant or other legal document, but merely what we believe is achievable and that can credibly be used for marketing." (PX-234.)

On September 26, 2007, synergies of $420 million were presented to the banks. (DX-172 at .003, .005 (Basell and Lyondell Bank Meeting Presentation, dated 9/26/2007) (listing "Gross Synergies" of $420 million for each year from 2007 to 2011); *see also* DX-172 at 033-.036 (identifying "Gross Benefits" of "$420 Million").)

The testimony established that synergy capture since the Merger has been in the order of $1 billion annually, a number far in excess of the estimates developed in 2007. Specifically, Gallogly, LBI's former CEO, and others at LBI testified that the majority of those synergies would have been achieved with or without bankruptcy. (11/4 Trial Tr. (Gallogly) at 2788:12–89:20; *see also* 11/4 Trial Tr. (Gallogly) at 2799–2800; Gallogly Decl. ¶¶ 16–17; Potter Dep. Tr. at 98–99.) Further, Gallogly testified that LBI used the bankruptcy process to reject certain leases, but generally speaking, contracts in the industry were short term, and the bankruptcy process was not required to shed costly and inefficient agreements. (11/4 Trial Tr. (Gallogly) at 2736:23–38:4.)[12]

2. The Banks' Projections

Goldman Sachs, Merrill Lynch, Citibank, ABN AMRO and UBS Securities LLC each committed billions to finance the Merger, and naturally, each bank carried out an in depth analysis of the transaction, analyzing the financial data and projections prepared by Lyondell management, and preparing its own projections. Goldman Sachs, Merrill Lynch, and Citibank, the first to commit to financing the Merger, conducted an intensive diligence review in anticipation of the Merger over several days in mid-July 2007, where the banks were granted access to non-public information about Lyondell's business and financial performance. These banks each employed dozens of employees to prepare projections modeling a wide variety of scenarios utilizing this new data in connection with publicly available data. ABN AMRO and UBS Securities LLC ("UBS" and, together with Goldman Sachs, Merrill Lynch, Citibank, and ABN AMRO, the "Banks"), who would later join the financing team, also prepared their own projections. The Banks' projections, the process by which they were prepared, and their ultimate value to the Court are discussed in detail below.

[12] The Court finds that Gallogly's trial testimony was credible. He was an experienced executive, who became CEO after the bankruptcy cases were filed, and has since retired. The Court credits his testimony that annual synergies from the Merger were approximately $1 billion annually, far in excess of the amounts used by the participants in supporting the approval of the Merger and its financing. The Trustee's challenge to the projected synergies, quite simply, failed miserably.

J. The Merger Closes

The Merger closed on December 20, 2007. The Merger involved elements of both a merger and acquisition deal, but also a leveraged finance component more emblematic of a leveraged buyout. But in contrast to a typical leveraged buyout, where a purchasing company borrows funds to buy a company while perhaps contributing some of its own money,[13] here, Basell borrowed funds from the financing banks secured by the assets of the combined company while contributing its own equity to the transaction, resulting in the combination of Basell and Lyondell into LBI, with the financing banks funding the acquisition of Lyondell by Basell.

Pursuant to the Merger Agreement, an indirect merger subsidiary of Basell was merged into Lyondell, and all of Lyondell's common stock and restricted stock was converted into the right to receive $48 in cash. (JX-8 (Merger Agreement) at .010.) At that time, Basell changed its name to LBI and became, through an intermediate holding company, the corporate parent of Lyondell. (DX-251 at .021.) Citibank prepared a valuation in which it estimated that the value of the "core" Basell businesses (without considering joint ventures) was between about $12 billion and $14 billion—a number that implied substantial equity value. Citibank also estimated that the equity value of LBI ranged from about $10.7 billion to $14.2 billion. (DX-235 (Citibank Valuation Assessment, dated Dec. 2007) at .002, .006.) The Citibank valuation was used to price

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[13] The Supreme Court recently offered a cogent primer on the dynamics of a typical leveraged buyout:

> In a leveraged buyout, the buyer (B) typically borrows from a third party (T) a large share of the funds needed to purchase a company (C). B then pays the money to C's shareholders. Having bought the stock, B owns C. B then pledges C's assets to T so that T will have security for its loan. Thus, if the selling price for C is $50 million, B might use $10 million of its own money, borrow $40 million from T, pay $50 million to C's shareholders, and then pledge C assets worth $40 million (or more) to T as security for T's $40 million loan. If B manages C well, it might make enough money to pay T back the $40 million and earn a handsome profit on its own $10 million investment.

Czyzewski v. Jevic Holding Corp., 137 S.Ct. 973, 980 (2017). Here, instead of contributing its own money to the LBO, Basell contributed itself to the deal.

a management equity buy-in, and key members of management, including Bigman, invested in LBI based on that valuation. (DX-270; Bigman Decl. ¶ 85; *see also* Twitchell Decl. ¶ 6.)

1. LBI Financing at Closing

On December 20, 2007, LBI, Lyondell, Basell B.V., Basell Finance Company B.V. ("Basell Finance"), Basell Germany Holdings GmbH, and certain affiliates entered into the senior credit facility as borrower or guarantor. Lyondell, with certain subsidiaries of LBI, also entered into the bridge loan facility, and LyondellBasell Finance Company, with certain guarantors, entered into the asset-based facilities.

A number of draws and payments were made in connection with the closing of the Merger (the "Merger Financing"). The sources of funds for the payments made in connection with the Merger, totaling $20.3 billion, were: two term loans totaling $11,156,196,500; a $7,839,945,000 bridge loan; two asset based loan facilities totaling $1,202,450,000; and a $114,800,000 revolving credit facility. (Reiss Report, DX-814 at 19.) These funds were used as follows: $11,256,717,120 payment to Lyondell shareholders; $523,503,305 payment to Nell Ltd on account of Toehold Payment 1; $674,328,055 payment to Merrill Lynch on account of Toehold Payment 2; $7,178,017,071 for the repayment of Lyondell debt; $447,127,226 for the repayment of Basell debt; $219,214,201 for the payment of closing costs and professional fees; and $14,184,522 in other unidentified uses. (JX-74 (Closing Funds Flow Memorandum); Reiss Report, DX-814 at 19.)[14]

[14] Basell funded a payment of approximately $127.6 million to Nell, pursuant to a 2007 Management Agreement. (JX-84 [Closing Cash Flow Mechanics, dated 12/19/2007] (Section F "Payments of Closing Costs/Professional Fees," Item 3 "Access M&A fees:" $127,608,860 paid by Basell); *see also* JX-74.) And, on or about December 20, 2007, Basell funded a payment of $500,000 to Perella Weinberg, allegedly as consideration for advisory services in connection with the Merger. (JX-84.002 [Closing Funds Mechanics] (Section F "Payments of Closing Costs/ Professional Fees," Item 7 "Perella Weinberg M&A:" $500,000 paid by Basell AF); JX-74.)

After the Merger, Lyondell's liquidity and capital resources were integrated with LBI's, and LBI managed the cash and liquidity of Lyondell and its other subsidiaries as a single group and as part of a global cash pool. (Bigman Decl. ¶ 35.) At closing, LBI had liquidity of about $2.3 billion. (Bigman Decl. ¶ 102; DX-446 at .005.) The $2.3 billion liquidity included a senior secured revolving credit facility, financed by the Banks, in the amount of $1 billion (the "2007 Revolver"). (*See* JX-45; DX-446 at .001.) The Court finds the evidence of LBI's $2.3 billion liquidity at closing to be credible.

2. LBI's Financial Condition on the Closing Date

As noted above, the Merger closed on December 20, 2007. In order to assess LBI's financial condition at the closing of the Merger, a detailed review of the events leading up to and following the Merger, the projections prepared by management before and in connection with the Merger, and the projections prepared by the financing banks, as well as expert testimony regarding LBI's financial condition at closing will all be addressed.

LBI's treasurer Karen Twitchell and CFO Alan Bigman both testified that LBI's opening liquidity of $2.3 billion was sufficient to operate the business, which sometimes faced day-to-day cash swings of $300 million to $500 million. (Twitchell Decl. ¶¶ 66, 68; Bigman Decl. ¶¶ 99–102.) The Court finds this evidence to be credible.

K. Post-Closing at LBI

LBI faced significant liquidity concerns in the first quarter of 2008. By February of 2008, LBI's liquidity was $895 million. (10/24 Trial Tr. (Bigman) at 1310:11–22; JX-91 (Liquidity Discussion Slides, dated 4/11/2008) at .002.) Given LBI's seasonal liquidity needs, LBI expected its liquidity to fall during the first quarter of 2008. (Twitchell Decl. ¶ 69.) The company, however, experienced a greater decline in liquidity during the first quarter of 2008 than anticipated. (Bigman Decl. ¶¶ 105–06.) This was the result of "up-flying oil price[s]"

(Trautz Dep. Tr. at 124; *see also id.* at 126–27; Melvani Decl. ¶ 95), but was also related to a greater than anticipated decline in sales, including weak seasonal business activity, merger-related payments, acquisition-related costs such as the acquisition of the Berre refinery and the acquisition of Solvay, and various recurring costs forecasted to occur, but which timing and final amounts were uncertain. (Twitchell Decl. ¶ 70.) In early 2008, LBI's treasurer became concerned over the amount of available liquidity and about the impact of unanticipated and rapidly rising crude costs. (Twitchell Decl. ¶ 71.)

The ability to borrow up to $750 million on an unsecured basis was contemplated (but not yet committed) by LBI and the banks at the time of the Merger in the form of a debt basket (*see* JX-45), and on March 27, 2008, LBI, Basell Finance, and Lyondell executed a revolving credit facility (the "Access Revolver") with Access Industries Holdings ("AIH"), which provided for up to $750 million in revolving credit, and hence corresponding increased incremental liquidity. (JX-51 ("Access Revolving Credit Agreement"); *see also* Twitchell Decl. ¶ 73.)

Also during this time, LBI looked to a feature of its asset-based facilities to increase its liquidity. LBI's asset-backed loan facilities (the "ABL Facilities") contained an "accordion" feature, which entitled LBI to "upsize" the facilities by $600 million. (*see* Twitchell Decl. ¶ 53; Bigman Decl. ¶¶ 6, 94.) The ABL Facilities were added at the suggestion of Twitchell, who became LBI's Treasurer and believed them to be an appropriate source of liquidity based on both availability and cost. (Twitchell Decl. ¶ 36; 10/25 Trial Tr. (Twitchell) 1562:8–64:4.) All parties to the ABL Facilities understood that LBI intended to use the $600 million accordion to upsize the facilities if the borrowing base increased as a result of escalating feedstock costs, or otherwise, necessitating more liquidity to finance LBI's increased working capital needs. (Twitchell Decl. ¶ 53; Bigman Decl. ¶ 94.)

In connection with the upsizing of the ABL Facilities, LBI negotiated with the financing banks, and ultimately paid roughly $36 million in fees, and gave up several costly concessions, including a negotiated 3.25% LIBOR Floor on USD-denominated term loan B for a period of three years. (DX-311 (UBS Project Leo Memorandum) at .003; *see* Tuliano 2009 Report, PX-800 at 96–98.) Additionally, LBI negotiated the payment of half of the original issue discount payment owed, or $125 million of the original $250 million sum. (*See* JX-54 (Credit Agreement Dated as of December 20, 2007 as Amended and Restated as of April 30, 2008 ("Amended Credit Agreement")); 10/24 Trial Tr. (Bigman) 1322:4–16.)

By the end of April, with the Access Revolver and the upsized ABL Facilities, LBI had added $1.5 billion of liquidity. Twitchell, LBI's Treasurer, no longer had the concerns she had articulated earlier in the year. (Twitchell Decl. ¶ 83.) According to Blavatnik, LBI's decisions with respect to what additional liquidity facilities to seek were made by management. (Blavatnik 2016 Decl. ¶ 7.)

In 2008, LBI's reported liquidity in the first quarter was $1.677 billion as of January 31, $1.025 billion as of February 29, and $1.527 billion as of March 31, excluding $538 million which was to be used to fund the Berre acquisition. (Twitchell Decl. ¶ 77.) By April 30, LBI reported $2.181 billion of liquidity. On May 31, it reported $2.519 billion of liquidity, and, on June 30th, $2.842 billion. (*Id*. ¶ 85.)

1. Events in 2008 Affecting LBI's Liquidity

a) <u>Volatility in the Oil Market</u>

Given the asset-based lending facilities in place at LBI, the price of oil greatly affected LBI's liquidity. Projections prepared by management in 2007 contemplated oil prices in the range of $63 to $69 per barrel. (DX-271 at .012.) The volatility in the price of oil in the summer and fall of 2008 was striking. Oil reached a peak price of $145.29 per barrel on July 3, 2008, then plummeted to less than $30 per barrel. (Tuliano 2009 Report, PX-800 at Appendix C, D; *see also* 10/20 Trial Tr. (Nebeker) at 828:1–11.) On September 4, 2008, the price of oil was back up to over $100. This undoubtedly had an impact on LBI's capital position, and the evidence at trial suggests that no one predicted such dramatic volatility in the price of oil.

b) <u>Crane Accident at the Houston Refinery</u>

On July 18, 2007, a 30-story crane collapsed at the Houston refinery, resulting in fatalities and an extended outage at the refinery. (O'Connor 2009 Report, DX-800 at 50.) While it is an open issue whether unplanned outages should be accounted for in projecting EBITDA, the Houston crane collapse was not foreseen or, assuredly, foreseeable.

Defendants' expert O'Connor testified that it is not common industry practice to reduce production or EBITDA projections on account of potential unplanned outages, given that the outages are, by nature, unplanned and entirely hypothetical. (11/3 Trial Tr. (O'Connor) at 2576:23–78:11.) Nebeker's report for the Trustee, on the other hand, stated that possible unplanned outages should be factored in to a refinery's projections, and that LBI's failure to do so resulted in inflated projections. (CMAI 2011 Rebuttal Report, PX-807 at 6.) The Court credits O'Connor's testimony and rejects Nebeker's conclusion. A company may miss projections for any number of reasons, but the Trustee failed to prove any credible basis for reducing projections for unplanned outages such as those that resulted from the crane collapse or the two hurricanes discussed in the next section.

c) <u>Hurricanes Gustav and Ike</u>

On September 1, 2008, Hurricane Gustav hit the Houston area. Soon thereafter, on September 13, 2008, Hurricane Ike hit the Houston refinery. Hurricane Ike caused LBI's Gulf Coast plants to shut down for 13 days. (O'Connor 2009 Report, DX-800 at 51.)

As noted above, experts testified at trial about the frequency and effects of hurricanes on refineries in the Gulf Coast region. In 2005, Hurricane Rita hit the Gulf Coast region, resulting in unplanned outages at several refineries in the area. (*Id.* at 3.) Hurricanes Gustav and Ike passed over the Gulf Coast in 2007, resulting in unplanned outages and reduced production and lower EBITDA for the year.

d) <u>The Great Recession</u>

Gallogly described market conditions in 2008 as "the worst [he has] ever seen it. The sudden slowdown in the economy and destocking of chemical inventories led to a precipitous drop in the demand for chemicals and a sharp drop in sales and profits for LBI and other chemical producers. The value of inventories also collapsed, resulting in sharp losses. It was a crisis time. And no one predicted it." (Gallogly Decl. ¶ 19.)

Numerous witnesses testified that the Great Recession was not predicted by anyone, and was a strong contributing factor to LBI's ultimate downfall. (11/2 Trial Tr. (Jeffries) at 2289:19–23 ("Look, as we all know now, looking back in history, the events of 2008, none of us ever predicted. And it was probably—you know, from the financial crisis on down, it was probably the worst events any of us have seen since the Great Depression in the 30s."); s*ee also* 10/20 Trial Tr. (Nebeker) at 824–29; 10/19 Trial Tr. (Witte) at 697–98; Gallogly Decl. ¶ 19.)

Tellingly, the Trustee's experts, CMAI, in a Chemical Company Analysis[15] issued in April 2009, provided a comprehensive look at LyondellBasell, and presented CMAI clients with CMAI's views on a number of issues related to LBI, including among others, "a corporate overview that provides an historical review and business structure, a summary of

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15 The Chemical Company Analysis is a "multi-client program of competitor assessment designed to provide current business information on the participants in the global chemical industry. This program provides a viewpoint of the industry from the company perspective with overviews of businesses that are important to the focus companies." (DX-463 at 7.)

historical/future finances and investments, and overview of acquisitions/divestitures as well as joint venture participation . . . ." (DX-463 at 7.) The CMAI report explained: "A flare up of the global financial crisis in September 2008 triggered the onset of the worst global recession since World War II. The combination of plunging chemical sales and a global credit freeze rendered LyondellBasell unable to service its $26 billion of debt by the fourth quarter of 2008." (DX-463 at 10.)

Attempting to reconcile CMAI's statements in 2009 with his own testimony on behalf of CMAI at trial, the Trustee's expert Dave Witte argued that "plunging chemical sales" and the "global credit freeze," and more generally "the worst global recession since World War II" were only *contributing* factors to LBI's downfall. The Court is skeptical of CMAI's dramatic shift in its opinion for litigation purposes and credits its 2009 analysis as an unbiased contemporaneous review of LBI's collapse amid the Great Recession.

2. *LBI Enters Into, Draws Upon, and Repays the Access Revolver*

a) <u>LBI Enters Negotiations in March 2008 with the Banks and Access to Increase its Borrowing Capacity</u>

At the time of the merger, as already discussed, the ABL Facilities contained an "accordion" feature, which entitled LBI to "upsize" the facilities by $600 million (the "Accordion"). (Twitchell Decl. ¶ 53; Bigman Decl. ¶¶ 6, 94.) In early March 2008, Access and LBI entered into negotiations with the Banks regarding funding the $600 million Accordion to create an additional liquidity cushion. (10/24 Trial Tr. (Bigman) at 1319:22–25; *see, e.g.*, PX-470 (E-mail from Patel re: Latest Bank Machinations," dated 3/12/2008); PX-490 (E-mail from Twitchell re: Update on Banks, dated 3/20/2008).) The Banks were reluctant to upsize the ABL Facilities under the Accordion unless Access and LBI agreed to put the Access Revolver in place. (*See* 10/24 Trial Tr. (Bigman) at 1355:19–25; Bigman Decl. ¶¶ 116–17.)

On March 12, 2008, Access prepared a presentation entitled "Project Aquifer." (PX-471 (Project Aquifer Presentation, dated 3/12/2008 ("Project Aquifer")).) Project Aquifer stated multiple objectives including "[p]rovid[ing] solutions for liquidity issues at the Company over various horizons," to be accomplished by, among other things, a $750 million revolver provided by Access—which would ultimately become the Access Revolver. (*Id.* at .002, .007.) Project Aquifer considered how the Access Revolver and Marimba[16] could be used "to our advantage in negotiations with banks," including "[s]ecurities [d]emand," "[a]dditional liquidity," and "[l]ooser maintenance covenants." (*Id.* at .002.) The presentation also discussed "Setting up Management penalties to assure rapid repayment of Access Revolver." (*Id.* at .008.)

On March 14, 2008, Access prepared a second presentation, entitled "Aquifer—the Dream Scenario." (PX-476 (Aquifer—The Dream Scenario Presentation, dated 3/14/08 ("Aquifer Dream Scenario")).) The Aquifer Dream Scenario presentation discussed whether subsequent lenders would "insist that Access not be repaid prior to their being repaid" and "[s]etting up LBI priorities to assure rapid repayment of the Access Revolver." (PX-476 (Aquifer Dream Scenario) at .0013; *compare with* PX-471 (Project Aquifer) at .008 ("Setting up Management penalties to assure rapid repayment of Access Revolver").)

b) <u>LBI and Access Enter into the Access Revolver</u>

On March 27, 2008, AIH, as Lender, entered into the Access Revolving Credit Agreement with Lyondell, as U.S. Borrower, and Basell Finance, as Foreign Borrower (together with Lyondell, the "Borrowers"). (JX-51 (Access Revolving Credit Agreement).) LBI was also a party to the Access Revolving Credit Agreement. (*Id*.) Pursuant to the Access Revolving

[16] "Marimba" was the internal project name given to Access's potential repurchase of LBI's bridge debt from the Banks. (10/21 Trial Tr. (Blavatnik) at 1106:5–08:18.)

Credit Agreement, AIH established a $750 million unsecured revolving line of credit: the Access Revolver. (*Id*.)

Because the Access Revolver was unsecured, it was more costly than the 2007 Revolver and the ABL Facilities. (Twitchell Decl. ¶ 74.) This facility was something that "the company had requested . . . of the shareholder as one more liquidity tool," and was reviewed by the Supervisory Board of LBI as "an additional financing source being made available to the company from the shareholder." (Potter Dep. Tr. at 200; *see* Bigman Decl. ¶ 112.) Although the Access Revolver was not drawn upon until October 2008, Twitchell testified that it was an important component of LBI's liquidity. (Twitchell Decl. ¶ 75.)

Under the terms of the Access Revolving Credit Agreement, LBI could draw upon the Access Revolver on one day's notice to AIH. (JX-51 (Access Revolving Credit Agreement) § 2.02(a).) The following day, AIH was to make the requested funds available to the requesting party through wire fund transfer. (*Id*. § 2.02(b).) While the repayment of all outstanding borrowing was required on the maturity date, September 28, 2009, prior to that time, debts could be voluntarily repaid upon one day's notice from the borrower to AIH. (*Id*. §§ 1.01, 2.06, 204(a).) Section 5.18 of the Access Revolving Credit Agreement required LBI to represent and warrant that it was solvent as of the Access Revolver's closing date, on March 27, 2008. (*Id.* § 5.18 ("On the Closing Date, the Loan Parties and their Subsidiaries (taken as a whole) after giving effect to the transaction contemplated by this Agreement and the payment of the fees and expenses in connection therewith, are Solvent.").) But LBI did *not* have to represent and warrant that it was solvent when it made loan draws on the Access Revolver.

The Access Revolving Credit Agreement contained the following "Material Adverse Effect" (also known as a "Material Adverse Change" or "MAC") clause: "Since the Closing

Date, there has been no event or circumstance that could, either individually or in the aggregate, reasonably be expected to have a Material Adverse Effect." (*Id.* § 5.05(c).) The term "Material Adverse Effect" was defined to include, among other things, "a material adverse effect on the business, operations, assets, liabilities (actual or contingent) or financial condition of the Company." (*Id.* § 1.01, p. 22.)

The absence of a solvency requirement raises the issue whether LBI's deteriorating financial condition in late 2008 supported Access's assertion of the MAC clause in refusing to fund LBI's requested $750 million loan draw on December 30, 2008, just eight days before LBI filed its chapter 11 cases.

c) <u>LBI Nearly Draws on the Access Revolver in April 2008</u>

On April 10, 2008, Twitchell and Storey informed Benet and Bigman that Lyondell would likely need to draw on the Access Revolver. (PX-527 (E-mail from Storey to Benet and Bigman, re: LyondellBasell Potential Cash Requirement, dated 4/10/2008) at .003-004.) In response to Benet and Patel, Kassin remarked, "Does Len know about this? As a Board Member and in my other roles, I feel a tad misled (that is not a legal term)." (PX-528 (E-mail from Kassin to Benet and Patel, re: LyondellBasell Potential Cash Requirement, dated 4/10/2008).)

Ultimately, the anticipated April draw on the Access Revolver never occurred. (Twitchell Decl. ¶ 81.)

d) <u>LBI Upsizes its European AR Facility and ABL Facilities in April 2008</u>

On or about April 14, 2008, LBI obtained an amendment to its European Accounts Receivable Securitization Program which added about $150 million of availability. (Twitchell Decl. ¶ 81.) On April 30, 2008, the size of the ABL Facility was increased by $600 million, consistent with the Accordion feature. (Twitchell Decl. ¶¶ 81–82.)

e) <u>LBI Draws on and Repays the Access Revolver in October 2008</u>

Several unforeseen events in 2008 diminished LBI's available liquidity. These events included a planned turnaround at the Houston refinery that was significantly prolonged by a serious crane accident that resulted in fatalities, two hurricanes that caused LBI's Gulf Coast chemical plants to be shut down for most of September, and the ripple effects of the early stages of the financial crisis which ultimately triggered the Great Recession, including having more than $175 million in cash frozen when a money market fund "broke the buck" due to the Lehman Brothers bankruptcy. (Twitchell Decl. ¶¶ 86–89, 94–95.) Accordingly, cash inflows and availability were weaker than expected in early October 2008, and this became a challenge as LBI prepared to make its payments due on the 15th of the month. (*Id*. ¶ 90.)

On October 15, 2008, LBI drew $300 million on the Access Revolver (the "October Draw"). (Twitchell Decl. ¶ 91; Bigman Decl. ¶ 118; JX-63.) At the time of the October Draw, LBI had virtually no other available sources of liquidity. (10/25 Trial Tr. (Twitchell) 1672–73, 1676–79 (explaining DX-416, a short-term cash forecast).) LBI's CEO Volker Trautz described this lack of liquidity as a "short-term" issue resulting from "a mismatch in timing with funds coming in and going out." (Trautz Dep. ¶ 134; *see also* Twitchell Decl. ¶¶ 90–91.) The October Draw was expected to be repaid in a matter of days. (Storey Decl. ¶ 14; DX-570; DX-572.)

The October Draw was repaid in three $100 million installments on October 16, 17, and 20, 2008 (the "October Repayment"). The Trustee is seeking to recover the $300 million October Repayment as an avoidable preference and constructive fraudulent transfer. Trautz testified that LBI repaid the October Draw "when [LBI] didn't need it anymore." (Trautz Dep. 134; Twitchell Decl. ¶ 91.) The October Repayment was made from LBI's ordinary cash flow, not from other loans. (11/4 Trial Tr. (Reiss) at 2936:17–20 ("So as soon as liquidity in October came in, the very next day, it made sense to reduce the cost of borrowing, so you would repay the most expensive borrowing first, having two different revolvers.”).)

f) LBI Attempts to Draw on the Access Revolver in December 2008 but AI International Refuses the Request

It is undisputed that the global economic collapse of fall 2008 had a serious negative impact on LBI’s business. (*See supra*, Section IV.K.1.) Against this backdrop, on December 30, 2008, LBI made a draw request for the full amount of the Access Revolver: $750 million. (Twitchell Decl. ¶ 98; JX-71.) The request went to AI International, which had been assigned the Access Revolver. (JX-71.) At that time, LBI also was in “discussions with its lenders concerning an anticipated bankruptcy filing.” (Trautz Dep. Tr. at 138.) Aware that “restructuring advisors had been retained and were hard at work” and “believ[ing] there had been a material adverse change by that time,” AI International declined to fund the requested draw on December 31, 2008. (Benet Decl. ¶ 36; JX-72.) The Trustee claims that this refusal to fund the $750 million draw request breached the terms of the Access Revolving Credit Agreement.

L. The Banks’ Projections

The Trustee’s constructive fraudulent transfer claims and preference claim all hinge on this Court making findings of insolvency: of LBI on December 20, 2007, and of LBI or Lyondell on October 16, 17, and 20, 2008. As explained in the legal analysis below (*see infra* Section V.A), three alternative insolvency tests apply to the constructive fraudulent transfer claim regarding December 20, 2007, but only a balance-sheet insolvency test applies to the preference claim regarding October 16, 17, and 20, 2008. The allegedly manipulated refreshed projections were the central focus of the Trustee’s insolvency argument at December 20, 2007. But Lyondell’s projections are not the only ones that need to be considered in determining whether LBI or Lyondell were insolvent. In addition to the Lyondell management projections (discussed below), the Court has another source of projections to consider: those of the Banks that financed the Merger.

On July 16, 2007, Goldman Sachs, Merrill Lynch, and Citibank agreed to provide roughly $21 billion to finance the Merger. On August 8, 2007, ABN AMRO joined the joint lead arranger group, and each of the four banks shared underwriting responsibilities equally. On October 29, 2007, UBS also became a lead arranger, leaving each of the now five joint lead arrangers equally responsible for the $21 billion principal amount of the Merger financing. Notably, and as discussed further below, UBS agreed to join the joint lead arranger group *after* Lyondell indicated that it would likely miss its third and fourth quarter earnings targets, and after a large team of UBS analysts reviewed the Merger and the relevant projections. (*See* DX-171 (September 2007 report from Lyondell indicating that it would miss its EBITDA projections for the third and fourth quarters); (DX-202 (UBS "Finance Commitment Committee Memorandum" dated October 2007); *see also* Benet Decl. ¶ 25.) Further, after UBS joined the lead arranger group, the Banks increased the unused availability under the financing agreement to roughly $2 billion, and funded an additional $550 million for the acquisition of the Berre refinery.

Each of the Banks committed substantial capital to the transaction, and risked billions of dollars on the deal. Naturally, each of the Banks conducted a detailed review of the transaction, and in addition to analyzing the projections set forth by Lyondell management, each Bank prepared projections of its own. Each Bank prepared "base cases," consisting of projections intended to reflect a best-guess on the likely outcome of the merger, in addition to "downside cases" or "credit stress cases," consisting of projections intended to stress LBI in a "worst case" or "doom and gloom" scenario. (*See, e.g.,* Jeffries Decl. ¶ 24 ("The Downside Case was not designed to be a realistic assessment of conditions LBI was likely to face. To the contrary, the stress conditions reflected in the Downside Case were considered highly unlikely to occur. That said, even under the Downside Case, Citi projected that LBI would remain solvent, adequately capitalized and able to pay its debts as they came due."); Vaske Decl. ¶ 30 ("We created the downside case to satisfy ourselves that even under stressed conditions the combined company would be creditworthy, adequately capitalized and able to repay our loans. The stressed conditions used to generate the downside case did not represent what we thought was a likely set of circumstances, but instead, a set of what we believed were improbably adverse circumstances that were assumed in order to test the ability of the combined company to sustain a series of hypothetical, severely negative conditions.").)

a) <u>The Bank's Diligence Process</u>

The Banks were given an opportunity, albeit an abbreviated one, to conduct due diligence on the proposed Merger at a share price of $48. Initially, Goldman Sachs, Merrill Lynch, and Citibank conducted an intensive diligence on the Merger that took place on an expedited basis over the course of several days as a result of Blavatnik's insistence that the deal get signed by July 16, 2007. (*See, e.g.*, 10/31 Trial Tr. (Kassin) at 1804; PX-210.) This diligence project culminated in a weekend of meetings with Lyondell's management, Access, Basell, and the original three lending banks on July 14 and 15, 2007. (Jeffries Decl. ¶¶ 17-31; Frangenberg Decl. ¶¶ 21, 27, 30–32, 54–68; Vaske Decl. ¶¶ 6–15; Benet Decl. ¶ 16; Bigman Decl. ¶¶ 53, 76, 124.)

While this diligence review took place over several days, Access, Basell and several of the banks were already closely familiar with publicly available information relating to Lyondell's business and financial condition as a result of watchfully monitoring Lyondell over the previous months and years. (Jeffries Decl. ¶¶ 7–16; Blavatnik 2009 Decl. ¶ 12; Kassin Decl. ¶ 59.) The bank representatives testified that this brief time period was sufficient to analyze the transaction, in part because of their ongoing familiarity with the companies involved, and that the diligence period was not unusual for public transactions of this nature. (Jeffries Decl. ¶¶ 6–7, 17–31; Vaske Decl. ¶¶ 14–15.)

Lyondell management presented EBITDA projections (the "Management Projections") during these diligence meetings, and the projections were viewed as "optimistic" and higher than Access and Basell's estimates, but ultimately not unreasonable. It is hardly surprising that the seller puts an optimistic face on what it is selling. Access and the Banks were hardly babes in the woods in analyzing complex transactions, and reaching their own conclusions whether the proposed transaction made economic and business sense.

Each of the original joint lead arrangers worked diligently in preparing its own base and downside case projections, and presenting memorandums to the requisite committees or executive groups at their respective banks, whose approvals were required before each bank could commit to provide merger financing. Each of the three original lending banks agreed to the Merger financing commitment. (PX-483.)

Citibank, for example, had up to 50 or more employees working to analyze and evaluate data in connection with the Merger. (Jeffries Decl. ¶ 18.) Citibank used its internal data and prior relationship with Basell to update a previously prepared model with Lyondell's internal and non-public information to arrive at a complete financial forecast for the combined company. (*Id.* ¶¶ 19–21.) Ultimately, the "Credit Committee" at Citibank was provided with a 74-page approval memorandum and unanimously approved Citibank's participation in the Merger. (*Id.* ¶ 29.) The approval memorandum detailed risks, such as industry cyclicality and rising raw material prices, but also noted the competitive advantage that LBI would have in the market, and outlined the base and downside cases prepared by Citibank that reflected a positive outlook on the Merger. (*Id.* ¶¶ 26–27.)

Likewise, Goldman Sachs was already familiar with Basell from prior dealings, and had a vast institutional knowledge base about both the petrochemical and refining industries. (Vaske Decl. ¶¶ 7–10.) John Vaske of Goldman Sachs testified that the compressed timeline of the transaction was "not unusual" and Goldman Sachs "employed the standard, rigorous process that [it] typically employ[s] before committing the firm's capital." (*Id.* ¶ 14.) Vaske stated that based on the diligence performed, he was satisfied that the proposed capital commitment was appropriate, and recommended that Goldman Sachs participate in the merger (and not surprisingly, indicated that had he not believed that there was sufficient time or information available to assess the deal, he would not have recommended that Goldman Sachs participate). (*Id.* ¶ 15.)

As noted above, ABN AMRO joined Goldman, Merrill, and Citibank as lead arrangers in August 2007. Then in October, after Lyondell indicated that it would miss its third and fourth quarter EBITDA targets due to wildly volatile oil prices and negative petrochemical demand growth, UBS committed to the deal. UBS conducted diligence, prepared its own projections, and ultimately decided to commit funds to the Merger. UBS was presented with a new set of management projections that, in conjunction with UBS's own base and downside cases, presented to UBS management in a credit memorandum, led UBS to believe that the deal was prudent. (DX-311 at .035.) Notably, even with updated company performance data, UBS's base case indicated that LBI would not only maintain a healthy liquidity position, but also pay down a sizeable portion of debt. (*Id.* (UBS's April 2008 credit memorandum indicating that under

UBS's base case, LBI would have "[s]trong liquidity throughout [the] projection period," with "25.8% of first lien debt and 15.6% of total debt paid down by 2011").)

b) <u>The Banks' Projections</u>

In determining whether to participate in the Merger financing, each of the Banks prepared both base case and downside case projections. As explained by Jeffries of Citibank, the "base case" "reflected Citi's own view, based on its due diligence and knowledge of the industry, as to the most accurate forecast of the company's future performance. The [Citi] Base Case represented a more conservative view than the [Lyondell] Management Case, which reflected the projections of Basell and Lyondell Management." (Jeffries Decl. ¶ 23.)

On the other hand, the "Downside Case was a stress test developed by Citi to determine how the merged company would perform under severe economic conditions, including conditions that would result in the breakage of financial covenants." (Jeffries Decl. ¶ 24.) By adjusting certain assumptions, the Citi Downside Case decreased projected annual EBITDA by roughly 45%. (*Id.*) The downside case, however, "was not designed to be a realistic assessment of conditions LBI was likely to face. On the contrary, the stress conditions . . . were considered highly unlikely to occur." (*Id.*)

The following chart, discussed in more detail below, shows 36 sets of projections prepared by the Banks and Lyondell management in connection with the Merger. (CX-1.)

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	C
	Actual EBITDA							4,420					
	Historical Pro Forma EBITDA	1,262	1,538	1,204	2,569	3,976	4,603						
B	ML 1/16/07, 1/23/07 and 1/24/07 Base Case							4,474	3,592	2,956	2,482	2,510	
B	ML 2/6/07 Base Case							4,432	3,653	3,236	2,760	2,887	
W	ML 3/07 Worst Case							3,671	2,983	2,537	2,084	2,206	
B	ML 3/8/07 Base Case							4,382	3,995	3,444	2,997	3,058	
B	ML 3/12/07 Base Case							4,282	3,995	3,444	2,997	3,058	
B	ML 08/06 Adjusted on 3/27/07 Base Case							4,810	4,234	3,598	2,982	2,954	
D	ML 08/06 Adjusted on 3/27/07 Downside Case							4,810	3,818	3,189	2,531	2,520	
B	ML 3/27/07 Base Case							4,456	4,271	3,723	3,255	3,329	
D	ML 3/27/07 Downside Case							4,320	3,823	3,093	2,640	2,628	
W	ML 3/29/07 Worst Case							3,671	3,046	2,583	2,120	2,206	
B	ML 4/1/07 through 7/9/07 Base Case							4,456	4,271	3,723	3,255	3,329	
D	ML 4/1/07 through 7/9/07 Downside Case							4,278	3,823	3,093	2,640	2,628	
W	ML 4/1/07 through 7/9/07 Worst Case							3,629	3,046	2,583	2,120	2,244	
CRT	ML 4/10/07 Credit Stress Test Case							3,901	3,380	2,604	1,995	2,059	
B	ML 7/10/07 Base Case							4,839	4,435	3,878	3,434	3,538	
D	ML 7/10/07 Downside Case							4,661	3,923	3,189	2,772	2,782	
M	ML 7/15/07 Management Case							5,253	5,462	4,623	4,312	4,141	
B	ML 7/15/07 Base Case							5,375	5,221	4,281	4,005	3,906	
D	ML 7/15/07 Downside Case							4,711	3,896	3,256	3,075	3,145	
M	Citi 7/15/07 Management Case							5,295	5,216	4,417	4,256	4,084	
B	Citi 7/15/07 Basell Base Case							5,045	5,059	4,203	4,105	3,958	
D	Citi 7/15/07 Downside Case							4,380	3,599	2,827	2,493	3,131	
B	Citi 7/15/07 Basell-ML Case							5,417	4,976	4,075	3,948	3,850	
B	ML 7/15/07 Debt Comm Base Case							5,262	5,121	4,185	3,867	3,906	
D	ML 7/15/07 Debt Comm Extreme Worst Case							5,078	3,784	3,124	2,772	2,874	
B	GS 7/16/07 Capital Comm Base Case							4,951	5,366	4,543	4,237	4,068	
D	GS 7/16/07 Capital Comm Downside Case							5,018	4,855	4,167	2,835	3,327	
B	ABN Amro 7/21/07 Base Case							5,375	5,222	4,281	4,005	3,906	
D	ABN Amro 7/21/07 Downside Case							5,375	4,700	3,639	3,404	3,320	
M	GS 9/7/07 New Management Case							4,731	5,351	4,772	4,458	4,281	
D	GS 9/7/07 Downside Case							5,070	3,896	3,256	3,075	3,145	
B	Projections Presentation 9/26/07							4,730	5,352	4,772	4,457	4,281	
D	GS 10/2/07 Downside Case							5,080	3,896	3,256	3,075	3,145	
M	GS 10/2/07 Management Case							5,080	5,253	4,677	4,328	4,130	
B	ABN Amro 10/07 Base Case								5,198	4,417	3,929	3,730	
B	Rating Agency and Bank Presentations 10/07 and 11/07							4,730	5,322	4,792	4,457	4,281	

c) <u>The Merrill Lynch Model</u>

As noted above, from April 2006 through the closing of the Merger, Frangenberg was a member of the Chemicals Group at Merrill Lynch and prepared projections models for the Merger. (Frangenberg Decl. ¶¶ 1–2, 4.) Frangenberg testified at trial regarding several models prepared by Merrill Lynch in connection with the Merger, but on cross-examination, admitted that the models included several significant errors. Using Merrill Lynch's model, Frangenberg ran, based on assumptions provided to him by Access, different "cases" purporting to test the future financial performance of a combined Lyondell-Basell entity: a "base case," a "management case," a "downside case," a "credit stress test," and a "worst case scenario." (11/1 Trial Tr. (Frangenberg) at 2057:9–58:4; DX-56 (ML Supplemental Hugo Analysis, 4/1/07 ("worst case scenario")); DX-66 (ML Credit Stress Test, 4/10/2007) at .015.)

Importantly, Frangenberg did not run the "worst case" scenario on the final deal terms, but Frangenberg admitted that the model he created could test multiple cases and assumptions at one time, including at $48 per share. (11/1 Trial Tr. (Frangenberg) at 2161:5–62:2, 2121:14–22:4.) Thus, Frangenberg had the ability to run the "worst case" scenario on the revised deal terms, but did not. Under this "worst case scenario" model, LBI was shown to lower its total debt load by $4 billion over a number of years, but on cross-examination, Frangenberg admitted that LBI's actual post-merger debt load was significantly higher than the $20 billion assumed under the "worst case scenario." (*See* 11/1 Trial Tr. (Frangenberg) at 2091:3–18.) Similarly, under Merrill Lynch's "credit stress test," also not run on final deal terms, Frangenberg contemplated that LBI would reduce its debt load significantly, but again, the actual ultimate debt left on LBI following the Merger was several billion dollars higher than contemplated by Frangenberg's model. (*Id.* at 2098:23–99:6.)

And more generally, the Merrill Lynch model overstated ethylene revenues of Lyondell by failing to take a discount off of the contract price of ethylene, which had a substantially inflated effect on Lyondell's revenues.[17] And, Merrill Lynch did not account for the millions of dollars that were to be used for the Berre acquisition. (*Id.* at 2099:7–10.)

Confronted with these inconsistencies and errors, along with other accounting defects in the calculation of product margins, Frangenberg was forced to admit that the Merrill Lynch models were potentially off by billions of dollars. (*Id.* at 2150:12–18 (referencing "double counting" in connection with modeling projections for ethylene co-product margins that would result in defects, Frangenberg is asked "So across the span of this model, you're probably talking billions of dollars, right?" and answers "Yes.") If the Merrill Lynch models were the only projections other than Lyondell's, the Trustee's arguments would have greater force. But the

[17] Specifically, CMAI publishes a "spot price" and a "contract price" for ethylene. (11/1 Trial Tr. (Frangenberg) at 2137:7–11.) The "contract price" is known as a "marker price" and parties in the industry typically negotiate discounts in the price of ethylene based off of the marker price. (*Id*. at 2137:19–24.)

other Banks did their own modelling, not subject to the same challenges the Trustee waged against the Merrill Lynch model.

M. Expert Testimony Regarding Lyondell's and CMAI's Projections

This Court's solvency determinations, in part, turn on the extent to which Lyondell management's projections may properly be relied upon. Lyondell produced the refreshed projections in May 2007, but also prepared projections later on in connection with the Merger. Both the Trustee, through its industry experts CMAI and Purvin & Gurtz ("PGI"), and the Defendants, through their industry experts Young and O'Connor, offered opinions regarding the credibility and value of the various projections prepared by Lyondell, and in certain circumstances prepared independent contemporaneous projections.[18] Each will be discussed in turn.

1. CMAI

The Court has carefully considered the testimony of CMAI, along with the testimony of the Trustee's other experts who rely on CMAI's CIMBal Model (defined below). The Court finds that CMAI's testimony at trial was not credible for the reasons explained below.

a) <u>CMAI's Changing Roles and Opinions Over Time</u>

CMAI and Turner Mason were retained by Basell in 2007, prior to the close of the Merger, as independent consultants to review the reasonableness of projections used in connection with the Merger. (*See* Frangenberg Decl. ¶¶ 74–84.) CMAI was a leading petrochemicals forecasting provider to the industry, whose petrochemical forecasting resources were extensively used by both Basell and Lyondell at the time of and preceding the Merger. Later, after the bankruptcy cases were filed in 2009, CMAI and PGI prepared a model (the

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[18] As noted below, the Trustee's solvency experts relied on CMAI and PGI, and as such, the credibility of these solvency experts are necessarily tied to the credibility of CMAI and PGI.

"CIMBal Model") to value and understand LBI's business from the standpoint of 2009 on behalf of the Official Committee of Unsecured Creditors (the "Creditors' Committee"). Still later, CMAI and PGI converted their model to use in this litigation on behalf of the Trustee. (10/19 Trial Tr. (Witte) at 595:22–97:18, 604:23–05:8.) CMAI's opinions changed with each of these engagements, as it represented different parties at different stages—pre-merger for the Banks, post-bankruptcy for the Creditors' Committee, and during trial for the Trustee. As a result of these ever-shifting conclusions, CMAI's credibility was seriously compromised at trial.

b) CMAI's Pre-Merger Work Concludes that Lyondell Management Projections Were "Conservative"

CMAI's pre-merger work for Basell was conducted in November 2007, under the supervision of CMAI employee Arvind Aggarwal. (Aggarwall Dep. Tr. at 55:2–18.) For its pre-merger work, CMAI drew upon transaction databases, and utilized its own forecasts of cash margins for petrochemical products,[19] to arrive at average cash margins for a range of products. (CMAI 2009 Report, PX-804 at 17.) To project future cash margins, CMAI used macro-economic demand forecasts for different products and regions, and compared this data with forecasts for manufacturing capacity to obtain forecast operating rates.[20] Generally speaking, cash margins tend to increase along with operating rates as manufacturing plants approach capacity.

CMAI's November 2007 analysis on behalf of Basell indicated that the differences between its own projections and management's projections for the petrochemical side of the business were insignificant, and highlighted that the "Lyondell view is conservative relative to

[19] Petrochemical cash margins are the net of actual price over the costs of production. (CMAI 2009 Report, PX-804 at 15.)

[20] Operating rate is the ratio obtained by dividing capacity by forecasted production.

CMAI." (JX-24 at .219; *see also* Frangenberg Decl. ¶ 84.) The November 2007 CMAI report was "a fulsome analysis of the reasonableness of the contemporaneous projections and other business assumptions regarding the 2007 merger of Basell and Lyondell." (Gallogly Decl. ¶ 25.) Turner Mason, a refining consultant also relied upon by the Trustee at trial (10/20 Trial Tr. (Nebeker) at 733–34), concluded that the projections for Lyondell's refining business were "based on reasonable operating assumptions" and that, while management's forecast was "more bullish" than Turner Mason's, it was "not significantly so." (JX-23 at .055–56.) Based on the work of CMAI and Turner Mason before the Merger, the bank group developed a "consultants' sensitivity case" that was consistent with, and further supported the reasonableness of, management's business plan. (Bigman Decl. ¶ 62; Frangenberg Decl. ¶ 83; DX-219 at .019; Kassin Decl. ¶ 79.)

c) <u>CMAI's Litigation Work Concludes that Lyondell Management's Projections Were Materially Overstated</u>

When CMAI was later retained for this litigation, the Trustee's industry experts, Witte and Nebeker, did not evaluate management's EBITDA projections against contemporaneous (2007) industry outlooks—*including those by their own firms*, CMAI and PGI. Instead, over a period of eight months in 2009, they developed a model that attempted to model LBI's assets from the bottom up. For petrochemicals, Witte used multiple proprietary CMAI databases—to which Defendants received only limited access—to calculate operating rate and price forecasts for the various products and regions in LBI's portfolio. These inputs were then hard-coded into another proprietary CMAI database called CIMBal, which was also used to calculate the cash costs variable of the EBITDA equation. (10/19 Trial Tr. (Witte) at 484, 493–95.)

CMAI populated CIMBal with company-specific Lyondell and Basell operating performance data and historical pricing data, including some non-public information it did not previously have access to prior to LBI's bankruptcy. (CMAI 2009 Report, PX-804 at 13; 10/19 Trial Tr. (Witte) at 615:4–22.) It was configured to LBI's 2007 operational viewpoint, and then populated with CMAI and PGI's price forecasts that were available in 2007. (*Id.*) CMAI attempted to model the expected profitability of each of LBI's petrochemical groups based on the information available to LBI at the time and the prevailing industry outlook at the time. (*Id.*) Through the CIMBal Model, CMAI sought to determine, in late 2009, the cost of production for LBI's various petrochemical divisions, as well as the actual prices that it received for those products prior to a management presentation given in October 2007 (the "October 2007 CIM," JX-19).

The CIMBal Model asserted that the projections of Lyondell's EC&D division and Basell's PO Europe division in the October 2007 CIM were materially overstated. (*See* CMAI 2009 Report, PX-804 at 26, 36.) According to the CIMBal Model, Lyondell's EC&D projections were overstated by a total of $900 million between 2008 and 2011 due to margin assumptions that were purportedly inconsistent with the margins achievable by Lyondell's operating assets. (*Id.* at 34–36.) The outputs from the CIMBal Model also imply that Basell PO Europe's projections were overstated by a total of $1.5 billion, due to volume and margin disparities between the CIMBal Model and the LBI projections, with approximately $500 million being due to the overstated volume and approximately $1 billion being due to the overstated margins. (*Id.* at 22–26.) Based this modeling, CMAI asserts that Basell improperly projected its PO Europe operating rate would increase to levels it had never historically reached. (*Id.* at 23 (graphs showing Western Europe operating rates projected to spike in LBI projections).)

The relevant EBITDA projections from the CIMBal Model are summarized in the table below:

	EBITDA ($ millions)			
	2008	**2009**	**2010**	**2011**
JV Dividends	$72	$92	$155	$154
LBI EBITDA	$3,908	$3,084	$2,633	$2,506
Total LBI EBITDA	$3,980	$3,176	$2,788	$2,660
LYO	$1,645	$1,256	$932	$910
HRO	$914	$706	$670	$557
Synergies	$45	$300	$420	$420
Other	$(18)	$(18)	$(18)	$(18)
Total LYO EBITDA	$2,586	$2,244	$2,004	$1,869
LYO EBITDA as % of LBI	65%	71%	72%	70%

d) CMAI's Financial Experts Relied on the CIMBal Model

The Trustee's financial experts, Maxwell and Tuliano, readily admitted they are not petrochemical or refining experts (10/24 Trial Tr. (Maxwell) at 1442; 10/17 Trial Tr. (Tuliano) at 159–60), and both relied on CMAI in selecting the projections that they used for their financial analyses. Maxwell, in fact, based his analysis on the CIMBal model, and selected which additional projections to use based on CMAI's opinions. (10/24 Trial Tr. (Maxwell) at 1409–11.) Tuliano did not use the CIMBal projections, but relied on CMAI in selecting the projections he used. (10/17 Trial Tr. (Tuliano) at 161.)

This reliance raises serious questions as to the credibility of Tuliano's and Maxwell's reports. (10/31 Trial Tr. (Maxwell) at 1700–01, 1734–35.) But as a preliminary matter, the Court is struck that the Trustee retained CMAI—and CMAI agreed to be retained—for an engagement that, by its very nature, required CMAI to undermine or repudiate its November 2007 report. CMAI and the Trustee's counsel presented Witte as its Rule 30(b)(6) witness to testify regarding the November 2007 report, which he had no role in preparing. Aggarwal, the actual author of the 2007 report, was ultimately deposed, but CMAI and the Trustee's counsel supplied Aggarwal with Witte's expert reports and deposition testimony. (Aggarwal Dep. Tr. at

56–59.) The Court questions whether the provision of these materials, which were critical of the November 2007 report, may have influenced Aggarwal's subsequent testimony. Nevertheless, even without delving into the issue whether Witte or Aggarwal was the appropriate deponent, CMAI's changing conclusions over time have severely undermined its credibility in this litigation.

e) Defendants' Critique of CIMBal

Defendants' refining and petrochemical expert Young strongly—and, the Court finds, credibly—criticized CIMBal. Young acknowledged that when the Defendants ran the data CMAI populated CIMBal with through their own model, the results were not "thematically lower than we would have expected." (11/4 Trial Tr. (Young) at 827:21–828:10.) The Defendants nevertheless attempted to reproduce one segment of the LBI portfolio using CIMBal. (11/4 Trial Tr. (Young) at 833:21–35:5 (Young tested a "slice of the portfolio").) It is this attempted reproduction upon which Young bases his critique.

Young and the Defendants argued at trial that the fundamental lack of transparency and the inability to comprehensively reproduce the modeling done by CMAI through CIMBal raises serious questions about CMAI's conclusions. Young explained that after spending "several hundreds of hours" with his team of experienced analysts examining CMAI's model, he determined that "[t]he capability to audit the model and follow numbers back to the source . . . was just missing completely." (11/4 Trial Tr. (Young) at 2873.) Young and his team were given access to the CIMBal Model on a laptop in a setting supervised by a CMAI employee with knowledge of CIMBal, but Young and his team were nonetheless unable to fully audit the model and test the assumptions and inputs, or reproduce any CIMBal modeling in a meaningful way.[21]

[21] The Trustee provided access to CIMBal on laptops in five different cities and provided a training course on how to use CIMBal, to assist Defendants in their review of the CIMBal Model. (10/19 Trial Tr. (Witte) at 659:12–

Numerous inputs and assumptions were hard-coded into the CIMBal Model, prompting Defendants to dub the CIMBal Model a "black box."

Even more significantly, Witte's projections developed using the CIMBal Model in 2009 for litigation purposes were fundamentally at odds with the projections that CMAI developed in 2007 on behalf of Basell, and which were relied on by the Banks in committing billions of dollars in Merger financing. (*See* DX-196; DX-215.) In particular, as set out in CMAI's November 2007 "Project Hugo" presentation to certain financing banks, CMAI concluded that "the Basell technology does allow Basell to achieve above average spreads in the market, compared to CMAI," and Lyondell management's view was "conservative relative to CMAI." (JX-24 at .205, .219.) But for the purposes of this litigation, CMAI's experts testified that Lyondell management's projections were materially overstated by approximately a total of $2.4 billion. (CMAI 2009 Report, PX-804 at 26, 36.)

The Trustee's experts conceded that no industry participant (including CMAI and PGI) had predicted the extraordinary adverse events that caused the deterioration in LBI's business performance in 2008—among them the wild upswing and downswing in oil prices, and the unprecedented plummeting in demand for both petrochemicals and refined products. Despite these unprecedented events, the EBITDA projections in CMAI and PGI's model *almost exactly matched* LBI's actual 2008 performance. (10/19 Trial Tr. (Witte) at 576 ("Q. Despite the fact that 2008 unexpectedly brought us . . . the first global demand drop for petrochemical products in your career, . . . your model is set to predict the same earnings that the company actually got,

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60:14.) CMAI and the Trustee turned over additional documentation showing manufacturing cost estimates that contained the data for each plant modeled in CIMbal. (10/19 Trial Tr. (Witte) at 657:3–16.) In March 2011, counsel to the Trustee renewed the offer to provide a CIMBal tutorial, and Young's staff—though not Young himself—accepted the offer and attended a tutorial on April 28, 2011. (*See* 10/19 Trial Tr. (Witte) at 656:21–58:5.) Defendants never filed a motion with the Court seeking enhanced access to CIMbal. (*See* 10/19 Trial Tr. (Witte) at 703:19–04:13, 716:21–17:4.)

right? A. Yes, in total.”).) Witte acknowledged the model was calibrated against LBI’s 2008 actuals. (*Id.* at 577 (“We checked the output of the model . . . against 2008 actuals.”).) Notably, once oil prices stabilized and demand recovered following the financial crisis, the CIMBal Model dramatically under-predicted LBI’s actual EBITDA—including by nearly $3 billion in 2011 alone. (*Compare* CMAI 2009 Report, PX-804 at 7 (CMAI/PGI projecting 2010 and 2011 LBI EBITDA of $2.79 and $2.66 billion, respectively), *with* DX-489 at .003 *and* DX-713 at .001 (reflecting actual 2010 and 2011 LBI EBITDA of $4.04 and $5.59 billion, respectively).) The CIMBal Model’s nearly perfect calibration to actual 2008 results—despite the fact that it was intended to reflect the perspective of 2007, before the Great Recession—smacks of hindsight.

The Court agrees with Defendants’ argument that the CMAI projections are rendered even more unreliable because: (i) CMAI’s severe conflict of interest and its actions in connection with the deposition of Aggarwal undermine CMAI’s credibility; and (ii) CMAI’s model was essentially a “black box,” which neither Defendants nor the Court had an effective opportunity to access or evaluate. *See Lawrence v. Raymond Corp*., No. 3:09 CV 1067, 2011 WL 3418324, at *7 (N.D. Ohio Aug. 4, 2011), *aff’d*, 501 F. App’x 515 (6th Cir. 2012) (“An expert is not a black box into which data is fed at one end and from which an answer emerges at the other; the Court must be able to see the mechanisms in order to determine if they are reliable and helpful.”). Courts must always view the opinion of litigation experts with searching scrutiny, but when those very same experts represented other parties at earlier stages and then dramatically change their opinions for litigation purposes, it tests credibility to accept the litigation opinions.

2. Defendants’ Expert Testimony

a) <u>Young</u>

In addition to assessing the CIMBal model, Defendants’ expert Young evaluated the assumptions underlying LBI’s petrochemicals and refining projections as of December 20, 2007, and determined that they were reasonable. (11/4 Trial Tr. (Young) at 2830–31.) Young also determined that the refreshed projections themselves, and the process by which they were prepared, was reasonable in the circumstances.

Specifically, he compared management's assumptions for the key EBITDA drivers—including operating rates and margins for petrochemicals, and the crack spread for refining—to contemporaneous industry forecasts in 2007, and concluded (as CMAI did in its analysis in 2007) that management's projections were consistent with the industry view. (Young 2009 Report, DX-804 at 32.) Young presented unrebutted analysis showing the consensus outlook in 2007 that demand growth for petrochemicals and refined products would remain positive and robust (*id*. at 16–18, 21–22), and that the projected upcoming petrochemical trough would be "mild" and "entirely supply-driven." (*Id*. at 15, 18; *see also* DX-217 at .164 (CMAI report from November 2007 projecting that "margins at the end of the decade [will be] somewhat above the last trough in 2001/02").) Likewise, Young explained that the confluence of events that actually caused LBI to miss its 2008 projections—including rapidly rising and then plummeting oil prices (which squeezed petrochemical margins and then wiped out refining margins) and unprecedented negative demand growth for petrochemicals in the fourth quarter of 2008—were not, and could not reasonably have been anticipated as of the Merger Closing Date. (Young 2009 Report, DX-804 at 58–69.) Young's views, in this respect, are not significantly different from the views expressed by CMAI in a 2009 industry report that addressed the effect of the Great Recession on LBI. *See* DX-463 at .010 (CMAI report from April 2009 acknowledging that it was "the worst global recession since World War II" and "[t]he combination of plunging chemical sales and global credit freeze [that] rendered LyondellBasell unable to service its . . . debt").)

As noted above, Young also opined that the rationale, process and the results of Lyondell's refreshed projections were reasonable under the circumstances. (Young 2011 Supplemental Report, DX-806 at 13–14.) With respect to petrochemicals, he explained that Lyondell management's downward revision for 2007 and 2008 was sensible in light of the delay in passing on higher-than-expected feedstock prices to customers, but that improving supply and demand fundamentals due to delays in new Middle East capacity[22] and other factors provided ample business justification for management's improved outlook for 2009–2011. (*Id*. at 15–16; *see also* DX-554 at .037 (CMAI power-point presentation for an annual chemicals symposium, stating CMAI's December 2007 view that "[n]ew capacity somewhat delayed").) With respect to refining, Young opined that the upward adjustments in the refresh were reasonable in light of Lyondell's substantially better-than-projected 2007 performance, the limited impact of rising oil prices on demand, and the continued optimization of Lyondell's (now solely-owned) Houston Refinery through capital improvements and cost reduction programs. (Young 2011 Supplemental Report, DX-806 at 19; 11/4 Trial Tr. (Young) at 2849.)

With respect to the refresh process itself, Young testified regarding different types of corporate planning that are utilized by companies in different scenarios, and sought to contextualize the refresh process employed by Lyondell when revising its projections in May 2007. (Young 2011 Supplemental Report, DX-806 at 8–22.) Young identified three categories of corporate planning: long range planning, short term planning, and event driven planning. Young noted that Lyondell's LRP was obviously a form of long range planning, as it involved a

[22] When competitors are delayed in bringing new facilities online, naturally, supply conditions remain more favorable.

detailed and thorough process that encompassed strategic considerations, entailed a "bottoms-up" review, macroeconomic analysis and industry trends. (*Id.* at 10.)

As noted above, the refresh process began following Blavatnik's acquisition of the Toehold Position, and Access's filing of the 13D with the Securities and Exchange Commission on May 11, 2007. Accordingly, Young determined that the refresh process represents a typical "event driven" planning that came in response to a potential merger opportunity, and required swift execution. (*Id.* at 13–14.) Salvin, Young explains, was "the kind of professional whom [he] would expect to see coordinate such an activity, due to his over thirty years of experience at Lyondell and knowledge of Lyondell's diverse businesses." (*Id.* at 14.) The actions of Salvin, and senior planning staff and management, in updating EBITDA projections in connection with a potential merger opportunity were reasonable and appropriate given the circumstances, according to Young.

Young also determined that the refreshed projections themselves were reasonable. (*Id.* at 14–22.) In the context of "gathering optimism in the performance of the Houston Refinery" and the anticipated poor performance in the chemical space, Young analyzed each business segment's historical performance and industry outlook, and concluded that the alterations to the EBITDA projections "were based on identifiable and justifiable business factors." (*Id.* at 20.) Young points out that for the first half of 2008, LBI's performance actually did track the refreshed forecast rather well. (*Id.*) The Court finds Young's testimony to be credible and persuasive. The Trustee's challenge to the refreshed projections presented a good headline for the Trustee's theory of the case. But credible trial evidence did not support that headline.

b) <u>O'Connor</u>

Defendants' expert Thomas O'Connor, an expert in the oil refining industry, evaluated the outputs of the refreshed refinery projections, and also evaluated the October 2007 CIM projections for the Houston Refinery and concluded that they were reasonable. (11/3 Trial Tr. (O'Connor) at 2529–31.) O'Connor submitted three expert reports: (i) an expert report dated November 7, 2009 (DX-800), (ii) a rebuttal expert report dated November 20, 2009 (DX-801), and (iii) a supplemental expert report, dated April 15, 2011 (DX-803).

O'Connor's opinion regarding the October 2007 CIM was based on his evaluation of the competitive advantages of the refinery in 2007, including its ability to process a high percentage of very cheap "heavy" or "sour" Venezuelan crude oil (*id*. at 2532–33), the long-term contract that ensured a steady supply of this cheap crude (*id*. at 2536), and the refinery's ability to produce premium products such as ultra-low sulfur diesel before a number of other refiners had that capability (*id*. at 2535). O'Connor further evaluated Lyondell forecasts for market indicators underlying the Houston refinery projections in the October 2007 CIM. This included the forecast for the spread between the prices of light crude oil and heavy crude oil, which was in line with contemporaneous industry projections including those of PGI. (*Id*. at 2541–42.) According to O'Connor, the Lyondell forecast for the spread between heavy crude prices and the price of refined products was similarly supported by Lyondell management's views of refining capacity additions (*id*. at 2552–55), projected global growth in demand for refined products which was expected to continue (*id*. at 2556), the contemporaneous behavior of other refining companies (*id*. at 2563–64), and data from the Energy Information Administration (*id*. at 2566).

Though O'Connor did not opine about the process by which Lyondell refreshed its projections in May 2007, O'Connor did "independently analyze the output" of the refreshed projections in concluding that the projections were reasonable. (11/3 Trial Tr. (O'Connor) at 2530–31.) This included evaluating various factors in the first half of 2007 which supported an increased projection for the Houston refinery, such as delays in capacity additions in the industry (*id*. at 2570), a shift in the refinery's product slate to produce a higher percentage of premium products (*id*. at 2573), a positive impact from planned and completed capital improvement projects (*id*. at 2574), and a reasonable expectation for higher spreads between the price of heavy crude oil and refined products in 2008. (*Id*. at 2574–75). The Court finds O'Connor's testimony to be credible, and supported by evidence.

N. Expert Testimony Regarding Solvency

A number of financial and solvency experts testified at trial as to LBI's financial condition on several key dates. As discussed in more detail below, in order to satisfy the elements of a constructive fraudulent transfer claim, the Trustee is required to establish the Debtors' insolvency through one of three "financial condition tests." In short, these financial condition tests are (i) a balance-sheet test (measuring a debtor's assets against its liabilities at a fair value), (ii) a test measuring whether a particular transaction left a debtor with unreasonably small capital to operate, and (ii) an inquiry into whether a debtor intended to incur debts beyond its ability to repay them. (*See infra* Section V.A.) For preference avoidance purposes, insolvency must be shown using the balance-sheet test. These financial condition tests colored each of the experts' testimony.

1. Solvency at Merger Closing

a) <u>The Plaintiff's Experts</u>

Both Maxwell and Tuliano relied in part on CMAI in reaching their respective conclusions that LBI was insolvent as of December 20, 2007. Maxwell used the projections that CMAI prepared for purposes of litigation, and based his selection of other projections on CMAI's opinions. (10/24 Trial Tr. (Maxwell) at 1409–11.) Tuliano did not use CMAI's litigation projections, but relied on CMAI in selecting the three projections he ultimately used. (10/17 Trial Tr. (Tuliano) at 161.)

(1) Maxwell

The Trustee's claim that LBI was insolvent as of December 20, 2007, depends in large part on Maxwell's opinion. Maxwell's work, in turn, depends on CMAI because he used projections from the CIMBal Model for his analysis and relied on CMAI in deciding what other projections to use in his analysis. (10/24 Trial Tr. (Maxwell) at 1410–11, 1443–44.) He did so, moreover, with scant information about how the litigation model had been developed, without informing himself as to differences between what CMAI was saying as a litigation expert and what it had said in 2007, and without independently testing CMAI's work. (*See id.* at 1411–15.)

Maxwell maintains that, based on a balance sheet test, LBI was insolvent as of December 20, 2007. Maxwell employed a discounted cash flow valuation methodology ("DCF"), along with a comparable transaction approach and a comparable company analysis. (Maxwell 2009 Report, PX-809 at 5, 17.) These analyses involve arriving at a valuation for LBI, and in his analyses, Maxwell relied on CMAI's reports in undertaking the DCF analysis, as well as his determination of which of the Banks and management's projections were reasonable or unreasonable. (10/24 Trial Tr. (Maxwell) at 1409:12–24; 1434:1–7.)

Maxwell did not closely analyze any of the valuations prepared by the Banks or specifically identify any errors in the Banks' valuations (11/24 Trial Tr. (Maxwell) at 1418:22–19:1), but testified at trial that these valuations should be disregarded as not credible, despite the fact that the Banks were putting billions at risk, and the projected valuations prepared by the Banks were all approved by the Banks' credit committees. (10/31 Trial Tr. (Maxwell) at 1697:15–16 ("I'm indicating that [the banks'] judgment is certainly to be questioned."); *see also id.* at 1698:6–13 (Maxwell indicated that he saw from four to six of the banks' projections, and as they "relate[] to the valuation of the company," Maxwell would completely disregard the projections altogether.).) Specifically, Maxwell testified that the Banks' projections and valuations were not credible based on his insistence that CMAI's reports were superior, and referenced scholarship on the supposedly "perverted motivations" of commercial banks in underwriting loans. (*Id.* at 1697:1–3.) The Court finds that Maxwell's opinions were not credible. He relied on assumptions prepared by other experts without taking any steps to determine whether the assumptions were reasonable. He rejected the Banks' models without even evaluating them. He seemed to believe (unreasonably) that banks were willing to risk billions of dollars and their own reputations without undertaking any serious analysis.

In his analysis, Maxwell arrived at a December 20, 2007, valuation range of $21.1 billion to $24.3 billion, with a midpoint of roughly $22.7 billion. But each of the financing banks prepared valuations of their own, with valuation ranges from $29.9 billion to $37.6 billion. (*See* DX-654.) For example, Citibank's contemporaneous valuation, prepared in December 2007, ranged from $34.2 billion to $37.6 billion. (DX-270 at 1.) Maxwell's midpoint valuation was over $10 billion below the valuation average produced by the Banks that were actually financing the deal. Maxwell agreed that his valuation was driven by the projections he used. (10/24 Trial Tr. (Maxwell) at 1421.) He further agreed that, although he had not done this work, using his valuation methodologies and management's projections, he would have found LBI to be solvent. (*Id*. at 1422–24; DX-657.) His reason for not using management's projections depended largely on CMAI's expert report (10/24 Trial Tr. (Maxwell) at 1425)—and for the reasons explained in this Opinion, Maxwell's testimony suffers from the same lack of credibility that undermines CMAI's reports and Witte's testimony. Maxwell also did not apply his valuation methodologies to any of the bank base cases prepared following due diligence. (11/24 Trial Tr. (Maxwell) at 1418:22–19:1.)

Maxwell used three sets of projections for his December 2007 valuation—the CIMBal Model and Merrill's Lynch's July 10, 2007, downside and base cases—and he did so without assigning any probability to these scenarios actually occurring. (*Id*. at 1425–26.) Maxwell's valuation is incorrect because he used after-the-fact litigation projections that are not credible (and that are billions of dollars lower than other projections he accepted as reasonable). (*Id*. at 1426–32.) The Merrill Lynch projections he used were done before Basell updated its projections and were not informed by due diligence conducted on Lyondell before Access and Basell approved the Merger and made their binding offer. One of those cases was a downside case. (*Id*. at 1432.) Maxwell has presented no defensible rationale for using a downside case for valuation purposes and since his methodologies averaged the results of the three sets of projections (*id*. at 1426), averaging in the downside case results in a significantly reduced valuation range. His final case was Merrill Lynch's July 10, 2007, base case—which he agreed was reasonable even though it projected billions of dollars more in EBITDA than his other two cases and produced a much higher valuation range. (*Id*. at 1432–35.) Although Maxwell knew that Merrill Lynch updated its cases just a few days later, after performing due diligence on Lyondell's projections, Maxwell ignored those updated numbers and did not incorporate them in his analysis; if he had, his value estimation would have been significantly higher, and his analysis would appear to show a solvent company. (*Id*. at 1435–39; Kearns 2009 Rebuttal Report, DX-809 at 13 (showing the impact of using different projections in Maxwell's DCF analysis).)

(2) Tuliano

Tuliano opines that as a result of the Merger, LBI was left with unreasonably small capital to conduct its operations, and was left unable to pay its debts when due. (Tuliano 2009 Report, PX-800 at 1.)

Tuliano calculated that LBI's opening liquidity on December 20, 2007, was $1.323 billion. (*Id.* at 81.) Tuliano arrives at this sum by taking LBI's reported opening liquidity figure of $2.3 billion, and subtracting out certain commitments, such as the obligation to purchase the Berre refinery for $535 million, the obligation to purchase Solvay for $130 million, and certain other costs totaling roughly $300 million. (*Id.*) Tuliano also calculated LBI's post-merger debt-to-EBITDA ratio at 5.4, which he argues is relatively high in the refining and petrochemical space. (*Id.* at 66.)

In reaching his conclusion that Lyondell's projections were unreasonable, Tuliano identified 36 sets of projections prepared by the Banks and Lyondell management. Not surprisingly, Lyondell's management's projections were among the highest EBITDA projections. Tuliano, however, discredited the bulk of the 36 sets of projections identified, and in his capital adequacy analysis, only considered three of the lowest projections of the entire slate of projections he identified: the April 10, 2007, Merrill Lynch Credit Stress Test; the July 10, 2007, Merrill Lynch Downside Case; and the July 15, 2007, Citibank Downside Case. (CX-3 (Chart, reproduced below in Section IV.N.1, showing these three sets of projections modeled against the 36 sets of projections identified by Tuliano).) Tuliano maintains that the use of these projections "is conservative in that certain of these downside projections are plausible choices for treatment as reasonable base case projections given the comparison to actual performance for 2007 . . . as well as in view of relevant contemporaneous industry outlooks." (*Id.* at 54.)

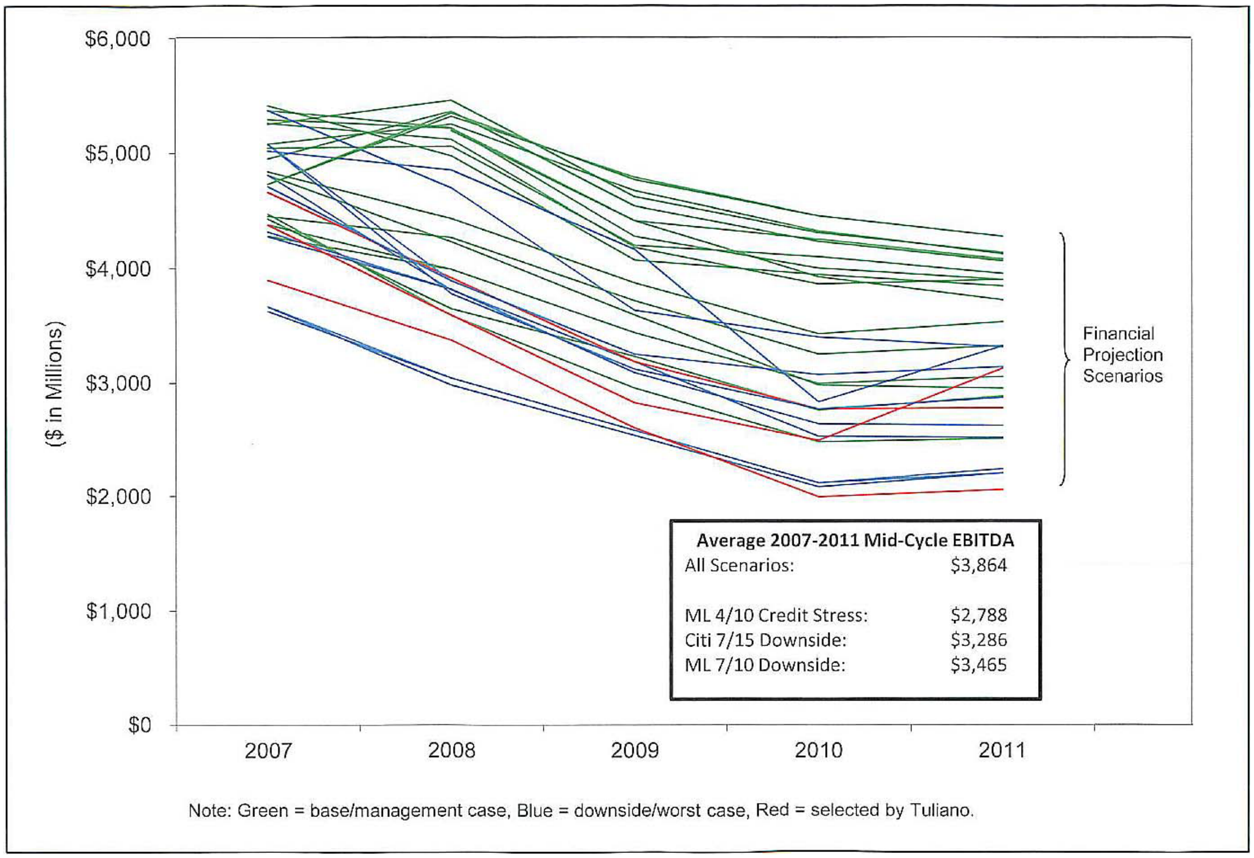
Notably, each of these projections is a "downside" or "credit stress" case. But each of the Bank witnesses rejected Tuliano's characterization and use of these projections, as these downside and stress cases are not designed by the Banks to reflect the actual thinking on how the combined company would perform, but rather were an exercise to determine the breaking point of the company, or in other words, to see how bad things would have to be in order for the company to fail. (Frangenberg Decl. ¶¶ 18, 41, 43; Melvani Decl. ¶¶ 37, 44, 50; Jeffries Decl. ¶¶ 23–25; 11/2 Trial Tr. (Jeffries) at 2279–81); *see also supra*, Section IV.I.2 discussing the Banks' Projections.)

As demonstrated by Exhibit CX-3, reproduced below, based on mid-cycle EBITDA, the projections Tuliano used were exceedingly low in comparison to other projections he considered and did not use. (Tuliano CX-3; Tuliano CX-4; 10/17 Trial Tr. (Tuliano) at 158–59.) Notably, some of the bank downside cases that Tuliano did not use passed his cash flow adequacy test. For example, the October 2, 2007, Goldman Sachs downside case, which was the latest downside case cited in Tuliano's list of 36 projections and prepared after Lyondell's second and third quarter projections misses were known, was described by Goldman Sachs as a "severe" downside case. (DX-180 at .010.) This downside case passes Tuliano's cash flow adequacy test. (Tuliano CX-2; 10/17 Trial Tr. (Tuliano) at 149–52.) Just the same, if LBI's fall 2007 projections or even Merrill Lynch's July 10, 2007, base case were used in Tuliano's cash flow adequacy test, both would pass the cash flow adequacy test. (Tuliano CX-9; Tuliano CX-10; 10/17 Trial Tr. (Tuliano) at 230–33.)

Tuliano acknowledged that he is not an expert in identifying or evaluating synergies and in this case did not evaluate the synergies identified by management, but he discounted those synergies based on his claim (which he does not support with evidence) that they are "suspect." (1017 Trial Tr. (Tuliano) at 277–78, 160–61, 171.) Although the downside cases he ultimately used had some synergy amounts built in, he admitted that the synergy numbers in the two early Merrill Lynch cases were $600 million less than LBI's final synergy estimates and that the

Citibank downside case reflected more than $1 billion less in synergies than LBI's estimates. (*Id*. at 165–67, 234–35.)

The following chart (CX-3) displays the 36 sets of projections identified by Tuliano, highlighting the projections analyzed by Tuliano in red:[23]



As demonstrated by all of the above, in lieu of taking the average of the 36 sets of projections he identified, or identifying some other method to blend the full set of projections, Tuliano chose three of the lowest projections, each of them downside or stress test cases, and found that these projections failed his cash flow adequacy test. Moreover, Tuliano did not

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23 For ease of interpretation in black and white copies of this Opinion, the Merrill Lynch credit stress test is the third from lowest projection for 2007, and declines to become the very lowest in 2010 and 2011. The Citibank downside case is the fourth-lowest projection for 2009–2010, then increases significantly from 2010 to 2011. The Merrill Lynch downside case begins in the bottom third of the range for 2007, and declines to the sixth-lowest in 2011.

account for the synergies identified by LBI management, but failed to provide a full explanation for his discrediting of the synergy values.

b) The Defendants' Experts

(1) Kearns

(a) Capital Adequacy and Ability to Pay Debts as they Come Due

Defendants' expert Kearns performed an analysis of LBI's capital adequacy and ability to pay debts as they came due as of December 20, 2007. (Kearns 2009 Report, DX-808 at 6–10, 31–48, 48–76.) He concluded that LBI was adequately capitalized and had the ability to pay its debts as they came due, and based his conclusions on: (i) the October 2007 CIM projections; (ii) the Banks' analyses of potential risks and mitigants; (iii) the Banks' base cases and stress tests; (iv) the expert analyses of O'Connor and Young; and (v) Kearns's own stress tests. (*Id.* at 31–32.)

Kearns conducted two stress tests, which stressed LBI's earnings and increases in oil prices, as these two items had potentially significant impacts on liquidity. (*Id.* at 38, Ex. E.) At trial Kearns acknowledged that $300–$500 million of liquidity was inadequate for LBI. (11/7 Trial Tr. (Kearns) at 2963:12–22.) The first test examined the minimum level of cash EBITDA that LBI would need to generate to maintain $1.4 billion of liquidity on the last day of each year. (*Id.* at 37, Ex. E.) Kearns's desired minimum liquidity of $1.4 billion was a figure designed to allow LBI to have $1 billion or more of liquidity on the worst liquidity days of the year (around March 31). (11/7 Trial Tr. (Kearns) at 3077.) This amount provided a cushion above the minimum daily liquidity needs identified by Twitchell ($300 to $500 million), but as pointed out by the Trustee, this liquidity amount is significantly below the liquidity historically maintained by the combined entities.[24] On the other hand, Kearns' minimum liquidity figure was more conservative than the minimum liquidity levels used in the Banks' stress tests. (Kearns 2009 Report, DX-808 at 35, 37.)

Kearns's first stress test used an opening liquidity figure of $2.14 billion, which reflected LBI's opening liquidity as of December 31, 2007, with two adjustments. (*Id*. at 3053–57.) Specifically, he, like Tuliano, set aside $550 million to fund the Berre acquisition, but also assumed that the "accordion" feature in the ABL Facilities would be available if needed.[25] (*Id*.) Finally, Kearns testified that, because he was stressing for higher feedstock costs, including the accordion made sense because as feedstock prices increased, the value of the inventory securing the ABL Facility would also increase, making it highly likely that the accordion would be funded in the very scenario where it would be needed. (*Id*. at 3055–56.)

Kearns concluded that LBI could miss its projections by substantial percentages— even if oil prices rose to levels that were exceedingly unlikely—and still maintain the desired minimum liquidity of $1.4 billion at the end of each year. (11/7 Trial Tr. (Kearns) at 3085; DX-853; Kearns 2009 Report, DX-808 at 43.). Under Kearns's first stress test, assuming oil prices stayed at the December 2007 price of $91.70 per barrel, LBI could miss its projections for the four-year projection period by more than $6.3 billion and still maintain the $1.4 billion of desired minimum liquidity over that period. (11/7 Trial Tr. (Kearns) at 3083–84; DX-851; Kearns 2009 Report, DX-808 at 44.) LBI could miss its projections for 2008 by roughly 30%, and sustain an increase in oil prices to $130 per barrel, and it would still maintain the $1.4 billion level of

[24] The combined reported liquidity of Lyondell and Basell was between $3.3 billion and $3.9 billion at the end of the four quarters preceding the LBO. (PX-831 at 10.)

[25] LBI's Treasurer and CFO both indicated that all parties understood as of December 20, 2007, that the accordion would be available to LBI if needed. (Twitchell Decl. ¶ 53; Bigman Decl. ¶ 94.)

desired minimum liquidity. (11/7 Trial Tr. (Kearns) at 3084–85; DX-852; Kearns 2009 Report, DX-808 at 43.)

Kearns also performed a second stress test which examined the minimum level of cash EBITDA that LBI would need to generate to comply with certain financial covenants. (Kearns 2009 Report, DX-808 at 47–48.) The test also measured how much of an increase in oil prices LBI could sustain while still complying with financial covenants and maintaining the $1.4 billion in desired minimum liquidity. (*Id.*) Under Kearns's second stress test, LBI could miss its projections in 2008 by 28%, remain in covenant compliance, sustain a 43% increase in oil prices (to about $130 per barrel), and still maintain the desired minimum liquidity of $1.4 billion. (DX-857.)

Based on his analysis, including his two stress tests, Kearns concluded that LBI had sufficient capital and liquidity to withstand reasonably foreseeable events and even had sufficient liquidity to survive many of the unexpected events that occurred in 2008, including the rapid rise in crude oil prices and other feedstocks. (Kearns 2009 Report, DX-808 at 48.) Especially when considered in conjunction with the various downside, worst case, and credit-stress cases developed by the banks, Kearns's stress tests provide compelling evidence of the soundness of LBI's capital structure at the time of the Merger. Notably, Kearns also concluded that based on market expectations as of December 20, 2007, the probability of oil reaching $130 per barrel in 2008 was 5.9%. (Kearns 2011 Supplemental Report, DX-810 at 61.)

Although Kearns stated that the company "fell off a cliff" in the fourth quarter, he admits that prior to the fourth quarter decline, LBI was already experiencing negative performance relative to plan. (11/7 Trial Tr. (Kearns) at 3002:1–6.) Nonetheless, Kearns concluded that LBI's bankruptcy was a result of the unforeseeable confluence of events that occurred in 2008.

(Kearns 2009 Report, DX-808 at 77–79.) In particular, he explained that the rapid decline in oil prices and the unprecedented collapse in demand in the fourth quarter of 2008—and in particular November and December—caused the ABL Facility to go into an over-advanced position because of the drop in collateral value, and simultaneously caused a precipitous drop in revenues. (11/7 Trial Tr. (Kearns) at 3097-3101; DX-858.)

(b) Balance Sheet Test

Kearns also performed a balance sheet solvency analysis of LBI as of December 20, 2007. (Kearns 2009 Report, DX-808 at 5–6, 18–30.) Using a valuation methodology based on an income approach and a market approach, Kearns opines that the fair value of LBI's assets at the closing of the Merger exceeded its debts by over $8 billion. Kearns stated that he used generally "conservative assumptions" in his valuation analysis. (Kearns 2009 Report, DX-808 at 6, 19; Kearns 2009 Rebuttal Report, DX-809 at 12.) For his valuation analysis, Kearns used the management projections in the October 2007 CIM, which he determined were prepared in a reasonable manner and were based on reasonable assumptions. (Kearns 2009 Report, DX-808 at 5–8.) To test the reasonableness of those projections and their underlying assumptions, Kearns examined: (i) the process by which the projections were prepared (*id.* at 50–54; Kearns 2011 Supplemental Report, DX 810 at 11–39); (ii) contemporaneous views of industry analysts (Kearns 2009 Report, DX-808 at 67–69); (iii) historical results of Lyondell and Basell (*id.* at 70–73); and (iv) the contemporaneous views of third-party consultants CMAI and Turner Mason (*id.* at 73–75). Based on his review of the foregoing, Kearns concluded that the October 2007 CIM projections were reasonable. (*Id.* at 48–49.)

Kearns's valuation analysis produced a valuation range largely consistent with the ranges developed by the Banks at the time of the Merger. (DX-874.) As between his work and Maxwell's conclusion with respect to valuation, Kearns's opinion and report are more consistent with the views of the financing banks, management, and industry experts at the time of the Merger. (Kearns 2009 Rebuttal Report, DX-809 at 4–6, 12–13, 19–35.) The Court finds that Kearns' testimony and expert report were credible. Therefore, as discussed further below, the Court concludes that LBI was solvent on December 20, 2007.

2. Solvency in October 2008

The Trustee relies heavily on Maxwell's testimony to establish LBI's and Lyondell's insolvency. Maxwell testified regarding only LBI's insolvency on a consolidated basis, offering no opinion on Lyondell's insolvency on a separate basis. The Trustee asserts that Lyondell's individual insolvency may be established by extrapolating Lyondell-only figures from Maxwell's testimony on LBI. (10/31 Trial Tr. (Maxwell) at 1729:16-22 ("Q: Okay. And is there any information in your reports and in the record documents that you believe would assist the Court in assessing the solvency of Lyondell Chemical Company on a standalone basis? A: The -- the information to draw a conclusion in that regard is I believe contained in -- is founded in the data that's included in my -- in my first report.".)) Accordingly, the Trustee must first prove that Maxwell's testimony regarding LBI on a consolidated basis is reliable.

Maxwell concluded that as of October 20, 2008, LBI's midpoint Total Asset Value ("TAV") was \$22.299 billion and its total net debt and contingent liabilities was \$27.539 billion, rendering it insolvent. (Maxwell 2011 Report, PX-841 at 7; 10/24 Trial Tr. (Maxwell) at 1444:12–17.) Maxwell reached the TAV number by weighting three different valuation methods: DCF (40%), comparable companies analysis (30%), and transaction comparables (30%). (PX-841 at 25.)

For the reasons that follow, Maxwell's testimony is seriously flawed and the Court finds that it is not reliable.

a) Maxwell Relies on December 2008 Projections for his October 2008 Valuation

In evaluating LBI's solvency at the time of the October Repayment, Maxwell relied on two sets of internal LBI projections: (i) for 2008, a set of projections dated October 23, 2008 (the "October NL Forecast"); and (ii) for 2009–2013, a set of projections contained in LBI's 2008 Long Range Plan (the "2008 LRP Projections"). (Maxwell 2011 Report, PX-811 at 5.) The 2008 LRP Projections were dated December 10, 2008, but the Trustee contends—without evidentiary support—that they must have been circulated and developed by mid-October 2008. Maxwell opines that the 2008 LRP Projections were "built-up by division during the fall of 2008 and delivered on October 24, formally presented to a Company Officer's meeting November 6, and appear consistent with Company projections presented to its Supervisory Board on December 10, 2008." (*Id*.) However, Maxwell does not cite, and the Trustee does not identify, any drafts of the 2008 LRP Projections prior to December 10, 2008.

Maxwell's reliance on December 2008 projections for a mid-October 2008 valuation date is particularly troubling given the dramatic decline in the global economy in the fall of 2008. Maxwell conceded at trial that the period between October and December 2008 was a time of "significantly deteriorating performance." (10/24 Trial Tr. (Maxwell) at 1452:19–22.) Voluminous evidence introduced at trial demonstrated that LBI's performance dropped off steeply in November and December 2008 because of fluctuating oil prices and the effects of the global financial crisis. (*See* 11/7 Trial Tr. (Kearns) 3097:10–98:17 (Kearns described how volatility in oil prices strained LBI's ABL facilities, but also resulted in "global de-stocking" which resulted in demand "[falling] off a cliff")); 11/2 Trial Tr. (Jeffries) at 2290:17–20 (remarking on the recession's "negative impact on [LBI] financially, on the demand for their products," which was related to the "very severe de-stocking" of inventory "across the industry," meaning that clients "used the inventory [they had] instead of buying new materials").) Despite these significant changes between October and December, Maxwell testified that he made no adjustments to the 2008 LRP Projections to account for any performance differences in that time. (10/24 Trial Tr. (Maxwell) at 1454:21–25.)

The Trustee does not proffer any projections from October, nor does the Trustee offer evidence that the projections submitted in December were substantially the same as any drafts that may have been circulating in October. Accordingly, Maxwell's use of the 2008 LRP Projections, which were not finalized and presented until December 2008, is unpersuasive as to LBI's financial condition two months earlier in mid-October 2008, in light of the substantial deterioration in LBI's financial performance thereafter.

b) Maxwell Used an Inflated Tax Rate Assumption

At trial, Maxwell testified that tax rates used for DCF calculations should reflect what the actual tax payment is expected to be over the projection period. (10/25 Trial Tr. (Maxwell) at 1504:21–25.) Maxwell used a 35% tax rate assumption for his DCF analysis. (Maxwell 2011 Report, PX-811 at 21.) However, Maxwell acknowledged that LBI's actual tax rate was much lower than 35%—a fact he was certainly aware of when working on his report, because LBI's cash tax figures were contained in the very same presentation from which he drew EBITDA projections for his valuation exercise. (*See* DX-443 at 86 (listing EBITDA and cash taxes).) The Trustee acknowledges that using the lower cash tax numbers from DX-443 would add $4.3 billion of additional cash flow to the DCF analysis, but contends that the change in cash taxes would still not make up for the $5.24 billion equity deficit in Maxwell's conclusion. At trial, Maxwell conceded that DX-667, a chart prepared by Defendants, was mathematically accurate. (10/25 Trial Tr. (Maxwell) at 1506–07.) DX-667 replaces Maxwell's 35% cash tax rate with LBI's actual cash tax rate from the LRP (DX-443). Maxwell conceded that this one change resulted in a midpoint DCF result of $25.7 billion, over $3 billion higher than the midpoint DCF in his 2011 report. (10/25 Trial Tr. (Maxwell) at 1507; *cf.* Maxwell 2011 Report, PX-841 at 23.)

c) Maxwell Used Only One Day of Trading in his Comparable Companies Analysis

The Defendants pointed out at trial that Maxwell based his comparable companies analysis on a single day of trading: October 20, 2008. (10/25 Trial Tr. (Maxwell) at 1480:16–1482:17.) Notably, Maxwell acknowledged that stock prices in late 2008 were "highly volatile and from day-to-day could be—there could be degrees of illiquidity." (10/25 Trial Tr. (Maxwell) at 1475:6–19.) Maxwell later examined a range of several days before and after October 20, 2008, between his cross-examination and his redirect testimony. However, because this additional analysis was not contained in his report, the Court will not rely upon it.

d) Maxwell's October 2008 Valuation is Inconsistent with his 2009 Testimony on Behalf of the Creditors' Committee and his December 2007 Valuation

Maxwell's 2011 report and trial testimony are inconsistent with a declaration he prepared in 2009, while working for the Official Committee of Unsecured Creditors, the Trustee's predecessor. (*See* DX-651 (the "2009 PJSC Report").) In the 2009 PJSC Report, Maxwell concluded that as of January 6, 2009, LBI had a DCF valuation of $27.8 billion—over $5 billion higher than his 2011 valuation as of October 2008. (*Id.* at .029; 10/21 Trial Tr. (Maxwell) at 1221 (agreeing that DX-651 at .029 shows his "illustrative" DCF valuation of $27.8 billion).) That figure would render LBI solvent under Maxwell's calculations, as it is slightly higher than Maxwell's net debt and contingent liabilities figure of $27.539 billion. Although Maxwell testified that the PJSC 2009 Report contained the disclaimer that it was not intended as a final valuation and was only intended to oppose Duff & Phelps' valuation, he did not offer a persuasive explanation of why his 2009 and 2011 figures differed so widely.

Maxwell changed his methodology yet again between his two litigation reports, in 2009 and 2011. In combining and weighting DCF with comparable companies and representative transactions, Maxwell changed his weighting from 50% DCF/ 25% comparable companies/ 25% transactions in his 2009 report as of December 20, 2007, to 40% DCF/ 30% comparable companies/ 30% transactions in his 2011 report as of October 20, 2008. Maxwell attributes this difference to being "forced" to rely on the 2008 LRP Projections, which he attests were overly aggressive and inflated. (10/25 Trial Tr. (Maxwell) at 1529–30.) Maxwell acknowledged at trial that had his 2011 analysis used the same 50/25/25 weighting used in his 2009 analysis, he would have calculated "almost no decrease" in the TAV from December 2007 to October 2008. (10/25 Trial Tr. (Maxwell) at 1469.) In fact, Maxwell's 2011 DCF analysis as of October 2008 was actually *higher* than his 2009 DCF analysis as of December 2007. (*Id.* at 1470.) Crucially for Maxwell's credibility, this change in weight among the three categories has the effect of de-emphasizing the higher DCF valuation in 2011—despite Maxwell's own statement that "DCF valuations better account for the cyclicality of companies like LBI." (10/21 Trial Tr. (Maxwell) at 1225:25–26:2.)

e) Maxwell's Testimony Regarding LBI's Insolvency Cannot Be Used as a Basis to Determine Lyondell's Stand-Alone Insolvency

The Trustee urges this Court to use Maxwell's 2011 Report as a basis for extrapolating Lyondell's stand-alone insolvency in October 2008 from Maxwell's findings about LBI on a consolidated basis. The Trustee argued during closing argument that Lyondell's stand-alone insolvency on October 20, 2008, is the relevant date for his avoidance claim. This represented a change in the Trustee's theory of this claim, which until closing argument focused on LBI's alleged insolvency. Such a late change in theory is highly questionable. *See Aldridge v. Forest River, Inc.*, 635 F.3d 870, 873 (7th Cir. 2011) (affirming district court's decision where the lower court barred a plaintiff from changing the very product at issue in a product litigation, as it "would be tantamount to changing the theory of the case at the eleventh hour").

But, for the reasons discussed above, Maxwell's testimony regarding LBI's insolvency is simply not reliable. Notably, the Trustee chose not to present specific evidence of Lyondell's stand-alone insolvency at trial. Maxwell offers no opinion regarding Lyondell's stand-alone insolvency. Given the unreliability of Maxwell's testimony regarding LBI, and the Trustee's choice not to present evidence regarding Lyondell, this Court will not rely on Maxwell's testimony regarding LBI to determine the solvency of Lyondell on a stand-alone basis.

V. LEGAL STANDARDS

A. Constructive Fraudulent Transfer

1. Background

The Trustee has brought three constructive fraudulent transfer claims against the Defendants.[26] Count 1 seeks to avoid and recover Toehold Payment 1 as a constructive fraudulent transfer. Count 11 seeks to avoid and recover fees paid to Nell and Perella Weinberg in connection with the Merger. The operative time period for counts 1 and 11 is the date the Merger closed, December 20, 2007. Lastly, the NAG Complaint is comprised of a constructive fraudulent transfer claim against NAG seeking to recover an extraterritorial dividend issued on December 7, 2007.[27]

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26 In addition to claims brought under the Bankruptcy Code, the Trustee has brought claims "under applicable state fraudulent transfer law." (SAC ¶ 337.) The parties stipulated that "there are no material differences as to the substantive standards between Section 548(a)(1)(B) and state law." (ECF Doc. # 907 ("Trustee's Post-Trial Brief") at 28 n.20; ECF Doc. # 906 ("Defendants' Post-Trial Brief") at 111 ("[I]f the claims under Section 548 are defective, the claims under Section 544 and applicable state law also fail.").) The parties did not brief the claims under state law. Because the Court finds that the claims under section 548 fail, the Court concludes that the claims under applicable state law (which, according to the parties, is likely Texas, *see* Defendants' Post-Trial Brief at 111 n.16) also fail.

27 Regarding the NAG Complaint, the Trustee stated in its post-trial brief that "the financial condition of Basell did not materially change, insofar as the relevant financial tests are concerned, between December 7 and

In this next section, the Court sets forth the elements of a constructive fraudulent transfer claim under the Bankruptcy Code. As discussed in detail below, in order to succeed on a constructive fraudulent transfer claim, the Trustee must prove that LBI did not receive reasonably equivalent value in the Merger, but also prove that the Debtor was insolvent on the date of the transfers by satisfying one of three alternative financial condition tests. In Section VI.A.1 below, the Court finds that the Trustee failed to prove that LBI was insolvent on December 7, 2007 (the date of the extraterritorial dividend at issue in the NAG Complaint) or December 20, 2007 (the date of the Merger closing), under any of the financial condition tests. And because the Court concludes that the Trustee failed to prove that LBI (or Lyondell) were insolvent on these transfer dates, it is unnecessary to include an extensive discussion of the separate reasonably equivalent value requirement. If the transferor was solvent, a constructive fraudulent transfer claim fails.

2. Legal Standard

Section 548(a)(1)(B) of the Bankruptcy Code provides that a transfer of an interest of the debtor in property may be avoided if: (i) the debtor did not receive "reasonably equivalent value" in exchange for the transfer, and (ii) the debtor can satisfy at least one of the relevant financial condition tests under section 548(a)(1)(B).[28] 11 U.S.C. § 548(a)(1)(B). The three relevant financial condition tests set forth in section 548(a)(1)(B)(ii) inquire whether the debtor:

> (I) was insolvent on the date that such transfer was made or such obligation was incurred, or became insolvent as a result of such transfer or obligation;

December 20, 2007." (Trustee's Post-Trial Brief at 97.) Accordingly, the Court's rulings regarding solvency on December 20, 2007, hold equal force as to December 7, 2007.

[28] Section 548(a)(1)(B)(ii) contains a fourth financial condition test, which asks whether the transfer was made "to or for the benefit of an insider," but it is not relevant for purposes of this analysis.

> (II) was engaged in business or a transaction, or was about to engage in business or a transaction, for which any property remaining with the debtor was an unreasonably small capital; [or]
>
> (III) intended to incur, or believed that the debtor would incur, debts that would be beyond the debtor's ability to pay as such debts matured . . . .

11 U.S.C § 548(a)(1)(B). "The burden is on the movant to demonstrate the elements of a constructive fraudulent transfer claim by a preponderance of the evidence." *In re S.W. Bach & Co.*, 435 B.R. 866, 875 (Bankr. S.D.N.Y. 2010) (internal citations omitted).

a) <u>The Trustee Must Satisfy One Of Three Financial Condition Tests: Insolvency; Unreasonably Small Capital; or Inability To Pay Debts As They Come Due.</u>

In addition to proving that the Debtor did not receive reasonably equivalent value, the Trustee must also satisfy one of three financial condition tests. As discussed in detail below, the three financial condition tests are: (i) balance-sheet insolvency, (ii) unreasonably small capital, and (iii) the intent to incur debts beyond the debtor's ability to pay the debts as they come due.

(1) Balance-Sheet Insolvency

The first financial condition test analyzes whether "the sum of [an] entity's debts is greater than all of such entity's property, at a fair valuation . . . ." 11 U.S.C. § 101(32)(A); *Tronox Inc. v. Kerr McGee Corp.* (*In re Tronox Inc.)*, 503 B.R. 239, 296 (Bankr. S.D.N.Y. 2013) ("The analysis of solvency for fraudulent conveyance purposes is a 'balance sheet test,' examining whether debts in the aggregate are greater than assets in the aggregate.") (internal citation omitted). Fair value, in turn, "'is determined by the fair market price of the debtor's assets that could be obtained if sold in a prudent manner within a reasonable period of time to pay the debtor's debts.'" *Comm. of Unsecured Creditors v. Motorola, Inc.* (*In re Iridium Operating LLC*), 373 B.R. 283, 344 (Bankr. S.D.N.Y. 2007) (quoting *Lawson v. Ford Motor Co.*

(In re Roblin Indus., Inc.), 78 F.3d 30, 35 (2d Cir. 1996)). A combination of valuation methodologies may be employed, but "neither cash flow nor the ability to pay current obligations is a factor in determining insolvency" under this financial condition test. *In re Nirvana Rest. Inc.*, 337 B.R. 495, 506 (Bankr. S.D.N.Y. 2006) (internal citation omitted).

Accordingly, under this financial condition test, the Trustee must prove that the debtor was balance-sheet "insolvent on the date that [the] transfer was made or [when the] obligation was incurred, or became insolvent as a result of such transfer." *Mellon Bank, N.A. v. Metro Commc'ns, Inc.*, 945 F.2d 635, 648 (3d Cir. 1991), *as amended* (Oct. 28, 1991) (quoting 11 U.S.C. § 548).

(2) Unreasonably Small Capital

The "capital adequacy" financial condition test is satisfied if a debtor engaged in a transaction "for which any property remaining with the debtor was an unreasonably small capital . . . ." 11 U.S.C. § 548(a)(1)(B)(ii)(II). "Unreasonably small capital" is not defined in the Bankruptcy Code. The Third Circuit has explained that "unreasonably small capital" typically refers to the "inability to generate sufficient profits to sustain operations," which is a condition that naturally "must precede an inability to pay obligations as they come due," and as such, "unreasonably small capital" is a term that "would seem to encompass financial difficulties short of equitable insolvency." *Moody v. Sec. Pac. Bus. Credit, Inc.*, 971 F.2d 1056, 1070 (3d Cir. 1992).

A key "inquiry when considering whether a transfer or conveyance has left a company with an unreasonably small capital is [] one that weighs raw financial data against both the nature of the enterprise itself and the extent of the enterprise's need for capital during the period in question." *Barrett v. Continental Ill. Nat'l Bank & Trust Co.*, 882 F.2d 1, 4 (1st Cir. 1989) (internal citation omitted); *see also MFS/Sun Life Trust-High Yield Series v. Van Dusen Airport*

Servs. Co., 910 F. Supp. 913, 944 (S.D.N.Y. 1995) ("In order to determine the adequacy of capital [for purposes of 11 U.S.C. § 548(a)(1)(B)(ii)(II)], a court will look to such factors as the company's debt to equity ratio, its historical capital cushion, and the need for working capital in the specific industry at issue.") (citation omitted). As such, the concept of "unreasonably small capital" encompasses a test that incorporates an element of "reasonable foreseeability." *Moody*, 971 F.2d at 1073.

Courts, however, have emphasized that solvency analysis should begin with a review of management's projections. *Iridium*, 373 B.R. at 347 ("Without a firm basis to replace management's cost projections with those developed for litigation, the starting point for a solvency analysis should be management's projections.") (internal citation and quotation marks omitted); *see also MFS/Sun Life Trust*, 910 F. Supp. at 944 (stating that for capital adequacy, "a court must consider the reasonableness of the company's projections, not with hindsight, but with respect to whether they were prudent when made"); *In re Citadel Broad. Corp.*, No. 09-17442, 2010 WL 2010808, at *5 (Bankr. S.D.N.Y. May 19, 2010) (stating that "[t]here is no basis to replace management's informed judgments with those of [plaintiff's expert]").

Accordingly, a central consideration when determining whether a transaction leaves a company with unreasonably small capital is "whether the parties' projections" used in facilitating the transaction were "reasonable." *Moody*, 971 F.2d at 1073; *Iridium*, 373 B.R. at 345 (concluding that management projections are entitled to deference if they were "reasonable and prudent when made"). Courts will "compare a company's projected cash inflows (also referred to as 'working capital' or 'operating funds') with the company's capital needs throughout a reasonable period of time after the questioned transfer." *Iridium*, 373 B.R. at 345 (citing *Moody*, 971 F.2d at 1071–72). So, under the capital adequacy financial condition test, courts do not focus on "what ultimately happened to the company," but will look to "whether the company's then-existing cash flow projections (i.e., projected working capital) were reasonable and prudent when made." *Iridium*, 373 B.R. at 345 (internal citation omitted). However, given that management "projections tend to be optimistic, their reasonableness must be tested by an objective standard anchored in the company's actual performance." *Moody*, 971 F.2d at 1073.

While management projections should be relied on when reasonably made given historical performance and reasoned views about the future, unforeseen challenges ultimately faced by a debtor are pertinent to an analysis of whether a company was properly capitalized. *See, e.g.*, *Fidelity Bond & Mortg. Co. v. Brand (In re Fidelity Bond & Mortg. Co.)*, 340 B.R. 266, 298–99 (Bankr. E.D. Pa. 2006) ("[E]conomic events [such as the economic crisis in Asia], which had a considerable negative impact on the [d]ebtor post-[m]erger, were not predictable. As a result, I cannot conclude, in hindsight, that the [p]rojections were unreasonable or that the [d]ebtor was left with an inadequate amount of assets to withstand such unforeseeable economic circumstances.") (internal citations omitted); *Peltz v. Hatten*, 279 B.R. 710, 746 (D. Del. 2002), *aff'd sub nom, In re Commc'ns, Inc.*, 60 F. App'x 401 (3d Cir. 2003) (finding it pertinent to a capitalization analysis that "the evidence show[s] that the capital markets unexpectedly dried up in the late summer of 1998" due to the Russian debt default). In *MFS/Sun*, for example, the court rejected the plaintiffs' contention that a leveraged buyout left the debtor with unreasonably small capital:

> The more persuasive view is that [the debtor] failed because of a concurrence of factors not related to the financial structuring of the LBO. The rapid emergence of competition at Lexington, the insensitive manner in which a ramp fee was imposed, the loss of business because of the termination of a key maintenance supervisor, and the failure to implement planned growth and cost-saving strategies all contributed to [the debtor's] ultimate demise. No doubt, [the debtor] could have weathered even these

> setbacks if it had unlimited working capital, but that is not the proper legal standard.

MFS/Sun, 910 F. Supp. at 944 (citation omitted).

Other factors that courts have considered are the length of time a company survives following a transaction, and a company's ability to obtain financing. *ASARCO LLC v. Americas Mining Corp*., 396 B.R. 278, 398 (S.D. Tex. 2008) (noting that "the length of time a corporation survives after the challenged transfer is an important factor, but is nevertheless merely one factor to consider in the unreasonably small assets analysis"); *Iridium*, 373 B.R. at 349 ("Courts examining the question of adequate capital also place great weight on the ability of the debtor to obtain financing.") (citing *Moody*, 971 F.2d at 1071–73). For example, the *Iridium* court found it significant "that Iridium closed on three syndicated bank loans and raised over $2 billion in the capital markets between 1996 and 1999," recognizing this as "an indication of both solvency and capital adequacy." *Iridium*, 373 B.R. at 349 (citing *Credit Managers Ass'n of S. Cal. v. Fed. Co*., 629 F. Supp. at 187).

When assessing capital adequacy in connection with a leveraged buyout, courts must closely scrutinize the transaction and the surrounding circumstances. *Moody*, 971 F.2d at 1073 (stating that "failed leveraged buyouts merit close scrutiny under the fraudulent conveyance laws"). For example, in discussing capital adequacy in the context of a leveraged buyout, the Third Circuit explained that "a leveraged buyout may fail for reasons other than the structure of the transaction itself, [and] the determination whether a leveraged buyout leaves a target corporation with an unreasonably small capital requires a more careful inquiry." *Moody*, 971 F.2d at 1073 (internal citations and quotation marks omitted).

(3) Inability to Pay Debts as They Come Due

The third financial condition tests inquires whether the debtor "intended to incur, or believed that the debtor would incur, debts that would be beyond the debtor's ability to pay as such debts matured . . . ." 11 U.S.C. § 548(a)(1)(B)(i)(III). "While the statute suggests a standard based on subjective intent, the courts have held that the intent requirement can be inferred where the facts and circumstances surrounding the transaction show that the debtor could not have reasonably believed that it would be able to pay its debts as they matured." 5 COLLIER ON BANKRUPTCY ¶ 548.05[3][c] (16th ed. 2010) (citing cases).

(4) Relevance of the Banks' Projections and Analysis

As noted above, the projections prepared by Lyondell management in connection with the Merger will weigh into this Court's solvency determination, and support a finding of capital adequacy if those projections were "reasonable and prudent when made." *Iridium*, 373 B.R. at 345. In addition to looking at management's projections, courts also look to the views of the market and, in particular, sophisticated investors involved in a transaction. Courts recognize that "[a] powerful indication of contemporary, informed opinion as to [a business's] value" comes from private investors who, "[w]ith their finances and time at stake, and with access to substantial professional expertise" decide to invest in a business viewed as potentially profitable. *Brandt v. Samuel, Son & Co.* (*In re Longview Aluminum, LLC)*, 2005 WL 3021173, at *7 (N.D. Ill. 2005). "Expert analysis by investment bankers that confirms the validity of management's projections is an indicator of reasonableness." *Iridium*, 373 B.R. at 348 (citing *In re Duplan Corp.*, 9 B.R. 921, 926 n.9 (S.D.N.Y. 1980)); *see also Davidoff v. Farina,* No. 04 Civ. 7617, 2005 WL 2030501, at *11, n.19 (S.D.N.Y. Aug. 22, 2005) (finding it significant that "sophisticated investors with the most intimate knowledge of [the debtor's] business plan and capitalization had confidence in the company's future and certainly did not think that the company was 'undercapitalized'" because it makes "no economic sense for defendants to invest literally billions of dollars in a venture that they knew would fail").

Here, the views of the financing banks are especially pertinent because these parties funded the Merger and, as "sophisticated investors with the most intimate knowledge of [LBI's] business plan and capitalization," they "had confidence in the company's future." *Davidoff*, 2005 WL 2030501, at *11 (rejecting an allegation of capital inadequacy where "sophisticated investors . . . did not think that the company was undercapitalized"); *see also Kipperman v. Onex Corp.*, 411 B.R. 805, 836–37 (N.D. Ga. 2009) ("Courts should also recognize that 'a powerful indication of contemporary, informed opinion as to value comes from private investors who with their finances and time at stake, and with access to substantial professional expertise, conclude at the time that the business was indeed one that could be profitably pursued.'") (quoting *Iridium*, 373 B.R. at 348). In *Iridium*, the court illustrated this concept, and wrote:

> Sophisticated Wall Street firms . . . were underwriters of Iridium's equity and debt offerings. In addition, the [discounted cash flow] and comparables analyses performed or endorsed by the underwriters and analysts at the time attributed large positive values to Iridium. These are the same types of valuations to which Courts have given great deference . . . . These assessments of value by analysts do not establish the value of Iridium, but these multiple judgments, all of which are consistent with positive value, do demonstrate what sophisticated observers believed to be true and provide ancillary support for concluding that Iridium was not insolvent.

373 B.R. at 348 (internal citation omitted).

Recognizing the importance of the views and analyses of professional investors when a court is tasked with assessing the valuation of a business, the Seventh Circuit has noted that "[t]he price at which people actually buy and sell, putting their money where their mouths are, is apt to be more accurate than the conclusions of any one analyst." *Metlyn Realty Corp. v. Esmark, Inc.*, 763 F.2d 826, 835 (7th Cir. 1985); *see also VFB LLC v. Campbell Soup Co.*, 482

F.3d 624, 633 (3d Cir. 2007) (noting that absent some reason to mistrust it, a stock's market price is "a more reliable measure of the stock's value than the subjective estimates of one or two expert witnesses") (quoting *In re Prince*, 85 F.3d 314, 320 (7th Cir. 1996)).

These valuation principles regarding professional investors and stock prices are applicable to this Court's balance-sheet insolvency analysis, but also to a capital adequacy analysis, given that a number of reputable banking institutions determined that supplying the capital for the Merger on a secured basis was a prudent investment.

(5) Applicable Law Regarding Expert Testimony on Insolvency and Capital Adequacy

Expert opinions are not reliable if they are not "based on sufficient facts or data" or are not "the product of reliable principles and methods properly applied." *Lippe v. Bairnco Corp.*, 288 B.R. 678, 686 (S.D.N.Y. 2003), *aff'd*, 99 F. App'x 274 (2d Cir. 2004); *In re Rezulin Prods. Liab. Litig.*, 369 F. Supp. 2d 398, 425 (S.D.N.Y. 2005) (rejecting expert testimony where "the plaintiffs' experts have ignored a large amount of information that calls many aspects of the [expert's analysis] into question" and explaining that "any theory that fails to explain information that otherwise would tend to cast doubt on that theory is inherently suspect"). As such, courts have rejected or discredited expert testimony where an expert's analysis utilizes "cherry-picked" data to distort results or produce misleading results. *See, e.g.*, *E.E.O.C. v. Freeman*, 778 F.3d 463, 469–70 (4th Cir. 2015) ("'Cherry-picking' data is essentially the converse of omitting it: just as omitting data might distort the result by overlooking unfavorable data, cherry-picking data produces a misleadingly favorable result by looking only to 'good' outcomes."); *Barber v. United Airlines, Inc.*, 17 F. App'x 433, 437 (7th Cir. 2001) ("Because in formulating his opinion [an expert] cherry-picked the facts he considered to render an expert opinion, the district court correctly barred his testimony because such a selective use of facts fails to satisfy the scientific method . . . ."). Similarly, an expert lacks credibility when an underlying solvency analysis is based on projections that "fly in the face of what everyone . . . believed" during the time period in question. *VFB LLC v. Campbell Soup Co.*, No. CIV. A. 02-137 KAJ, 2005 WL 2234606, at *29 (D. Del. Sept. 13, 2005), *aff'd*, 482 F.3d 624 (3d Cir. 2007).

But at base, a court must be able to evaluate the methods by which an expert conducts an analysis. *See Lawrence*, 2011 WL 3418324, at *7 ("An expert is not a black box into which data is fed at one end and from which an answer emerges at the other; the Court must be able to see the mechanisms in order to determine if they are reliable and helpful.").

Additionally, made-for-litigation projections should be viewed skeptically. *See Burtch v. Opus, LLC (In re Opus East, LLC)*, 528 B.R. 30, 55 (Bankr. D. Del. 2015) (stating that litigation experts' projections are "inherently suspect"); *In re Emerging Commc'ns Inc. S'holders Litig.*, No. Civ. A 16415, 2004 WL 1305745, at *15 (Del. Ch. June 4, 2004) (stating that "post hoc litigation-driven forecasts have an untenably high probability of containing hindsight bias and other cognitive distortions") (citation and quotation marks omitted). And as noted above, courts often reject projections created by litigation experts that "fly in the face of what everyone involved in the [transaction] believed at that time." *VFB*, 2005 WL 2234606, at *29 n.71. Here, the Trustee's litigation projections were billions of dollars lower for the projection period than contemporaneous ones that Maxwell conceded were reasonable when made. (10/24 Trial Tr. (Maxwell) at 1426–32.)

b) The Trustee Must Prove That The Debtor Did Not Receive Reasonably Equivalent Value

To succeed on a constructive fraudulent transfer claim, the Trustee must also prove that LBI "received less than a reasonably equivalent value" in connection with the Merger. 11 U.S.C. § 548(a)(1)(B)(i). In determining whether a debtor has received reasonably equivalent value in a transfer, courts undertake a two-step inquiry: first, a court must determine "whether the debtor received any value at all in exchange for the transfer; i.e. any realizable commercial value as a result of the transaction," and second, a court must determine "whether that value was in fact reasonably equivalent . . . . " *Devon Mobile Commc'ns Liquidating Trust v. Adelphia Commc'ns Corp. (In re Adelphia Commc'ns Corp.)*, No. 02–41729 (REG), 2006 WL 687153, at *11 (Bankr. S.D.N.Y. Mar. 6, 2006) (citations omitted); *see also Mellon Bank v. Official Comm. of Unsecured Creditors (In re R.M.L., Inc.)*, 92 F.3d 139, 149 (3d Cir.1996) ("[B]efore determining whether the value was 'reasonably equivalent' to what the debtor gave up, the court must make an express factual determination as to whether the debtor received any value at all.").

Generally speaking, "[f]air equivalence only requires that the value of the consideration be reasonably equivalent rather than exactly equivalent in value to the property transferred or obligation assumed." *Murphy v. Meritor Sav. Bank (In re O'Day Corp.)*, 126 B.R. 370, 393 (Bankr. D. Mass. 1991) (citation omitted); *Harrison v. N.J. Comm. Bank (In re Jesup & Lamont, Inc.*), 507 B.R. 452, 472 (Bankr. S.D.N.Y. 2014) ("A finding of reasonably equivalent value does not require an exact equivalent exchange of consideration. However, the benefits the debtor receives from the transfer must approximate its expected costs.") (internal citations omitted).

B. Intentional Fraudulent Transfer

1. Background

A discussion of the legal principles applicable to Count 2 requires some background. Actual fraudulent transfer claims were asserted not only in the *Blavatnik* and *Nell* cases, but also in several other cases filed by the Trustee relating to Lyondell in which the Trustee seeks to claw back the $48 per share distributions (approximately $12 billion) to Lyondell shareholders paid as the merger consideration. Smith's alleged fraudulent inflation of the "refreshed projections"—long the centerpiece of the Trustee's theory in these two cases—was the same underlying factual predicate for the actual fraudulent transfer claims against the shareholders.

Two earlier decisions by Judge Gerber and one later decision by District Judge Cote dealt with the actual fraudulent transfer claims. In his 2014 opinion, Judge Gerber dismissed the actual fraudulent transfer claims in the shareholder cases with leave to amend. *Weisfelner v. Fund 1 (In re Lyondell Chem. Co.)*, 503 B.R. 348, 392 (Bankr. S.D.N.Y. 2014). After the Trustee amended the complaint, the shareholder defendants again moved to dismiss the actual fraudulent transfer claims in the shareholder actions. Judge Gerber, in his 2015 opinion, again dismissed the actual fraudulent transfer claims in the shareholder actions. *Weisfelner v. Fund 1 (In re Lyondell Chem. Co.)*, 541 B.R. 172, 201 (Bankr. S.D.N.Y. 2015). Judge Gerber concluded that the facts alleged in the amended complaint did not support an inference that Lyondell board members who approved the merger transaction—and whom Judge Gerber concluded were the relevant decision-makers whose intent had to be ascertained—had the actual intent to hinder, delay or defraud creditors. Judge Gerber held that Smith's knowledge could not be imputed to the directors, because Smith alone could not constitute the "critical mass" of directors necessary to impute intent to Lyondell. *In re Lyondell Chem. Co.*, 541 B.R. at 192. Judge Gerber applied his 2015 opinion to dismiss the actual fraudulent conveyance claim in *Blavatnik* and *Nell*.

The Trustee appealed Judge Gerber's 2015 *Hofmann* decision to the district court. In her 2016 opinion, Judge Cote reversed Judge Gerber's 2015 *Hofmann* decision. *Weisfelner v. Hofmann (In re Lyondell Chem. Co.)*, 554 B.R. 635, 638 (S.D.N.Y. 2016). She concluded, based on the facts alleged in the amended complaint, that Smith's knowledge, as chief executive officer and chairman of the board of directors, of the allegedly grossly inflated refreshed projections, could be imputed to Lyondell. *Id.* at 648 ("Smith's knowledge and intent in connection with the LBO may be imputed to Lyondell. The parties do not dispute that as the CEO of Lyondell, Smith was an agent of the company. His supervision of the preparation of EBITDA projections as well as his presentation of those projections to the Board were done pursuant to his duties as CEO and Chairman of the Board. Similarly, his negotiations with Blavatnik were duties performed by an officer on behalf of a corporation. The Shareholders do not contend otherwise. Accordingly, Smith's alleged knowledge that the EBITDA figures were fraudulent, as well as his intent in creating and presenting them, can be imputed to Lyondell.") (citation omitted).

Judge Cote determined that "[t]he Trustee . . . adequately pleaded a claim that Lyondell engaged in an intentional fraudulent transfer of its assets through the LBO" given that the Trustee "pleaded facts sufficient to create a strong inference that Smith acted with actual intent to hinder, delay and defraud Lyondell's creditors." *Id.* at 654. Therefore, Judge Cote held that the allegations in the Trustee's amended complaint in *Hofmann* stated a cause of action for an actual fraudulent transfer. Because the holding in Judge Cote's *Hofmann* decision was equally applicable to the actual fraudulent transfer claims in *Blavatnik* and *Nell,* those claims were reinstated in these two cases on September 12, 2016 and were tried along with the other claims in these cases.[29]

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[29] Judge Cote's decision understandably does not address one potentially important issue here—namely, whether Smith's intent can be imputed to Access and Blavatnik, who were on the other side of the transaction from

Judge Cote's opinion sets forth the legal principles applicable to the actual fraudulent transfer claims in these two cases.[30] But in order to impute Smith's alleged wrongdoing to Lyondell, it was necessary, at a minimum, for the Trustee to establish that Smith had the required intent to hinder, delay or defraud creditors. The allegations in Count 2 of the amended complaint survived the motion to dismiss; but applying the legal standards discussed below, the proof at trial failed to establish Smith's intent to hinder, delay or defraud creditors. Therefore, the actual fraudulent transfer claims in these two cases fail.

2. Legal Standard

"The modern law of fraudulent transfers had its origin in the Statute of 13 Elizabeth, which invalidated 'covinous and fraudulent' transfers designed 'to delay, hinder or defraud creditors and others.'" *BFP v. Resolution Trust Corp.*, 511 U.S. 531, 540, (1994) (citation omitted). "Such laws were enacted to allow creditors to unwind transactions entered into by a debtor who hid his assets away from his creditors. The intent was to protect the creditors of an insolvent debtor by recapturing all property of the debtor transferred away, thus ensuring that creditors were paid before the debtor, a general principle that permeates today's bankruptcy law." FRAUDULENT TRANSFER ISSUES IN COMMERCIAL TRANSACTIONS, Presentation by Rachel H. Lenoir, Law Clerk for the Honorable Neil P. Olack at 1 (available at www.sbli-

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Lyondell. The Trustee seeks to use the so-called "collapsing doctrine"—a theory that allows courts in certain circumstances to collapse multiple transactions into one—to impute Smith's intent to Access and Blavatnik. *See, e.g., HBE Leasing Corp.*, 48 F.3d at 635; *Official Comm. of Unsecured Creditors v. JPMorgan Chase Bank, N.A. (In re Fabricant & Sons, Inc.)*, 394 B.R. 721, 731 (Bankr. S.D.N.Y. 2008) (concluding that the defendant "must have actual or constructive knowledge of the entire scheme that renders the exchange with the debtor fraudulent). This issue is discussed below.

[30] In *In re Tribune Co. Fraudulent Conveyance Litig.*, No. 11-MD-2296 (RJS), 2017 WL 82391, at *6 (S.D.N.Y. Jan. 6, 2017), Judge Sullivan granted a motion to dismiss an actual fraudulent transfer claim. Judge Sullivan agreed with Judge Gerber's *Hofmann* decision, and disagreed with Judge Cote's decision reversing Judge Gerber, on the issue whether intent could be imputed to board members. I believe I am bound by Judge Cote's *Hofmann* decision, but the different views of the two district judges does not affect the outcome here since the Trustee failed to establish Smith's wrongful intent. *See United States v. Quintieri*, 306 F.3d 1217, 1225 (2d Cir. 2002) (discussing the law of the case doctrine).

inc.org/archive/2011/documents/M%20-%20Olack.pdf). Although constructive fraudulent transfer law is a development of twentieth century common law and the Chandler Act, American bankruptcy law has always allowed for the avoidance of actual fraudulent transfers. *See* Bankruptcy Act of 1898 § 67(d), 11 U.S.C. § 107(d) (repealed 1938).

The Code today still provides for avoidance of actual fraudulent transfers. Section 548(a)(1)(A) provides:

> The trustee may avoid any transfer . . . of an interest of the debtor in property, or any obligation . . . incurred by the debtor, that was made or incurred on or within 2 years before the date of the filing of the petition, if the debtor voluntarily or involuntarily—
>
> (A) made such transfer or incurred such obligation with actual intent to hinder, delay, or defraud any entity to which the debtor was or became, on or after the date that such transfer was made or such obligation was incurred, indebted . . . .

11 U.S.C. § 548(a)(1)(A). In analyzing the predecessor statute to section 548(a)(1)(A) that required a showing of "intent to hinder, delay, or defraud" creditors, Judge Learned Hand explained that:

> [T]here must be proof in some form of an actual intent, as distinct from the knowledge of the facts from which the consequences of the debtor's act will arise. That means only this: That although, in general, civil responsibility is imputed to a man for the usual results of his conduct, regardless of whether in the instance under consideration he actually had those consequences in mind, in specific cases like this, the law requires proof of that added element, his mental apprehension of those consequences, before it attaches to his conduct the result in question.

In re Condon, 198 F. 947, 950 (S.D.N.Y. 1912) (citing *Coder v. Arts*, 213 U.S. 223 (1909)). This requirement of a subjective "mental apprehension" remains applicable today; a showing of intent grounded in an objective standard is insufficient. *Harman v. First Amer. Bank of Marfyland (In re Jeffrey Bigelow Design Grp., Inc.)*, 956 F.2d 479, 484 (4th Cir. 1992) ("[A]ctual fraudulent intent requires a subjective evaluation of the debtor's motive."); *see also*

United States v. Rivernider, 828 F.3d 91, 104 (2d Cir. 2016) (requiring that defendant "contemplate" harm).

The inquiry focuses on the intent of the transferor, not the transferee. *See Weisfelner v. Blavatnik (In re Lyondell Chem. Co.)*, 543 B.R. 417, 425 n.36 (Bankr. S.D.N.Y. 2016) ("The intent must be the intent of the transferor."); *see also Silverman v. Actrade Capital, Inc.* (*In re Actrade Fin. Techs., Ltd.*), 337 B.R. 791, 808 (Bankr. S.D.N.Y. 2005) (Gropper, J.) ("Cases under § 548(a)(1)(A) indicate that it is the intent of the transferor and not the transferee that is relevant for purposes of pleading a claim for intentional fraudulent conveyance under the Bankruptcy Code."). As explained by the district court, while the central question is the transferor's intent, such intent "is rarely subject to direct proof" and thus "may be shown by circumstantial evidence." *Hofmann*, 554 B.R. at 651 n.17.

The *Hofmann* court discussed how, when pleading actual fraud, plaintiffs often rely on "badges of fraud." *Id.* at 652–53 (quoting *In re Sharp Int'l Corp.*, 403 F.3d 43, 56 (2d Cir. 2005) ("Due to the difficulty of proving actual intent to hinder, delay, or defraud creditors, the pleader is allowed to rely on 'badges of fraud' to support his case."); *see also Salomon v. Kaiser (In re Kaiser)*, 722 F.2d 1574, 1582–83 (2d Cir. 1983) (applying badges in finding actual fraud). These "badges of fraud" include:

> (1) the transfer or obligation was to an insider;
>
> (2) the debtor retained possession or control of the property transferred after the transfer;
>
> (3) the transfer or obligation was disclosed or concealed;
>
> (4) before the transfer was made or obligation was incurred, the debtor had been sued or threatened with suit;
>
> (5) the transfer was of substantially all the debtor's assets;
>
> (6) the debtor absconded;

> (7) the debtor removed or concealed assets;
>
> (8) the value of the consideration received by the debtor was reasonably equivalent to the value of the asset transferred or the amount of the obligation incurred;
>
> (9) the debtor was insolvent or became insolvent shortly after the transfer was made or the obligation was incurred;
>
> (10) the transfer occurred shortly before or shortly after a substantial debt was incurred; and
>
> (11) the debtor transferred the essential assets of the business to a lienor who transferred the assets to an insider of the debtor.

Hofmann, 554 B.R. at 652–53 (citing UFTA § 4, 7A U.L.A. at 653; 5 COLLIER ON BANKRUPTCY ¶ 548.04[1].).

"While the existence of a badge of fraud is merely circumstantial evidence and does not constitute conclusive proof of actual fraudulent intent, the more factors present, the stronger the inference." *In re Lyondell Chem. Co.*, 541 B.R. at 187 (quoting *Bear Stearns Securities Corp. v. Gredd (In re Manhattan Inv. Fund Ltd.)*, 397 B.R. 1, 10 n.13 (S.D.N.Y. 2007) (internal quotation marks omitted)). Even with the presence of badges of fraud, actual intent still must be proven; it cannot be presumed. *See Hofmann*, 554 B.R. at 650–51.

The actual intent to defraud "need not target any particular entity or individual as long as the intent is generally directed toward present or future creditors of the debtor." *Christian Bros. High School Endowment v. Bayou No Leverage Fund, LLC (In re Bayou Grp., LLC)*, 439 B.R. 284, 304 (S.D.N.Y. 2010); *see also* 5 COLLIER ON BANKRUPTCY ¶ 548.04 [1] (16th ed. 2016). Put another way, "the debtor must have had an intent to interfere with creditors' normal collection processes or with other affiliated creditor rights for personal or malign ends." *Lehman Bros. Holdings Inc. v. JPMorgan Chase Bank, N.A. (In re Lehman Bros. Holdings Inc.)*, 541 B.R. 551, 575 (S.D.N.Y. 2015) (internal citation and quotation marks omitted).

The district court in *Hofmann* explicitly rejected a lower standard used by the Seventh Circuit for intentional fraudulent transfer claims in *In re Sentinel Mgmt. Grp., Inc.*, 728 F.3d 660 (7th Cir. 2013). *Hofmann*, 554 B.R. at 651. "The burden of proving actual intent is on the party seeking to set aside the conveyance." *MFS/Sun Life Trust*, 910 F. Supp. at 934–35 (internal citations omitted). As discussed below, there is a split over whether Courts should apply a "preponderance of the evidence" standard or a "clear and convincing" standard.

C. Preference

1. Background

The preference claim arises from the loan repayments totaling $300 million on October 16, 17, and 20, 2008, within 90 days of the bankruptcy filing. This Court previously found that the Trustee had proven all of the elements of its preference claim, except for insolvency. (ECF Doc. # 771 at 5–6 (the "Preference Order").) Although the Trustee is entitled to a rebuttable presumption of insolvency within 90 days before the Petition Date, 11 U.S.C. § 547(f), this Court found that the Defendants had successfully rebutted that presumption—placing the burden on the Trustee to prove insolvency at trial by a preponderance of the evidence. (Preference Order at 5–6); *Roblin*, 78 F.3d at 34 (concluding that "[a] creditor may rebut the presumption by introducing some evidence that the debtor was not in fact insolvent at the time of the transfer. If the creditor introduces such evidence, then the trustee must satisfy its burden of proof of insolvency by a preponderance of the evidence.").

2. Legal Standard

Bankruptcy Code section 547(b) permits a trustee to avoid any transfer of an interest of the debtor in property: (i) "made to or for the benefit of a creditor;" (ii) "for or on account of an antecedent debt owed by the debtor before such transfer was made;" (iii) "made while the debtor was insolvent;" (iv) "made on or within 90 days before the date of the filing of the petition" (or within one year with respect to creditors who are "insiders" of the debtor; and (v) "that enables such creditor to receive more than it would receive" in a liquidation had the transfer not been made. *See* 11 U.S.C. § 547(b); *Roblin*, 78 F.3d at 34. "The Trustee bears the burden of proving each of these elements by a preponderance of the evidence." *Id*.

a) Property of the Debtor

Bankruptcy Code section 547(b) permits a trustee to avoid any transfer of an *interest of the debtor in property* if certain statutory elements are met. *See* 11 U.S.C. § 547(b). Consequently, the threshold question is whether the debtor had an interest in the transferred property. *See Southmark Corp. v. Grosz (In re Southmark Corp.)*, 49 F.3d 1111, 1115 (5th Cir. 1995) ("A preliminary requisite, however, is that the transfer involve property of the *debtor's estate*.") (emphasis added). The Supreme Court provided the following guidance for determining what is "property of the debtor":

> Because the purpose of the avoidance provision is to preserve the property includable within the bankruptcy estate—the property available for distribution to creditors—'property of the debtor' subject to the preferential transfer provision is best understood as that property that would have been part of the estate had it not been transferred before the commencement of bankruptcy proceedings. For guidance, then, we must turn to § 541, which delineates the scope of "property of the estate" and serves as the postpetition analog to § 547(b)'s "property of the debtor."

Begier v. I.R.S., 496 U.S. 53, 58–59 (1990) ("Section 541(a)(1) provides that the 'property of the estate' includes 'all legal or equitable interests of the debtor in property as of the commencement of the case.'") (quoting 11 U.S.C. § 541(a)(1)).

Courts use two predominant tests to determine property of the debtor: the "dominion/control" and "diminution of the estate" tests. The Second Circuit has not clearly adopted either test. Under the dominion/control test, "a transfer of property will be a transfer of 'an interest of the debtor in property' if the debtor exercised dominion or control over the transferred property." *Parks v. FIA Card Services, N.A. (In re Marshall*, 550 F.3d 1251, 1255 (10th Cir. 2008) (citation omitted); *see, e.g.*, *McLemore v. Third Nat'l Bank in Nashville (In re Montgomery)*, 983 F.2d 1389, 1395 (6th Cir. 1993) (concluding that debtor exercised control over funds because he could choose how to spend them); *In re Smith*, 966 F.2d 1527, 1531 (7th Cir. 1992) (concluding that debtor had dominion and control over a provisional credit in his bank account by using the funds to pay a creditor). This Court and others have applied a presumption that "deposits in a bank to the credit of a bankruptcy debtor belong to the entity in whose name the account is established." *Amdura Nat'l Distr. Co. v. Amdura Corp. (In re Amdura Corp.)*, 75 F.3d 1447, 1451 (10th Cir. 1996) (finding that funds kept segregated at all times, where the debtor "possessed all other legally cognizable indicia of ownership," were part of the debtor's estate); *McHale v. Boulder Capital LLC (In re 1031 Tax Grp., LLC)*, 439 B.R. 47, 70 (Bankr. S.D.N.Y. 2010), *supplemented*, 439 B.R. 78 (Bankr. S.D.N.Y. 2010) (holding that transferred property belonged to the debtors where "the transferred funds were all contained in unrestricted bank accounts belonging to" the debtors).

Under the diminution of the estate test, "a debtor's transfer of property constitutes a transfer of 'an interest of the debtor in property' if it deprives the bankruptcy estate of resources which would otherwise have been used to satisfy the claims of creditors." *Marshall*, 550 F.3d at 1256; *see, e.g.*, *Southmark*, 49 F.3d at 1116–17 (finding that which bank account funds were drawn from was "particularly important, as the primary consideration in determining if funds are property of the debtor's estate is whether the payment of those funds diminished the resources from which the debtor's creditors could have sought payment"); *Hansen v. MacDonald Meat Co. (In re Kemp Pac. Fisheries, Inc.)*, 16 F.3d 313, 316 (9th Cir. 1994) (applying diminution of the estate test to transfer of loaned funds); *Manchester v. First Bank & Trust Co. (In re Moses),* 256 B.R. 641, 645 (B.A.P. 10th Cir. 2000) (same).

Although neither of the predominant tests was unequivocally adopted by the Second Circuit, some courts—including the Second Circuit—have been primarily concerned with "whether the payment of funds diminished the resources from which the debtor's creditors could have sought payment," an inquiry resembling the diminution of the estate test. *Southmark*, 49 F.3d at 1117; *see also Enron Corp. v. Port of Houston Auth. (In re Enron Corp.)*, No. 01-16034 (AJG), 2006 WL 2385194, at *6 (Bankr. S.D.N.Y. June 2, 2006); *In re Perosio*, 277 F. App'x 110, 112 (2d Cir. 2008) ("As the Ninth Circuit has observed, a 'transfer of an interest of the debtor in property' occurs 'where the transfer diminishes directly or indirectly the fund to which creditors of the same class can legally resort for the payment of their debts . . . .'") (internal quotes omitted); *see also Adelphia Recovery Trust v. Goldman, Sachs & Co. (In re Adelphia Commc'ns Corp.),* 748 F.3d 110, 115–16 (2d Cir. 2014)[31]; *In re Big Apple Volkswagen, LLC*,

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[31] The trustee in *Adelphia Recovery Trust* made an interesting argument that funds in commingled accounts should be attributed to the parent company if the parent company exercised complete dominion over the funds. The Second Circuit did not find the argument persuasive because of the peculiar facts of the case. It did, however, provide a comprehensive analysis of two other cases in which the courts agreed with the trustee's argument:

> Appellant argues that we should follow decisions of the Fifth and Tenth Circuits, *Matter of Southmark Corp.*, 49 F.3d 1111 (5th Cir.1995) and *In re Amdura Corp.*, 75 F.3d 1447 (10th Cir.1996), to determine whether ACC was the true owner of the commingled Concentration Account. Together, these cases are said to support a principle of attributing ownership of funds aggregated in a communal account to a parent when the parent exercises complete dominion over the funds, and has all legally cognizable indicia of ownership. In *Southmark,* the court determined that because Southmark owned and controlled the cash management account, the subsidiary's settlement payment from that account to its former president and director could be avoided by Southmark because the funds were part of, and under complete control by, Southmark's estate. 49 F.3d at 1117. And in *Amdura,* the court held that funds in a commingled cash management account belonged to the parent Amdura, even though subsidiaries had contributed to the account, because Amdura was listed as the owner and "possessed all other legally cognizable indicia of ownership." 75 F.3d at 1451.

Adelphia Recovery Trust, 748 F.3d at 115.

No. 11-2251 (JLG), 2016 WL 1069303, at *9 (Bankr. S.D.N.Y. Mar. 17, 2016) (citing *Southmark*, 49 F.3d at 1116–17). In contrast to this focus on diminution, Judge Gonzalez looked to whether the debtor "holds the legal title [to the property], all other indicia of ownership, and the unfettered discretion to pay creditors of its own choosing, even where the account contains commingled funds." *Enron*, 2006 WL 2385194, at *6 (internal quotes omitted).

Lastly, a parent company does not automatically acquire an interest in property owned by a subsidiary simply because of that relationship. *See Regency Holdings (Cayman), Inc. v. The Microcap Fund, Inc. (In re Regency Holdings (Cayman), Inc.)*, 216 B.R. 371, 377 (Bankr. S.D.N.Y. 1998) ("As a rule, parent and subsidiary corporations are separate entities, having separate assets and liabilities."); *see also Feldman v. Trustees of Beck Indus., Inc. (In re Beck Indus., Inc.)*, 479 F.2d 410, 415 (2d Cir. 1973) ("Ownership of all of the outstanding stock of a corporation, however, is not the equivalent of ownership of the subsidiary's property or assets."). One way for a claimant to overcome the presumption that the parent and subsidiary corporations own separate assets is by piercing the corporate veil. *Regency*, 216 B.R. at 375.

b) Insolvency

As discussed above, the only remaining element for the Trustee to prove is insolvency. (Preference Order at 5–6.) Unlike a constructive fraudulent transfer claim, which permits the plaintiff to prove insolvency by any one of three measures, the only measure of insolvency for the purposes of a preference claim is balance sheet insolvency. *See* 11. U.S.C. § 101(32)(A) (defining insolvency as a "financial condition such that the sum of such entity's debts is greater than all of such entity's property, at a fair valuation"); *In re Roblin Indus.*, 78 F.3d at 35.

Courts require specific evidence of insolvency to carry a plaintiff's burden. The *Roblin* court affirmed that the trustee had carried its burden to show insolvency where the trustee relied on an SEC registration statement including a balance sheet showing a negative net worth of

$9,397,828; continuing operating losses for approximately four years; and a “grim” picture of the debtor’s business and industry. *See id.* at 35. While noting that “book values” in balance sheets may underestimate assets, the Second Circuit found that the evidence also showed that the debtor “was unable to pay the principal and interest on its bank debt” and had sustained “heavy losses” for years, and that the debtor’s credit standing was in a “tenuous state.” *Id.* at 36, 38. Considering those factors among others, the Second Circuit affirmed the bankruptcy court’s finding that while the debtor had initially rebutted the presumption of insolvency, the trustee had carried its burden to prove insolvency by a preponderance of the evidence. *Id.*; s*ee also In re Zerbo*, 397 B.R. 642, 657 (Bankr. E.D.N.Y. 2008) (where trustee bears the burden to prove insolvency, unsupported affidavit was insufficient to raise a disputed issue of material fact at the summary judgment stage).

The Defendants have asserted the affirmative “ordinary course of business” defense to the preference claim. The defense allows a debtor to defeat a preference claim:

> (2) to the extent that such transfer was in payment of a debt incurred by the debtor in the ordinary course of business or financial affairs of the debtor and the transferee, and such transfer was –
>
> > (A) made in the ordinary course of business or financial affairs of the debtor and the transferee; or
> >
> > (B) made according to ordinary business terms.

11 U.S.C. § 547(c)(2). Because the Court finds below that the Trustee has not made the required showing of insolvency at the time of the October Repayments (*see infra* Section VI.C.2) analysis of the ordinary course of business defense is unnecessary.

D. Breach of Contract

1. Background

Judge Gerber previously held, with respect to the Trustee's breach of contract claim, that the Access Revolving Credit Agreement's limitation on damages provision is enforceable, and only restitutionary damages are available to the Trustee. *Weisfelner v. Blavatnik (In re Lyondell Chem. Co.)*, 544 B.R. 75, 92 (Bankr. S.D.N.Y. 2016) [hereinafter *Lyondell I*] ("[T]he limitation on damage clause, even though the Court has found it enforceable, does not preclude recovery of restitution.") Although Judge Gerber found that the breach of contract claim survived the motion to dismiss, this Court must now consider the claim in the full light of trial after reviewing the full evidentiary record.

2. Legal Standard

To prevail on a claim for breach of contract under New York law, a plaintiff must prove "a contract; performance of the contract by one party; breach by the other party; and damages." *Terwilliger v. Terwilliger*, 206 F.3d 240, 245–46 (2d Cir. 2000). "To establish the existence of a contract under New York law, a plaintiff must allege an offer, acceptance, consideration, mutual assent, and intent to be bound." *Rozsa v. May Davis Group, Inc.*, 152 F. Supp. 2d 526, 533 (S.D.N.Y. 2001) (dismissing a breach of contract claim where the nonmoving party failed to allege facts establishing that the parties mutually agreed to the terms of the contract); *Oscar Prod., Inc. v. Zacharius,* 893 F. Supp. 250, 255 (S.D.N.Y. 1995) ("[T]he general requisites for formation of a contract include offer, acceptance, and consideration.") (citing RESTATEMENT (SECOND) OF CONTRACTS §§ 24, 50, 71 (1981)).

The plaintiff "has the burden of establishing all essential terms of the alleged contract, with sufficient definiteness that the Court can interpret its terms." *Oscar Prod.*, 893 F. Supp. at

255. The plaintiff "must also establish that there was a meeting of the minds, demonstrating the parties' mutual assent and mutual intent to be bound." *Id.* (citation omitted).

MAC clauses are a common feature of many contracts, and are subject to the same rules of interpretation as any other contract provision. Under New York law, "[t]he fundamental, neutral precept of contract interpretation is that agreements are construed in accord with the parties' intent." *Greenfield v. Philles Records, Inc.*, 98 N.Y.2d 562, 569 (2002). "The best evidence of that intent is the parties' writing." *Marin v. Constitution Realty, LLC,* 28 N.Y.3d 666 (2017). "[A] contract should be read as a whole, . . . and if possible [every part] will be so interpreted as to give effect to its general purpose." *Beal Sav. Bank v. Sommer*, 8 N.Y.3d 318, 324–25 (2007) (citation omitted).

District courts in the Southern District of New York have emphasized, albeit in the summary judgment context, that a MAC clause must be read in conjunction with other contemporaneous evidence of the parties' intent. *Traub v. JC's East, Inc. (In re JC's East, Inc.)*, No. 95 CIV. 1870 (MGC), 1995 WL 555765, at *3 (S.D.N.Y. Sept. 19, 1995), *aff'd*, 84 F.3d 527 (2d Cir. 1996). In *JC's East*, the appellant purchased a restaurant from a debtor in chapter 11 proceedings. *Id.* at *1. The purchaser soon failed to comply with the purchase agreements and the debtor brought an adversary proceeding for breach of contract. *Id.* The purchaser asserted the MAC clause as a defense to the breach of contract action, claiming that the departures of two key staff members constituted a material adverse change. *Id.* The bankruptcy judge granted summary judgment in favor of the debtor, and the district court and Second Circuit affirmed. *Id.*; *In re JC's East, Inc.*, 84 F. 3d at 531.

At the direction of the bankruptcy court, the *JC's East* purchaser signed an affidavit stating that she took the restaurant in an "as is" and "where is" condition. 1995 WL 555765, at

*3. The purchase agreement included a MAC clause similar to the one at issue here: "[t]here shall be no material and adverse change affecting the business prospects or financial condition of the Seller and its assets between the date of execution of this Agreement and the Effective Date of the Plan. This condition is not applicable if such material change was caused by the Buyer." *Id.* at *1. Without deciding whether the contract was ambiguous, the district court held that the MAC clause must be interpreted in light of the "as is" affidavit. *Id.* at 3. The court reasoned that the "as is" affidavit limited the scope of the MAC clause to events that were "outside the contemplation of the parties at the time of the transaction" and "outside appellants' control." *Id.* With those considerations in mind, the district court found that the departures were not within the scope of the MAC clause. *Id.* The Second Circuit affirmed on the grounds that the MAC clause defense was waived because the appellants failed to raise it until they requested rehearing, but noted that the MAC argument was "frivolous on the merits." 84 F.3d at 532 n.3.

In a contrasting example, the New York Appellate Division, First Department, found that extensive financial losses, caused partly by the closing of a retail packaging plant, constituted a material adverse change. *Katz v. NVF Co.*, 100 A.D.2d 470, 471 (N.Y. App. Div. 1984). In *Katz*, the target company of a proposed merger suffered losses of $19,890,000 over approximately an 18-month period while the merger was pending. *Id.* During this time, the target company announced a fiscal year net loss of $6,347,000, compared with net earnings of $2,105,000 for the previous fiscal year—more than a 300% reversal of fortune. *Id.* The proposed acquirer cancelled the merger "because of a material adverse change in [the target's] business and financial condition . . . ." *Id.* The First Department noted that these losses constituted a material adverse change, before going on to deny class certification to a group of the target company's shareholders who claimed damages as a result of the cancelled merger. *Id*. at 472.

More recently, the Supreme Court for New York County discussed whether declining rental prices in lower Manhattan in the wake of the September 11, 2001, terror attacks would have constituted a material adverse change. *River Terrace Assocs., LLC v. Bank of N.Y.*, 10 Misc. 3d 1052(A) (N.Y. Sup. Ct.), *aff'd*, 23 A.D.3d 308 (N.Y. App. Div. 2005). The defendant lender had committed to lend the plaintiff funds for a development in lower Manhattan. *Id.* at 3–4. After the September 11, 2011, terror attacks, BNY wrote the plaintiff a letter indicating that a material adverse change "may have occurred" and proposing a reduced amount of financing. *Id.* After months of negotiations, the plaintiff ceased making payments under the financing agreement and commenced a breach of contract action, arguing that the lender had repudiated the contract by sending the letter. *Id.* The court did not decide whether a material adverse change had in fact occurred, but noted that the lender had "a right, under the Credit Agreement, to declare a Material Adverse Change . . . . Given that there were several appraisals indicating that the value of River Terrace's project had decreased materially in the wake of 9/11, whether [the lender's] conduct amounts to a repudiation is all the more questionable." *Id.* at 6.

Several common threads emerge among *JC's East*, *Katz*, and *River Terrace*. Each court read the MAC clause in the context of the entire agreement, and in conjunction with other evidence of the parties' intent: including a separately executed but integrated agreement (*see River Terrace*, 10 Misc. 3d at *4–5) and a contemporaneous affidavit (*see JC's East*, 1995 WL 555765, at *3). Courts considered whether the alleged material adverse change was within the contemplation of the parties at the time they executed the agreement, whether it was within the control of the parties, and the magnitude of the impact on the relevant party's business. Notably,

the Court's research has revealed no precedent finding that insolvency constituted a material adverse change, nor have the parties identified any such case in their briefing. Importantly, however, section 5.18 of the Access Revolving Credit Agreement included a requirement that LBI represent and warrant that it was solvent as of March 27, 2008, but it was not required to represent and warrant that it was solvent as a condition precedent to loan draws.
(JX-51 (Access Revolving Credit Agreement) § 5.18.)

E. Breach of Fiduciary Duties Under Luxembourg Law

1. Background

The Trustee has brought several liability claims against the Defendants in connection with conduct relative to Basell, LBI, or the GP. Because Basell, LBI, and the GP were Luxembourg entities, the parties agree that potential liability of the Defendants arises under Luxembourg law.

Count 7 contains a number of related allegations. First is a tort liability claim against Blavatnik and Access Industries arising under Articles 1382 and 1383 of the Luxembourg Civil Code. The foundation of this claim is the allegation that Blavatnik or Access Industries acted as *de facto* managers of Basell and LBI, and that Blavatnik or Access Industries engaged, in that capacity, in misconduct that caused harm to Basell and LBI. Count 6 asserts the same claim, against Blavatnik only, and on an alternative contractual basis under Article 59 § 1 of the Companies Act.

Count 7 also asserts tort liability on behalf of LBI against Kassin as an individual managers of the GP. Count 7 seeks to hold Kassin liable for abdications of duty in the conduct of his formal roles based on Article 59 § 2 of the Companies Act and, in the alternative, on Articles 1382 and 1383 of the Luxembourg Civil Code.

Finally, Count 7 further asserts claims against Benet, Blavatnik and Kassin as members of the Supervisory Board of LBI arising from their failure, after the closing of the Merger, to exercise alleged "veto rights" to prevent the upsizing of the ABL Facilities or entrance into the Access Revolver. This claim is brought by the Trustee alternatively under any of the following: Article 59 § 2 of the Companies Act; Article 59 § 1 of the Companies Act; or Articles 1991 to 1997 of the Luxembourg Civil Code.

As permitted by Rule 44.1 of the Federal Rules of Civil Procedure, the parties have provided the Court with detailed expert reports regarding relevant Luxembourg law. The Trustee's expert, Philippe Thiebaud, submitted an opening report (PX-813) and a supplemental report (PX-814). The Defendants submitted single reports from two experts: Pieter Van der Korst (DX-815) and Alex Schmitt (DX-816). The Court found the reports of all three experts helpful in its consideration of these foreign law issues.

2. Legal Standard

a) <u>Claims against Blavatnik and Access Industries as *de facto* managers of Basell and LBI</u>

Although the parties disagree on the exact criteria of *de facto* directorship under Luxembourg case law, it is generally accepted that a *de facto* manager is any person or entity that exercises some degree of management of a company without being contractually mandated to do so. Accordingly, because a *de facto* manager has no contractual link to the corporation, a *de facto* manager may be held liable for misconduct committed in that capacity only in tort under Articles 1382 and 1383 of the Luxembourg Civil Code, and not on a contractual basis. *See* Cour d'appel [CA] [court of appeal], Oct. 1, 1997, 12583, 12771, 12896 and 20243 [*hereinafter* "CA October 1997 Decision"] ("[T]he liability of *de facto* directors is of an extra contractual nature i.e. in tort or quasi-delict in ordinary law."); *see also* Cour d'appel [CA] [court of appeal], July

10, 2002, 23054, 24097 and 26382 [*hereinafter* "CA July 2002 Decision"] ("The liability claim directed against [the defendant] who is said to have acted as *de facto* manager is admissible in tort.").[32] The Trustee's expert agrees. (*See* Thiebaud 2016 Report, PX-813 at 21 ("[t]he more accepted view under Luxembourg case law is that the liability of a *de facto* director rests on tort law.").) The contractual claim against Blavatnik under Article 59 § 1 must therefore fail.

Article 1382 of the Luxembourg Civil Code provides:

> Any act whatever of man, which causes damage to another, obliges the one by whose fault it occurred, to compensate it.

Code civil (Civil Code) art. 1382. Article 1383 of the Luxembourg Civil Code provides:

> Everyone is liable for the damage he causes not only by his intentional act but also by his negligent conduct or by his imprudence.

C. civ. (Civil Code) art. 1383. A party seeking liability in tort for misconduct under Articles 1382 and 1383 of the Luxembourg Civil Code of an alleged *de facto* manager requires a showing that (i) the defendant acted as a *de facto* manager; (ii) the defendant's actions constituted a "fault" or "misconduct" within the meaning of Luxembourg law; and (iii) such misconduct caused harm to the company. (Thiebaud 2016 Report, PX-813 at 6, 22; *see also* Schmitt Report, DX-816 at 18.) "According to the general legal principles, it is up to whoever intends to have the person or group designated as a *de facto* director to provide the evidence thereof." Metzler, Piret, "Le dirigeant de fait : critères de la notion et réflexions sur la responsabilité" ["The *de facto* director: notion's criteria and thoughts on liability"], Droit bancaire et financier au Luxembourg, ALJB, vol. 3, 2014, 27, 1538.

[32] Both parties' expert reports attached the relevant case law in its original French and translated into English. The English translations generally did not include page numbers and, therefore, the Court does not include pincites in its citations to these materials.

(1) The Trustee Must Prove That The Defendants Acted As De Facto Managers

"The *de facto* director of a company is the director who is in fact responsible for the management of the company in the place and instead of its legal body or under cover of it." *CA 1997 Decision*; *see also CA July 2002 Decision*, Cour d'appel [CA] [court of appeal], Dec. 19, 2012, 37857 [*hereinafter* "CA December 2012 Decision"] ("The concept of *de facto* director relates to any person who, directly or through an intermediary, carries out affirmative and independent activity in the general management of a company in the guise of its legal representatives.") (citation omitted). In other words, under Luxembourg law, to establish that a person or an entity was acting as a *de facto* director of the company, the plaintiff must prove two essential facts: (i) the alleged *de facto* director must have affirmatively and independently carried out management of the company; and (ii) such action must have been in lieu of conduct by duly appointed management or under its cover. The alleged *de facto* director must have exercised its powers on a long term and repeated basis, a single isolated action not sufficing to characterize *de facto* directorship. *See* Cabannes, "Le dirigeant de fait" ["The *de facto* director"], ACE Comptabilité, Fiscalité, Audit, Droit des affaires au Luxembourg, 2013/1, 5.

The parties disagree on the precise level of control required to establish *de facto* directorship. Thiebaud, the Trustee's expert, articulates two "scenarios" in which a person or entity qualifies as a *de facto* director: (i) the *de facto* director "carries out in fact the management of the company *in the place of* its legal body" (the "substitution" test); or (ii) the *de facto* director "carries out in fact the management of the company *under the cover of* its legal body" (the "actual control" test). (Thiebaud 2016 Report, PX-813 at 15 (emphasis added).) Schmitt, the Defendants' expert, contends that the *de facto* director must have "substituted" itself for the *de jure* directors: "the case law has always turned on the same substantive question: did the alleged *de facto* director actually *exercise* the powers reserved to the *de jure* directors, thereby supplanting (*i.e.*, acting in substitution of) their role." (Schmitt Report, DX-816 at 13.) For the reasons discussed below, the Court finds it unnecessary to resolve this distinction because the Trustee has proven that Blavatnik and Access were *de facto* directors of pre-merger Basell and post-merger LBI under either the "substitution" or "actual control" formulations of the test.

The *CA 2012 Decision* discussed how Luxembourg case law and legal scholarship have established criteria for establishing *de facto* management. These criteria include whether persons other than the executive bodies of the company

> (1) "are in direct contact with credit institutions";
>
> (2) "exercise powers in the context of the most important decisions of the undertaking and sign material contracts;"
>
> (3) "are charged with employing personnel"; and
>
> (4) "have contributed essential financing."

Id. (defendants held to be *de facto* directors for being "directly involved in discussions and negotiations with the lessor . . . [and] took steps to obtain funds for the business of the company and negotiated with creditors to obtain payment deferrals for the company and they took material decisions relating to the capital expenditure of the company . . . [and] the contractual counterparties of [the company] viewed [the defendants] as its directors"). In the *CA 1997 Decision*, the Court of Appeal found *de facto* directorship where the company's transactions had been made for the sole benefit of the *de facto* director, not in the corporate interest of the company. *CA 1997 Decision*; *see also* Cour de cassation [Cass.] [supreme court for judicial matters], com., June 27, 2006, 04-15831 (Fr.) (relying implicitly on the fact that the conduct of the *de jure* director acting under the influence of the *de facto* director was contrary to the corporate interest of the company and in the interest of a third party). Furthermore, a

Luxembourg trial court found a defendant liable as a *de facto* manager where, *inter alia*, a counterparty viewed the defendant as the company's director and the defendant held "100% participation, real and in fact . . . in [the company], [placing him] in a situation of authority with regard to the legal bodies of the company." Tribunal d'arrondissement de et à Luxembourg [Luxembourg district court], crim., June 27, 1985, 15850 (explaining that the defendant "personally holds 20% of [the company] and the remaining 80% via [another company], which allowed him to direct and influence the legal bodies any way he wished … It is still significant that at the time of the denunciation of the accounts that [the company] had with [the bank], its assistant director took care to inform [the defendant] first of the denunciation by providing him with the exact reasons, and that only then, the assistant director informs the *de jure* administrator of [the company], of [the bank]'s decision to denounce."). "All these criteria are however only indicators which, when taken in isolation, do not make it possible to prove beyond doubt that the person in question is actually a *de facto* director." *CA December 2012 Decision*.

In the context of assessing whether a defendant may be held liable as a *de facto* director under Luxembourg law, the Court considers the District of Delaware's opinion in *Nortel Networks* to be highly persuasive. *See In re Nortel Networks, Inc.*, 469 B.R. 478 (D. Del. 2012). In *Nortel Networks*, the plaintiff sought a company's liability under French law for breach of its fiduciary duty as *de facto* director of its sister company. *Id.* The court rejected the claim, holding that "it is the absence of direct precedent establishing a sister company as a *de facto* or shadow director that the Court finds most significant," explaining that "[t]o do so would usurp the function of the legislative authorities of the foreign sovereign nations. The Court is not prepared to extend foreign law." *Id.* at 504. The Court agrees with the approach adopted by the District Court in *Nortel Networks*, and recognizes that it is not the role of the Court to extend

Luxembourg law where Luxembourg statutes and case law have not done so. The Court will apply Luxembourg law as far as it is developed by Luxembourg statutes and courts, but no further.

(2) The Trustee Must Prove That The Defendants' Actions Constituted A "Fault" Or "Misconduct" Within The Meaning Of Luxembourg Law

The parties disagree on the legal standard under which the *de facto* director's conduct must be analyzed for purposes of a tort liability claim brought by the company under Articles 1382 and 1383 of the Luxembourg Civil Code. Indeed, the relevant standard of conduct has not been explicitly addressed by any published Luxembourg court decision available to the Court. The Trustee and Thiebaud seek the Defendants' liability by applying the ordinary tort standard of mere misconduct, or "fault." (Thiebaud 2016 Report, PX-813 at 22.) On the other hand, the Defendants and Schmitt contend that such liability can only be sought by a third party by using the heightened standard of a fault "severable from the manager's functions." (Schmitt Report, DX-816 at 18-19.) Under this standard, used by Luxembourg courts when assessing liability of *de jure* directors to third parties, the alleged *de facto* manager may only be held liable if the *de facto* manager's fault is (i) intentional; (ii) of a particularly serious nature; and (iii) incompatible with the normal exercise of the manager's corporate functions. *See*, Tribunal d'arrondissement de et à Luxembourg [Luxembourg district court], Nov. 28, 2007, 11064 (*citing* Cour de cassation [Cass.] [supreme court for judicial matters], May 20, 2003, Seusse. D. 2003, 2623 (Fr.)) [hereinafter *District Court 2007 Decision*].

In support of the mere "fault" legal theory, Thiebaud cites two Luxembourg court opinions which purportedly stand, however implicitly, for the proposition that a *de facto* director's liability to the company under Articles 1382 and 1383 of the Luxembourg Civil Code shall be triggered where his actions constituted a mere misconduct. *See CA 1997 Decision* (applying the standard of mere misconduct to hold the *de facto* director liable toward the company under Articles 1383 and 1383 of the Luxembourg Civil Code and holding that "the *de facto* director incurs liability towards the company he represents if his decisions, taken when managing the company, have a direct impact on the company's financial fate," without referring to any other more stringent standard); *CA July 2002 Decision* (in the context of a liability claim brought by the company against its shareholders acting as *de facto* managers, explaining that the *de facto* manager's liability, "in the event of fault followed by harm with a direct link between cause and effect, has a tortious or quasi-tortious character," without referring to any other more stringent standard.). The Court is skeptical that either of these cases are on point, and in any event neither of them expressly holds that *de facto* directors may be held liable for mere misconduct.

Schmitt explains, and Thiebaud agrees, that the heightened tort liability standard of conduct "severable from his functions" applies to *de jure* directors. (Schmitt Report, DX-816 at 18–19; Thiebaud 2016 Report, PX-813 at 36.) The experts differ on whether the same standard should apply to *de facto* directors. Schmitt and the Defendants argue that *de facto* and *de jure* directors are legally equivalent for purposes of tort liability, as recognized by the Luxembourg Court of Appeal. *See CA December 2012 Decision* ("The *de facto* director of a company is legally assimilated to a *de jure* director."). Schmitt points out that the Luxembourg courts have not squarely settled whether the mere fault or separable fault test applies to a *de facto* director's tort liability, but argue that there is no reason for the Luxembourg courts to depart from legal equivalency set forth in the *CA December 2012 Decision*.

The Court is sensitive to the concerns expressed in *Nortel Networks*, and is therefore hesitant to extend Luxembourg law by addressing legal issues unresolved by Luxembourg statutes and case law. *Nortel Networks*, 469 B.R. 504. However, it is unnecessary for the Court to decide which "fault" test to apply in this case, because the Trustee has not proven a fault under either test. (*See infra* Section VI.E.) Because this Court finds below that the Defendants' activities do not rise to a mere "misconduct" under the ordinary standard of liability, they would not rise to a "fault severable from the manager's function" under the heightened standard. The Court discusses the Luxembourg application of the mere fault standard below for purposes of clarity in this decision, not because the Court finds that it is necessarily the appropriate test.

To assess a director's conduct against the mere fault standard, a Luxembourg court would consider the director's conduct objectively, referring to the standard of "the *bon père de famille*, in other words, a director that is prudent, diligent and active. Directors have a general duty of competence, diligence and good faith. They must act, in all circumstances, in the interest of the company, and not in their own interest." Tribunal d'arrondissement de et à Luxembourg [Luxembourg district court], Mar. 15, 2001, 228/01 (assessing the *de jure* director's liability for mismanagement under Article 59 § 1 of the Companies Act).

In assessing whether a *de facto* director committed a fault, "the judge must assess any fault *at the time it was committed*." *CA 1997 Decision* (emphasis added). Furthermore, the director receives a "certain degree of discretion" in his or her decisions, which Thiebaud characterizes as a "business judgment rule." (Thiebaud 2016 Report, PX-813 at 23.) This business judgment rule, also called the "notion of marginal control," "means that the judge is limited in his power of appreciation because he must not assess the directors' behaviour in accordance with his own value judgments, because he is not an 'appeal court' seized with the decisions of the corporate bodies." *CA 1997 Decision*.

(3) The Trustee Must Prove That The Damages Suffered Are The Result Of The De Facto Managers' Fault

Tort liability under Articles 1382 and 1383 of the Luxembourg Civil Code requires a showing of "adequate causality," under which only harm that is directly caused by a fault can be remedied, as opposed to indirect harm. *See, e.g,.* Cour d'appel [CA] [court of appeal], Dec. 11, 2002, Pas. XXXII, 313 ("On[ly] direct damages are reparable, because only these damages can be linked causally to the incriminated act or event."); *also* Cour d'appel [CA] [court of appeal], Nov. 21, 2001, 25025 ("In the context of the theory of adequate causality . . . [i]t is therefore appropriate to question, with regard to each event of which the causal intervention in realization of harm is invoked, whether this event, in the normal course of events and according to life experience, normally entails such prejudicial effects."). Further, a plaintiff seeking tort liability under Articles 1382 and 1383 may only recover compensation for an actual, certain, direct, and immediate damage. *See, e.g.*, Cour d'appel [CA] [court of appeal], Nov. 18, 1887, Pas. 2, 547.

b) <u>Tort liability claims against Kassin as de jure manager of the GP</u>

The Luxembourg "théorie de l'organe" doctrine holds that a company will generally be bound by the actions taken by its managers, so that an injured third party will be limited to seeking compensation from the company rather than its managers. *See, e.g.*, Tribunal d'arrondissement de et à Luxembourg [Luxembourg district court], Dec. 23, 2015, 1648/2015 [*hereinafter* "District Court December 2015 Decision"]. There are two exceptions under which a third party can make a claim directly against the directors of a company in respect of actions made in the exercise of their mandates. *Id.*

(1) Tort Claim Under Article 59 § 2 Of The Companies Act

The first exception is for claims in tort pursuant to Article 59 § 2 of the Companies Act "for damages resulting from the violation of [the Company Act] or the articles of association of the company." Companies Act art. 59 § 2. Violation of Article 59 § 2 is a result of the director's much more severe fault than simple mismanagement of the company. Tribunal d'arrondissement de et à Luxembourg [Luxembourg district court], Feb. 26, 2015, 142277, 5 ("Article 59 § 2 only applies where the wrongdoing of the directors results from a breach of the [Companies Act] or the articles of association of the company. It is not simple mismanagement, but *extremely severe faults* which constitute a violation of the 'social pact' or the provisions of the [Companies Act] that protect the public and the shareholders.") (emphasis added). Both the requirements of Article 59 § 2 of the Companies Act and the provisions of Articles 1382 and 1383 of the Luxembourg Civil Code must be satisfied, including the causal link between the fault and the remedial harm. *See id*.

Regarding damages resulting from the violation of the Companies Act, Article 191 of the Companies Act provides:

> Private limited liability companies shall be managed by one or more agents, who may but are not required to be members and who may receive a salary or not. They shall be appointed by the members, either in the constitutive instrument or in a subsequent instrument, for a limited or undetermined period. Unless otherwise provided for in the articles of association they may be removed, regardless of the method of their appointment, for legitimate reasons only.

Companies Act art. 191. Regarding damages resulting from a violation of the articles of association of the company, Article 9.1 of the GP's articles of association provides:

> The Company is managed by at least three managers, who need not be associates, appointed by a resolution of the sole associate or the general meeting of the associates representing more than half of the corporate capital. The managers will constitute a board of managers which will manage the affairs of the Company. At any time the sole associate, or, as the case may be, the general meeting of associates, may, at the same majority, decide to dismiss anyone or all of the managers for any reason whatsoever.

(GP's articles of association art. 9.1.)

The question whether a *de jure* director can be held liable in tort to third parties under Article 59 § 2 of the Companies Act because he did not comply with his statutory obligation to actually manage the company has not been addressed by any published Luxembourg court decision available to the Court. In line with the view expressed in *Nortel Networks*, this Court should avoid extending foreign law by addressing legal issues unresolved in their legal system. *See Nortel Networks, Inc.*, 469 B.R. at 504.

(2) Tort Claim Under Article 1382 and 1383 Of The Luxembourg Civil Code

The second exception to the "théorie de l'organe" doctrine involves claims in tort pursuant to Articles 1382 and 1383 of the Luxembourg Civil Code, which requires a showing of (i) a misconduct that is severable from the managers' functions; (ii) damages suffered by a third party; and (iii) a causal link between the fault and the damages. *See District Court December 2015 Decision*. The Court has already discussed damages and causation. (*See supra* Section V.E.2(a)(3).) As explained in Section V.E.2(a)(2), a fault is severable from the manager's functions where the manager's conduct is (i) intentional; (ii) of particularly serious nature; and (iii) incompatible with the normal exercise of the manager's corporate functions. *See* Cour de cassation [Cass.] [supreme court for judicial matters], May 20, 2003, Seusse. D. 2003, 2623 (Fr.) ("[T]he personal liability of a director to a third party may only be found when he has committed misconduct severable from his functions; this is the case when the director intentionally commits particularly serious misconduct that is incompatible with the normal performance of corporate duties."); *District Court 2007 Decision* ("[D]etachable wrongdoing, separable from the office of the director . . . covers the hypotheses in which the director acted outside of the normal framework of his remit: the act of the director consequently cannot be attached to the activity of the company. French case law had indicated that the wrongdoing detachable or separable from the office 'is an intentional wrongdoing of a particular seriousness incompatible with the normal exercising of the corporate office.'"); *see also* Tribunal d'arrondissement de et à Luxembourg [Luxembourg district court], Oct. 24, 2008, BIJ, 2009, 29 (applying the "judgment of 20 May 2003 [by which] the French Court of Cassation indicated that an error that is detachable or separable from the functions represents an intentional fault of a particular severity incomptabible with the normal exercise of company functions.") (citation omitted).

c) <u>Liability claim against Blavatnik, Kassin, and Benet as members of the Supervisory Board of LBI</u>

The Trustee alleges that Blavatnik, Kassin, and Benet, as members of the Supervisory Board of LBI, failed to exercise their "veto rights" under the articles of association of LBI to disapprove the upsize of the ABL Facilities and the Access Revolver. (Trustee's Post-Trial Brief at 141–43.) LBI's Supervisory Board was a three-member committee whose mission was to "carry out the permanent supervision of the management of [LBI] by the manager." (Schmitt Report, DX-816, Ex. TT ("LBI Articles of Association") art. 14 and 15 § 1.) The Trustee's claims against the Supervisory Board's members arises from the Trustee's allegation that the Supervisory Board had an ability to "veto" some of the management's decisions, while the Defendants contend that no such right existed in the hands of the members of LBI's Supervisory Board.

(1) Claim Under Article 59 Sections 1 and 2 of the Companies Act

Under Article 59 § 2 of the Companies Act, statutory auditors of a company are liable to the company or any third party for any breach of the Companies Act or any breach of the articles of association of the company. The Court has already discussed Article 59 § 2 of the Companies Act (*see supra* Section V.E.2(b)(1)). Accordingly, the Trustee must establish a breach of either the Companies Act or LBI's articles of association to prove its claim against the Supervisory Board.

Under Article 59 § 1 of the Companies Act, a statutory auditor may be held individually liable to the company for the faulty execution of his or her mandate. Article 59 § 1 of the Companies Act provides:

> Directors are liable towards the company according to the general principles governing the execution of the mandate given to them and for any misconduct in the management of the company.

Article 15 § 3 of LBI's articles of association provides:

> The Supervisory Board members shall solely be guided by the corporate interest of the Company and shall not be bound by any instruction or order of any shareholder.

LBI Articles of Association art. 15 § 3.) The articles of association define the duties of the Supervisory Board as follows:

> The Supervisory Board shall have the following duties and power:
>
> (1) the Supervisory Board shall carry out the permanent supervision of the management of the Company by the manager (*without being authorized to interfere with such management*), including the supervision of its operations and the business of the company as well as its financial situation, including more in particular its books and accounts;
>
> (2) the Supervisory Board shall advise the manager on any matter that the manager refers to it; and
>
> (3) the Supervisory Board shall *grant or deny the authorizations* required pursuant to Article 16 …

(*Id*. art. 15 (emphasis added).) Article 16 of LBI's articles of association provides that certain management acts "shall be submitted by the managers to the Supervisory Board for prior approval," including "the entry into of a credit facility (howsoever called) with a term of up to one year and exceeding twenty million euro (EUR 20,000,000.-) and the entry into any credit facility (howsoever called) with a term exceeding one year of fifty million euro (EUR 50,000,000.-) or more, unless the relevant facility had been included in a previously approved business plan and/or financing plan." (*Id*. art. 16.)

Assuming that the Supervisory Board members committed a breach of the Companies Act or the articles of association of the company, the Supervisory Board members may only incur liability based on that fault if the Trustee proves causation and damages, as discussed above (*see supra* Section V.E.2(a)(3)). In the context of a contractual claim, the Luxembourg Civil Code also provides that financial harm suffered consists of the losses suffered *and* lost profits as a result of the contractual breach. C. civ. (Civil Code) art. 1149. Further, the harm suffered must have been foreseeable. C. civ. (Civil Code) art. 1150.

(2) Alternative Claim Under Articles 1991 to 1997 of the Luxembourg Civil Code

Articles 1991 to 1997 of the Luxembourg Civil Code, which define the legal status of agents, are applicable to the obligations of an agent under a mandate agreement and are thus generally applicable to the mandate agreement between a company and a statutory auditor. It is the shared view between the Parties' experts that a Luxembourg court would not make a determination solely on these provisions, but would rather assess a statutory auditor's liability by reference to Article 59 of the Companies Act. (Thiebaud 2016 Report, PX-813 at 45; Schmitt Report, DX-816 at 33.)

3. Aiding and Abetting Violations of Luxembourg Law

In Count 18, the Trustee also brings a claim against AIH and AI Chemical for aiding and abetting the Supervisory Board and GP Managers' Luxembourg law violations. Judge Gerber held that Texas law applies to Count 18. (ECF Doc. # 698.) As the Court will discuss below (*see infra* Section VI.E), the Court holds today that the Trustee's Luxembourg law claims fail.

Accordingly, as there is no underlying violation of Luxembourg law, there can be no liability for aiding and abetting.

VI. DISCUSSION

A. Constructive Fraudulent Transfer

1. Discussion

As already discussed, in order to succeed on its constructive fraudulent transfer claims, the Trustee must prove that, in connection with the Merger, LBI did not receive reasonably equivalent value, and that one of the three financial condition tests is satisfied (balance-sheet insolvency, unreasonably small capital, or the inability to pay debts as they come due).

Establishing reasonably equivalent value in the context of a leveraged buyout transaction is exceedingly complex and not straightforward. 5 COLLIER ON BANKRUPTCY ¶ 548.05[2][c] (16th ed. 2011) (noting that analyzing reasonably equivalent value in leveraged buyout transactions has "caused significant concern" and that the value received is typically indirect, and difficult to quantify). Here, however, the Trustee failed to meet any of the financial condition tests, and as such, the Court need not analyze whether the Debtor received reasonably equivalent value.

a) Inability to Pay Debts When Due

Both before and during trial, the parties did not devote much time or effort to this financial condition test. In the Trustee's post-trial brief, in summary fashion, the Trustee simply maintains without express evidentiary support that "[t]he evidence at trial is sufficient to prove that, by incurring or intending to incur debts beyond its ability to pay as such debts matured, Lyondell was insolvent on December 20, 2007 . . . and that in light of the Merger financing, Lyondell incurred or intended to incur debts beyond its ability to pay as such debts matured." (Trustee's Post-Trial Brief at 42.)

The Court disagrees that this financial condition test has been satisfied. Contrary to the Trustee's conclusory assertions, there is neither direct evidence establishing that any party to the Merger intended for LBI to incur, or believed it would incur, debts beyond its ability to repay them when they matured, nor is there persuasive circumstantial evidence indicating that anyone at Lyondell or Access believed that LBI would fail. The fact that Dan Smith, Lyondell's pre-merger CEO, proposed to stay on as CEO after the merger severely undermines the Trustee's claim that Smith wanted to raid and leave behind a company that was doomed to fail. Just the same, Blavatnik and others at Access "whole-heartedly believed" in the transaction and had faith in LBI. (Blavatnik 2016 Decl. ¶¶ 11–14; *see also* Benet Decl. ¶ 27 ("We were fully committed to the success of this transaction, and we had every reason to believe that it would succeed.").) Indeed, Blavatnik lost vast sums of money on account of LBI's failure. (*See* Blavatnik 2016 Decl. ¶ 12.) Furthermore, LBI had sufficient liquidity, and projected that it would have sufficient liquidity to pay its debts as they matured. All of this undercuts the Trustee's assertion that this financial condition test is satisfied.

b) <u>Balance Sheet Insolvency</u>

The Trustee also argues that under the balance sheet test, LBI was insolvent on the date the Merger closed. The Trustee relies primarily on Maxwell's balance sheet solvency analysis. Maxwell arrived at a December 20, 2007 total asset valuation range of $21.1 billion to $24.3 billion, with a midpoint of roughly $22.7 billion, and calculated LBI's debts to total $25.8 billion. (Maxwell 2009 Report, PX-809 at 7.) As discussed in detail above, the Court finds that Maxwell's testimony is not credible for several reasons. First, Maxwell relied heavily on CMAI's analysis (10/24 Trial Tr. (Maxwell) 1425), which is problematic for numerous reasons, including because CMAI's CIMBal model employed unreproducible methods. Additionally, Maxwell subtracted roughly $500 million from LBI's cash reserves, but admitted at trial that this was incorrect. (10/25 Trial Tr. (Maxwell) 1510–1513.) Lastly, Maxwell applied a flat 35% tax rate in his valuation analysis, but LBI's CFO, Alan Bigman, showed that LBI's actual tax rate was much lower. (*See* Bigman Decl. ¶ 141 (explaining that actual tax rate included in a December 9–10, 2008 Supervisory Board meeting "were developed on a 'bottoms-up' basis with input from LBI's Tax Department" and that an arbitrary 35% tax rate "would result in significant underestimation of the cash flows that LBI management reasonably anticipated during the projection period").) Maxwell himself agreed that tax calculations, however conducted, should attempt to reflect the actual tax payments that will occur. (*See* 10/25 Trial Tr. (Maxwell) 1504–1505.) Further, the Defendants introduced into evidence an analysis demonstrating that if one were to calculate total asset value using all of Maxwell's assumptions except for the 35% flat tax rate, and instead use the actual tax rate paid by LBI, the result is an asset value sum indicative of a solvent entity. (*See* DX-667.)

It is also important to note that Maxwell's valuation analysis flies in the face of those prepared by the financing banks. Defendants' expert, Kearns, on the other hand, produced a valuation range largely consistent with those developed by the financing banks and industry experts at the time of the Merger, and determined that at the close of the Merger, LBI's assets exceeded its debts by over $8 billion. (DX-874); 2009 Kearns Rebuttal Report, DX-809 at 12–13, 19–35). According to Kearns's analysis, Goldman Sachs, ABN AMRO, UBS, and Citibank valued LBI at roughly $35.62, $32.55, $35.62, and $33.52 billion, respectively. (DX-874).[33]

[33] To arrive at valuation figures representing the banks' views on LBI's valuation, Kearns reviewed certain credit memoranda prepared by the banks, and utilized the financial data contained therein to come up with valuation figures in line with the banks' views on LBI's financial condition. The figures Kearns holds out to be valuations by Goldman Sachs, ABN AMRO, and UBS are amounts that these banks itemized as being related to capitalization. (*See* DX-207 at 2 (Goldman Sachs listing $35,617 million as "Capitalization" as of December 2007); DX-202 at 5 (UBS listing $35,617.8 million as "Implied Total Capitalization").

These figures are relatively close to the $33.30 billion valuation Kearns arrived at using a weighted average of an income and two market approaches. (DX-874.)

Based on all of the credible evidence presented at trial, the Court finds that the aggregate value of LBI's assets, at fair value, were greater than its debts. *See Tronox,* 503 B.R. at 296 ("The analysis of solvency for fraudulent conveyance purposes is a 'balance sheet test,' examining whether debts in the aggregate are greater than assets in the aggregate.") (internal citation omitted). Accordingly, the Trustee has failed to establish that LBI was insolvent under the balance-sheet test.

c) Unreasonably Small Capital

Of the three financial condition tests in section 548, the Trustee focuses primarily on the "unreasonably small capital" test. (*See generally* Trustee's Post-Trial Brief at 29–40.) But after thorough consideration of the reasonableness of management's projections, the projections prepared by the financing banks and third-party consultants, the consensus industry outlook at the time of the Merger, the analysis of the Trustee's and the Defendants' expert witnesses, and the perhaps unforeseeable external events that occurred following the Merger, the Court finds and concludes that the Trustee has failed to prove that LBI was left with unreasonably small capital on December 20, 2007, as a result of the Merger.

(1) Lyondell's Historical Performance and Management Projections

Naturally, given that the Merger involved the combination of Lyondell and Basell, there is no historical operating data for the combined company. The Merger, therefore, requires a look into the historical performance and forward-looking projections of Lyondell and Basell. The Trustee zealously argues that Lyondell's refreshed projections, which were central to the analyses that resulted in the combination of the two companies, were not reasonable and should not be relied upon.

Notwithstanding the Trustee's arguments, the aggregate EBITDA projections in the 2007 LRP and the refreshed projections do not differ dramatically. (PX-196 (Lyondell Valuation Corporate Development June 2007) at .0005 (comparing the 2007 LRP with the refreshed projections showing cumulative figures that are not materially different).)[34] During the refresh process, Lyondell's EC&D projections were adjusted downward, but Salvin revised the terminal EBITDA refining projections upwards by roughly $1.6 billion over the course of several days. (*See id*. at .0003, .0005.) At trial, no conclusive evidence was presented regarding a solvency analysis conducted utilizing the 2007 LRP. Defendants, nevertheless, maintain that by taking the Trustee's solvency expert's analysis and recalculating a valuation utilizing the 2007 LRP projection figures, the product is a valuation showing a solvent entity. (*See* DX-662.)

With respect to the refreshed projections, there is little disagreement that the refresh process took place over several days, involved very few people, and did not entail a "bottoms-up" review of the refining business. The Trustee, however, maintains that the addition of $1.6 billion in terminal EBITDA was not reasonable, and had no basis in fact. (*See* Trustee's Post Trial Brief at 87.) And to be sure, the Trustee has demonstrated that Salvin's testimony regarding the inclusion of other employees at Lyondell in the preparation of the refreshed projections is questionable. Many of the individuals that Salvin claims participated in the refresh process did not testify along those lines.

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[34] The EBITDA projections in Lyondell's June 2007 Corporate Development Presentation, (PX-196 at 4) differ slightly from those in the July 2007 Management Presentation, (DX-100 at 82), though the differences are not material.

Phillips, for example, disclaimed involvement in the refresh process, but maintained that Teel, a corporate development director, was involved. (Phillips Dep. Tr. at 72:14–24.) Teel, however, also disclaimed knowledge or involvement in the refresh. (Teel Dep. Tr. at 101:5–102:5, 163:12–17.) Similarly, Dineen's deposition testimony indicates he had little knowledge of the refresh as well. (*See* Dineen Dep. Tr. at 65:9–74:15.)

The Defendants point out that Teel, Phillips, Dineen and others may not have known that they were assisting in the refresh process but nevertheless contributed to Salvin's analysis, but there is little evidence to support this contention. However, since confidential merger negotiations that prompted the refresh process were underway, it is not surprising that Lyondell staff (even senior staff) were not aware of the refresh process. Particularly, in light of Lyondell's recent acquisition of the remaining interest in the Houston refinery, updating the refinery projections was reasonable in the circumstances. That those refreshed projections proved wrong, based on future unforeseen events, does not make the projections actionable.

While Salvin's credibility has been damaged, the ultimate issue whether Lyondell's refining projections were reasonable when made includes many aspects, including an assessment of the projections "by an objective standard anchored in the company's actual performance," given that management projections often "tend to be optimistic." *Moody*, 971 F.2d at 1073 (citation omitted). Defendant's refining expert O'Connor, for example, maintains that LBI's HRO operations were "more than capable of generating EBITDA levels forecasted by Lyondell for the years 2008 and beyond." (O'Connor 2009 Report, DX-800 at 2.) And indeed, the HRO asset demonstrated "an excellent record of operating reliability, with crude processing averaging 99% of calendar day capacity from 2004 through 2007" with a limited exception in 2005. (*Id.* at 3.) Given this track record, it was largely undisputed at trial that the Houston refinery was a prime refining asset. (*Id.* at 6 ("Lyondell's EBITDA per barrel prior to 2008 is almost double the largest companies in their peer group (Valero, Tesoro and Sunoco). This advantage exists because the refinery can process up to 100% of the cheapest crude in the Western Hemisphere; peer companies are well under 40% heavy crude.").)

But "despite better than plan performance in the first half of 2008, the unforeseen collapse in spreads in the second half of 2008, loss of processing throughput," and other operational issues in the first quarter of 2008, cost the refinery millions of dollars of EBITDA resulting in the projections ultimately falling far short of actual performance in 2008. (*Id.* at 52; *see also* Jeffries Decl. ¶ 48 ("I understand that for the first half of 2008, LBI was largely 'on plan,' performing within a few percentage points of the EBITDA forecasts set forth in the July 15 Projections, and that its financial results remained strong through the first half of 2008.").)

(2) Industry Outlook

In addition to a detailed look at management's projections and the actual performance of relevant entities, the Court considers the industry outlook at the time the Merger was consummated to be largely in line with management's and the banks' projections. *See In re Norstan Apparel Shops, Inc.*, 367 B.R. 68, 79 (Bankr. E.D.N.Y. 2007) ("To determine adequacy of capital, a court will consider . . . the need for working capital in the specific industry at issue.") (citations and quotation marks omitted).

In anticipation of the Merger, Lyondell, with the help of CMAI and Turner & Mason, along with Basell, Access, Merrill Lynch, and others, analyzed the refining and petrochemical industry outlooks. With respect to the outlook on the price of oil, as noted above, management in 2007 contemplated oil prices in the range of $63 to $69 per barrel (DX-271 (LyondellBasell Supervisory Board approval for 2008 Business Plan) at .012.), but the eventual volatility in the price of oil in the summer and fall of 2008—reaching a peak price of over $145 then dropping to below $40—was not predicted by anyone, and this unpredicted volatility had a large impact on LBI's borrowing capacity. (*See* 10/20 Trial Tr. (Nebeker) at 828.) Defendants' refining expert O'Connor maintains that the outlook for both global demand and refinery margins contained in the refreshed projections, which included an expected Maya 2-1-1 margin[35] of roughly $30 per barrel in 2008, was reasonable for both 2008 and subsequent years. (*See* 2009 O'Connor Report, DX-800 at 4, 20.) Similarly, Gallogly credibly testified that the economic slowdown in late 2008 resulted in "a precipitous drop in the demand for chemicals and a sharp drop in sales and profits for LBI and other chemical producers," and that these conditions were not predicted by anyone. (Gallogly Decl. ¶ 19.) And with respect to the cyclicality of the petrochemical demand cycle, Defendant's expert Young demonstrated that the consensus outlook in 2007 was that demand growth for petrochemicals and refined products would remain healthy, and that the projected upcoming petrochemical trough would be "mild." (Young 2009 Report, DX-804 at 15–18, 21-22, 32.) CMAI itself, in a November 2007 analysis, projected that "margins at the end of the decade [will be] somewhat above the last trough in 2001/02." (DX-217 at .164.)

The record indicates that nearly all of the parties involved in the Merger viewed the industry outlook at the time of the Merger to be largely positive and conducive to a healthy LBI. These views, though they turned out to be erroneous, nonetheless appear to have been reasonable when made. This further bolsters the Defendants' position that LBI was adequately capitalized upon the closing of the Merger, given the optimistic perceptions of future market conditions.

[35] "The Maya 2-1-1 crack spread margin is a measure of the difference between the value of refined products and the cost of crude oil." (O'Connor 2009 Report, DX-800 at 3 n. 2.)

(3) The Banks' Projections

On the whole, the banks that financed the Merger viewed LBI as a viable business capable of not only surviving, but sustaining operations in a manner that would allow for the company to repay its roughly $20 billion secured debt load. (*See* Vaske Decl. ¶ 30; Melvani Decl. ¶ 73.) Dozens of employees at each of the banks scrutinized the Merger, analyzing the refining and chemical markets, pouring over Lyondell's and Basell's historical performance, and modeling the performance of the combined company. (*See, e.g.*, DX-202 (UBS Project Leo Memorandum); DX-207 (Goldman Sachs); DX-209 (Citi Commitment Committee Approval Memorandum).) Some of these models, in particular the Merrill Lynch model prepared by Frangenburg, were shown at trial to contain flaws. (*See* 11/1 Trial Tr. (Frangenberg) at 2091:3–18.) But the overwhelming consensus among the banks was that LBI was going to be a powerful company with a global footprint and competitive advantages on account of an exceptional refinery, and leading petrochemical technologies.

While each of the banks received fees in connection with lending to LBI, each bank put billions of dollars at risk. (*See* 2016 Twitchell Decl. ¶¶ 51–54.) The effort to syndicate the banks' LBI debt failed, but the banks were acutely aware that syndication was not a foregone conclusion. (*See* Jeffries Decl. ¶¶ 41–42.) The banks' projections and analyses were not futile rubber-stamps of management's projections, nor was the approval of the merger financing solely an exercise in appeasing Blavatnik in order to secure deals in the future with Access. Each of the banks prepared detailed presentations to senior personnel based on droves of data in order to gain approval of the Merger financing. As sophisticated investors and market participants, each of the financing banks was satisfied that LBI would prosper, and the Court declines to find that the banks' projections should be written off as unreasonable.

(4) Expert Testimony

The Court will also consider the testimony of the experts that testified at trial. The Defendants' solvency expert, Kearns, credibly presented an analysis of LBI's required minimum liquidity. Kearns did not rely on CMAI's analysis, but rather looked to the expert analysis of Defendants' refining and chemical experts O'Connor and Young, and also conducted a comprehensive review of the analyses of the financing banks, management's projections, and his own stress tests.

On the other hand, as the Court set forth in detail above in Sections IV.M and IV.N, the testimony of the Trustee's experts, CMAI, Tuliano and Maxwell, was flawed in several key respects. Tuliano, in preparing his capital adequacy analysis, chose three of the lowest sets of projections out of the 36 sets of projections he identified. And the projections he chose were downside or stress cases, which were not reflective of a measured view on the likely outcome of the Merger. Conducting an analysis based upon these three "cherry-picked" downside cases produced distorted and misleading results, and as such, the Court declines to credit Tuliano's capital adequacy analysis. *Freeman*, 778 F.3d at 469–70 (criticizing results based on "cherry picked" data). Indeed, at the time of the Merger, management, the banks, and independent consultants, such as Turner & Mason and even CMAI, all believed the Merger to be sound—Tuliano's analysis simply "fl[ies] in the face of what everyone[ ] believed at that time." *VFB*, 2005 WL 2234606 at *30 n.71.

Moreover, CMAI's CIMBal model was proven to be a "black box" from which the Defendants could not analyze how "data is fed at one end and from which an answer emerges at the other," and without the ability to fully assess the methods and mechanisms by which the model operated, the Court is unable credit the model's conclusions as reliable. *Lawrence*, 2011 WL 3418324, at *7.

(5) Additional Considerations Affecting Capital Adequacy

Additionally, as noted above, there were a number of unforeseen events that significantly affected LBI's financial condition following the closing of the Merger, and these events must be considered when determining whether the Merger left LBI adequately capitalized. *See e.g. Fidelity*, 340 B.R. at 297–98 (finding that post-merger "economic events," such as a crisis in Asia, had a significant negative impact on the debtor, but were not predictable, and therefore refusing to "conclude, in hindsight, that the [p]rojections were unreasonable or that the [d]ebtor was left with an inadequate amount of assets to withstand such unforeseeable economic circumstances") (internal citation omitted); *MFS/Sun*, 910 F. Supp. at 944 (considering external factors affecting a company when assessing adequacy of capital).

Specifically, Defendants' refining expert O'Connor explained that "[w]hile it is a given that hurricanes and unscheduled outages are facts of life in refining, the coincident series of events that occurred in 2008 [namely, the HRO crane collapse and two large hurricanes, each causing substantial interruptions to production] is far more than normal planning contingencies would include." (O'Connor 2009 Report, DX-800 at 51.) The crane collapse occurred on July 18, 2008, and resulted in four fatalities and seven injuries, and a total shutdown of the refinery for 139 days. (*Id.* at 50.) Hurricane Gustav hit Texas on September 1, 2008, but the more powerful Hurricane Ike hit the Gulf Coast on September 13, 2008, requiring the entire refinery to be shut down for 13 days. (*Id.* at 5.)

Again, some unplanned outages are a part of "normal planning contingencies," and hurricanes in the Gulf Coast are not unheard of. For example, Hurricane Rita hit the Gulf Coast in 2005, resulting in outages in the area. (*Id.* at 3.) But the confluence of events that hit the Houston refinery in the second half of 2008 resulted in substantial outages, with an accompanying drop in EBITDA, and the extent and impact of these events was not foreseen by management or the financing banks.

And lastly, the Great Recession had implications that reached far and wide, driving down demand and restricting the credit markets, and severely hampered LBI's ability to turn a profit. No one at trial disputed that the Great Recession was both devastating and unforeseen, and notably, CMAI's own assessment of the Great Recession's effect on LBI was that the global conditions in 2008 triggered LBI's demise. (*See* DX-463 at .010 (in a CMAI report from 2009 discussing the Great Recession's effects on LBI, CMAI asserted that the "combination of plunging chemical sales and a global freeze and a global credit freeze rendered LBI unable to service its $26B of debt by the fourth quarter of 2008").)

d) Analysis of Recent Case Law

The Court has found Judge Peck's *Iridium* decision to be useful in addressing the capital adequacy issues that have risen in the present case, and in ultimately concluding that the Trustee has failed to prove that LBI was solvent on the relevant dates in this case.

By way of background, in the early 1990's, Iridium developed a handset for voice communication that required an unobstructed path, or line-of-sight, between the handset and an orbiting satellite to function. *Iridium,* 373 B.R. at 305. As product development advanced, Iridium, taking into account this line-of-sight limitation, created subscriber and revenue projections. *Id.* at 315–319. Goldman Sachs, Merrill Lynch, and Salomon Smith Barney—while assisting Iridium acquire bank loans and conduct equity and debt offerings—reaffirmed Iridium's projections after each firm conducted its own due diligence. *Id.* at 315. The Iridium business, however, quickly floundered on account of subscriber numbers vastly below projected amounts, and an involuntary petition was filed against Iridium just nine months after the commercial activation of its handset services. *Id.* at 290.

Creditors challenged Iridium's IPO as a constructively fraudulent transfer, and argued that Iridium's colossal meltdown occurred because of a fatal marketing mistake and inflated subscriber projections that doomed the business from the start, and thus Iridium must have been insolvent and undercapitalized regardless of its projections and value ascribed to it by the public markets. *Id.* at 297. But the *Iridium* court ultimately found "that the [c]ommittee [had] not carried its burden of proof in establishing that Iridium was insolvent or had unreasonably small capital during the relevant period." *Id.* at 291. Even though Iridium's projections turned out to be grossly inaccurate, the court gave them considerable weight because the "projections were the result of a prolonged [and] deliberate process," and thus, were "reasonable and prudent when made." *Id.* at 300, 345 (citation omitted).[36] Furthermore, Iridium acquired three syndicated bank loans during the relevant period, "an indication of both solvency and capital adequacy." *Id.* at 349. Finally, the *Iridium* court noted that Iridium's failure could have been caused by factors other than the inaccurate projections and marketing failures, such as the developments in the competing cellular systems or by Iridium offering bulky headsets to customers before all of the software bugs were worked out. *Id.* at 308.

The parallels between the *Iridium* case and the dispute before this Court are salient. Similar to how the creditors' committee in *Iridium* argued that Iridium's projections should not be relied upon given the gross overestimation of subscribers, the Trustee here asserts that the LBI merger was doomed to fail because of the inaccurate and baseless refreshed projections. The *Iridium* court explained that "[w]ithout a firm basis to replace management's cost projections' with those developed for litigation, the starting point for solvency analysis should be

[36] During the relevant period, Iridium conducted market research studies before preparing its projections; had third parties conduct due diligence and then re-affirm the projections; and had significant success acquiring loans from banks and raising funds from public equity and debt offerings. *See id.* at 316.

management's projections." *Id.* at 347 (internal quotation marks omitted). And although Lyondell's refreshed projections weren't as rigorously prepared as the 2007 LRP, or as the projections prepared in *Iridium*, for that matter, the refreshed projections in this case did incorporate the acquisition of a 100% interest in the Houston refinery, among other considerations that might merit an upward revision. (Salvin Dep. Tr. 287–89.) Furthermore, just as the financing banks reaffirmed Iridium's projections by investing substantial funds into the business, here the financing banks provided roughly $21 billion to finance the merger after reviewing Lyondell's projections but also conducting due diligence and preparing projections of their own. Moreover, just as the *Iridium* court considered that external factors, such as developments in competing products, could have contributed to Iridium's downfall, the Defendants here have presented credible evidence of other factors that undoubtedly harmed LBI following the closing of the Merger, such as the Houston crane collapse, and of course, the Great Recession.

The *Tronox* case, on the other hand, presents a largely different set of facts, but nonetheless involves solvency and capital adequacy analyses useful in the present case. By way of background, Kerr-McGee was an oil and gas and chemical producer; the oil and gas business generated the substantial majority of its revenue but was also saddled with legacy environmental and tort liabilities aggregating more than $1 billion. *Tronox*, 503 B.R. at 249. Recognizing that the legacy liabilities significantly detracted from the value of their company, Kerr-McGee management spun off the assets of the oil and gas E & P business to a new holding company ("New Kerr-McGee"), which then disclaimed the associated liabilities which were transferred to a separate company ("Tronox"). *Id.* at 251–52. Post-spinoff, the newly created chemical company, Tronox, was saddled with legacy liabilities and consistently lost money despite serious cost-cutting measures. *Id.* at 261. Several years after the spin-off, Tronox filed for bankruptcy. *Id.* at 262.

A litigation trust created by a reorganization plan challenged the spin-off with both actual and constructive fraudulent transfer claims. With respect to the capital adequacy determination in the constructive fraudulent transfer claim, the *Tronox* court first looked to the public market, but did not view Tronox's ability to raise debt and equity as persuasive evidence of solvency, in part because the court found that the financial statements upon which the market relied were misleading, "sell-side" projections for which Kerr-McGee had abandoned its historical forecasting methodology and projected a dramatic uptick in revenue. *Id.* at 298–99. But significantly, in concluding that Tronox was insolvent under a balance-sheet analysis, the court found that the defendants had grossly undervalued their environmental liabilities by many hundreds of millions of dollars. *Id.* at 313–14.

The Trustee in this case draws numerous parallels between the overly optimistic pre-spin-off management projections in *Tronox*, and the refreshed projections in this case. In *Tronox*, Kerr-McGee's CFO ("Wohleber") manufactured the essential figures at the heart of Tronox's inflated projections, and Kerr-McGee "abandoned its historical forecasting methodology" in following Wohleber's direction. *Id*. at 299. Comparably, the Trustee alleges that the refreshed projections ordered by Dan Smith and challenged by the Trustee here—which took place over a compressed timeframe and did not involve relevant experts (Phillips Dep. 51–54; Dineen Dep. 61)—were inflated for the refining business well beyond the earlier, more thorough projections included in Lyondell's 2007 LRP.

Projections and analysis performed by third-parties were heavily contested in both this case and *Tronox*. But critically, in *Tronox*, the court found that none of the banks that provided secured credit to Tronox post-spin-off had independently valued the significant legacy liabilities saddling the company. *Tronox,* 503 B.R. at 303–04. The level of independent vetting performed by the financing banks prior to the merger of Lyondell and Basell is disputed, but it is evident that at least Merrill Lynch's projections – while flawed – were performed independently. (*See* Frangenberg Decl. ¶¶ 13, 75, 81, 86 (discussing the independent aspects of Merrill Lynch's analysis.) Ultimately, the *Tronox* court gave great weight to the fact that the legacy liabilities were not properly accounted for by management or third-parties, and the result was a substantial overvaluation of the company in the magnitude of hundreds of millions of dollars. There was no realistic way for the *Tronox* defendants to consider the cash reserves left with Tronox to be sufficient to cover its future legacy liabilities, and further, there was no meaningful third-party analysis of these liabilities. The refreshed Lyondell projections, on the other hand, were subject to scrutiny by the banks, who had been, to various degrees, tracking Lyondell and Basell, and researching and analyzing a potential merger based on vast amounts of public and, in certain cases, private information. While the refreshed projections were indeed optimistic and turned out to be not reflective of future performance, the banks were able to legitimately assess their reasonableness, and this fact is an important distinction from the *Tronox* case.

Accordingly, both *Tronox* and *Iridium* mesh with this Court's holding in the present case, and other case law confirms the result here. For example, in *VFB LLC v. Campbell Soup Co.*, the Third Circuit affirmed a finding of capital adequacy when the district court based its decision "on the objective evidence from the public equity and debt markets" rather than expert valuations. *VFB LLC*, 482 F.3d at 633. The *VFB* court relied heavily on market data, as did the *Iridium* court, and this reliance is particularly applicable on the facts of this case, with financing banks providing perhaps the most independent and clear-eyed view of LBI at the time of the Merger.

Just the same, in *Moody*, the Third Circuit found that, in an LBO that resulted in the collapse of a houseware products manufacturer, projections prepared in connection with the LBO were reasonable, as they "were grounded in . . . interviews with [company] personnel and examination of the company's financial records for the year and a half preceding the [transaction]." *Moody*, 971 F.2d at 1073. Here, the financing banks poured over public and non-public information, and spoke with company representatives during the July 2007 diligence sessions, basing their projections on this information, as well as their own views on the market at large. The financing banks projections were based on a sufficient data set to render their projections reasonable, as was the case in *Moody*, and unlike the scenario in *Tronox*.

That Lyondell's projections turned out to be "off the mark" is of relatively little consequence. As was the case in *Moody*, where a court did not make a finding of unreasonably small capital though "[i]n hindsight it [was] clear that the figures employed . . . were not entirely on the mark,"[37] here, the Great Recession and a number of other factors discussed elsewhere in this Opinion rendered Lyondell's projections unattainable, but the Court nonetheless declines to find that LBI was left with unreasonably small capital. *Moody*, 971 F.2d at 1074.

2. *The Trustee Failed to Establish that LBI Was Insolvent on December 20, 2007*

A comprehensive review of management's projections and the industry outlook prior to the closing of the Merger, the expert testimony presented at trial, and perhaps most importantly, the banks' projections and support for the Merger as they staked billions of dollars on the future

[37] The Third Circuit in *Moody* noted that the district court had properly found that the debtor's failure "was caused by a dramatic drop in sales due to increased foreign and domestic competition, rather than a lack of capital." *Moody*, 971 F.2d at 1074–75.

of LBI, leads the Court to find that the Trustee has failed to meet his burden in establishing any of the three financial condition tests required to succeed on the constructive fraudulent transfer claims. This conclusion meshes with the fact that several significant events following the closing of the Merger, including the Houston crane collapse, Hurricane Ike, and importantly, the Great Recession, dramatically strained LBI's financial health to the breaking point.

The process by which the refreshed projections were prepared has been called into question, but the Trustee has nonetheless failed to establish that the projections themselves, taking into account the upward adjustment to refining EBITDA numbers, were patently unreasonable such that LBI was doomed from the start with unreasonably small capital. The banks, understanding that management projections tend to be optimistic, developed their own projections, and after detailed analyses involving many employees at each bank, and the sign off from superiors, risked billions of dollars on the profitability of LBI. The contemporaneous views of the banks, informed by their own views of the industry outlook in the context of the Merger, is exceedingly valuable to the Court in its determination that, on the record before the Court, the Trustee has failed to establish LBI's insolvency.

Recent case law only bolsters this conclusion. Just as the court in *Iridium* looked to the views of the market and the financing parties in declining to find insolvency, so too does this Court find significant the fact that the financing banks committed billions to the future of LBI after a diligent review of the transaction. And, while the *Tronox* court, in finding that Tronox was insolvent from its inception, discounted the views of both management but also third-party investors as their analyses were based upon woefully incomplete information relating to massive environmental liabilities, here the financing parties had droves of public and private information on which to develop their own reasoned investment decisions.

All of these reasons contribute to the Court's conclusion that the Trustee has failed to prove that LBI was insolvent on December 20, 2007.

B. Intentional Fraudulent Transfer

This Court assumes—without deciding—that the "preponderance of the evidence" standard, applies to actions brought pursuant to Section 548(a)(1)(A).[38] Furthermore, the Court declines to draw an adverse inference against the Trustee for not calling Smith as a witness to testify at trial. Fraud is a serious allegation, and the Court concludes that for the following reasons, the Trustee did not establish his intentional fraudulent transfer claim.

1. There Was No Intent To Hinder, Delay, or Defraud Creditors.

a) Smith Did Not Have the Requisite Intent

The Trustee relies on the theory that Smith, as CEO of Lyondell, warned publicly of the harm Lyondell creditors would face as a result of the merger, but once the die had been cast, he pushed Lyondell into the transaction in order to profit.

The Trustee has made much of the fact that Smith asked Salvin to review the 2007 LRP, and to prepare updated projections after collecting additional information. The Trustee would

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[38] There is a split of authority within this Circuit whether a "preponderance of the evidence" standard, or a "clear and convincing" standard applies to the burden of proof required by a trustee bringing a claim under section 548(a)(1)(A) of the Code. *See Mendelsohn v. Jacobowitz (In re Jacobs),* 394 B.R. 646, 661 (Bankr. E.D.N.Y. 2008) ("The trustee has the burden of showing that the challenged transfer was made with actual intent to hinder, delay, or defraud, and he or she must do so under the clear and convincing standard.") (citing *Glinka v. Bank of Vermont (In re Kelton Motors, Inc.),* 130 B.R. 170, 179 (Bankr.D.Vt.1991) (finding clear and convincing standard applies to section 548(a)(1)(A) claims)); *but see In re Livecchi,* No. ADV 11-02027, 2014 WL 6668886, at *10 (Bankr. W.D.N.Y. Nov. 20, 2014) ("The Trustee carries the burden of proof of showing, by a preponderance of the evidence, that the debtor effected a transfer with the requisite intent under § 548(a)(1)(A).") The Court concludes that the Trustee in these cases can satisfy neither standard. Although the Second Circuit, looking to New York law, applies a "clear and convincing" standard to actions brought under NY fraudulent conveyance law, section 548(a)(1)(A) is a cause of action independent of state law, and so does not rely on state law when deciding what standard applies. *See HBE Leasing Corp.*, 48 F.3d at 639 (applying a "clear and convincing" standard for NY DCL section 276).

have the mere fact that a CEO requests a subordinate to take a second-look at company projections, in the face of a possible merger, as being indicative of fraudulent intent. Such a theory cannot hold. There were external events driving the preparation of the refreshed projections that do not require ascribing a malevolent motive to Smith, including, the rise of merger and acquisition activity occurring contemporaneously with the refreshed projections.

The Trustee also alleged that the entire process of preparing the refreshed projections is indicative of fraud. The Trustee argues that Salvin's handwritten notes of the May 15, 2007 meeting between them show that Smith commanded Salvin to reach projections that would reach a higher value, because the notes include a reference to "refining: 1.5–1.6$." (*See* PX-134 at .009.) However, the Court does not consider the notes alone to be evidence that Smith demanded a pre-determined result. Smith asked Salvin, an employee in Lyondell's corporate development group, to examine the 2007 LRP, collect information from other individuals in the company, and prepare updated projections. (Salvin Dep. Tr. 387–89; *see id*. at 396 ("One of the key areas . . . was refining . . . . [W]e had changed the way we were running the refinery and we wanted to take another look at those EBITDA projections that were developed, again, six, seven months earlier")), but the record does not support the contention that Smith told Salvin that he should reach a value of $1.5–1.6 billion. It is equally plausible that Smith, the experienced CEO, believed based on his intimate knowledge of the company and industry, that EBITDA in that range was likely to be achieved. There is nothing inherently wrong with a CEO expressing his opinion, even as he tasks a subordinate with refreshing projections. Savlin certainly said that he was not directed what result to reach. (Salvin Dep. Tr. at 391 (explaining that Salvin took offense to the Trustee's complaint "[b]ecause it implied that we made up numbers to fit what Dan wanted, and that was not the case"); *see id.* at 395 ("Q. Now, when you sat down with Mr.

Smith, did he tell you what numbers he wanted to have reflected in the refreshed projections? A. No, he did not.").)

A statement, such as, "I believe EBITDA will be 1.6 billion," is a far cry from a command, "Make sure that the new projections reach 1.6 billion." Particularly here, Smith had more experience in the field than Salvin, who testified that he was not a refining expert and was unaware of certain basic facts regarding the refining sector. (Salvin Dep. Tr. at 117:5–8 (testifying that he is not an expert and has never heard of the phrase that describes the margin of the Houston Refinery), 133:13–15 (testifying that he is not a refining expert), 218:19–219:4 (testifying that he was unaware that refining profitability is seasonal because he has no expertise in the subject), 238:6–239:2 (testifying that, because he was unaware of the proper method to calculate EBITDA, he simply used both methodologies he was aware of).) There is nothing fraudulent about asking an employee to take a second look at projections. And indeed, in the face of a merger, it would be prudent to have the most up-to-date financial information available.

The Trustee also noted that the refreshed projections did not contain a bottoms-up analysis, as did the projections contained in the long-range plan. The parties did not dispute this at trial. The Court finds that the process by which the refreshed projections were prepared was hardly flawless. However, the mere fact that the Trustee can show that the projections could have been more accurate by using a bottoms-up analysis does not mean that the methods used to prepare the refreshed projections rise to the level of actual fraud. The usual long range planning process consumes most of the year; that sort of process could not be undertaken in the compressed setting of merger negotiations. Ultimately, the Court concludes that the Trustee fell far short of showing fraudulent intent during the preparation of the refreshed projections. *See In re Irving Tanning Co.*, 555 B.R. 70, 76 (Bankr. D. Me. 2016) (declining to find that projections prepared in anticipation of a merger showed intent of actual fraud, even where it could be shown that some defendants believed that the projections were overly optimistic).

The Trustee also emphasizes the speed with which the preparations were prepared in advance of a possible merger, but the desire to swiftly complete a transaction, by itself, will not give rise to actual fraud. *See GSC Partners CDO Fund v. Washington*, 368 F.3d 228, 237 (3d Cir. 2004) ("In every corporate transaction, the corporation and its officers have a desire to complete the transaction, and officers will usually reap financial benefits from a successful transaction.") This Circuit has a demanding standard for showing fraudulent intent. *See In re Xiang Yong Gao*, 560 B.R. 50, 55 (Bankr. E.D.N.Y. 2016) (finding on a motion for summary judgment that there was actual fraud under NY DCL when a debtor created a fictitious individual to divert funds away from the debtor's creditors); *see also Manhattan Inv. Fund*, 397 B.R. at 8 (applying a presumption of fraud where there is a Ponzi scheme); *Drenis v. Haligiannis*, 452 F. Supp. 2d 418, 428 (S.D.N.Y. 2006) (same).

This is not the first bankruptcy case where missed projections played a role. In *Irving Tanning Co.*, a trustee failed to prove a claim for intentional fraudulent transfer in an analogous scenario. The trustee sought to avoid a transaction and release to recover funds, where the transaction provided that "all assets, working capital, and business associated" with one company, Prime Maine, would merge with Irving Tanning (the debtor, and subsidiary of Prime Delaware) into Prime Tanning Company, Inc. ("Prime Delaware," the parent corporation of Irving Tanning). *Id.* at 73–76. The result was the company being owned 40% by the shareholder defendants and 60% by Meriturn (the acquiring company). *Id.* at 76. In return, Meriturn assumed a number of obligations, including a $15 million cash contribution to certain shareholder defendants and a $3 million capital investment in the new company. *Id.* Before the transaction, two letters of interest had been exchanged between Meriturn and Prime Maine, and following the exchange of letters, the parties engaged in diligence on the deal. *Id.* Significantly, the projections ultimately used in connection with the deal seem to have been more optimistic than those originally drafted and contemplated by the parties. *Id.* ("Some of the Defendants believed that these projections were optimistic and might be difficult to achieve.") These projections stood in contrast to December 2006 projections (the "Phoenix Report") that indicated a decline and recommended certain actions which were not taken by the board. *Id.* at 74. Ultimately, the court found the trustee failed on all its claims, despite the shortcomings of the projections involved in the case, noting that the parties had taken "considerable due diligence efforts" and the fact that the merger had great "potential." *Id.* at 82, 86.

The Trustee here, at closing argument, argued that "[the Court] doesn't have to necessarily reach a determination to resolve the issue, whether [Smith's instructions to Salvin constituted] a fraudulent act, per se." (Trial Tr. (Closing Argument) 99:7–9.) However, the Trustee asserted that this would be true only as it relates to *constructive*, not *actual*, fraudulent transfers. As the district court made clear, the standard of intent for a fraudulent transfer claim is high, requiring that the actor actually desires to cause a certain action or that he believes that consequences are "substantially certain to result from it." *See Hofmann*, 554 B.R. at 648 (citation omitted). *Hofmann* explicitly rejected the Trustee's argument that a lower standard applied. *Id.* *Hofmann* also only held that the Trustee adequately *pled* an intentional fraudulent transfer claim; the standard of pleading a claim is not equivalent to the high bar in *proving* a claim. *See generally In re Dreier LLP*, 452 B.R. 391, 408 (Bankr. S.D.N.Y. 2011) (discussing the rule that, because bankruptcy trustees are necessarily outsiders, a more liberal view is taken when examining allegations of actual fraud at the pleading stage).

The Court finds that the Trustee has failed to establish that the refreshed projections were used to defraud Lyondell's creditors. The Court also finds that the Trustee did not prove that Smith told Salvin what result he should reach or attempt to fraudulently influence the process. (Salvin Dep. Tr. 395 ("Q. Now, when you sat down with Mr. Smith, did he tell you what numbers he wanted to have reflected in the refreshed projections? A. No, he did not."); *see also id.* at 393, 395–96). The Court finds that the Trustee has failed to prove by a preponderance of the evidence that Smith acted with fraudulent intent.

b) <u>Blavatnik Did Not Have the Requisite Intent</u>

The Trustee also argued that Blavatnik had the requisite intent to support a finding that the Toehold Payments were actual fraudulent transfers. The Court has evaluated all the relevant evidence, and finds that Blavatnik's testimony at trial was credible and that he did not have an intent to hinder, defraud, or delay Lyondell's creditors.

As a preliminary matter, Blavatnik himself testified that Lyondell's projections did not drive the decision by Access and Basell to proceed with the Merger. (Blavatnik 2016 Decl. ¶¶ 8–9.) But more importantly, Blavatnik had no reason to be part of a merger that was doomed to fail. He credibly testified that Access is generally interested in long-term investments, and had a keen interest in seeing LBI succeed. (10/21 Trial Tr. (Blavatnik) at 1130:4–16.) In fact, he arguably lost more than anyone as a result of the bankruptcy (Blavatnik 2016 Decl. ¶ 12; *see also* 10/21 Trial Tr. (Blavatnik) 1132:1–4 (Blavatnik lost about $600 million as a result of Lyondell's bankruptcy)), and credibly testified that he had no incentive to approve a transaction that was destined to fail and significant reasons not to do so. (Blavatnik 2009 Decl. ¶¶ 24–25.) He "whole-heartedly believed" in the transaction and had great faith in LBI (Blavatnik 2016 Decl. ¶¶ 11–14), and his testimony is corroborated by others at Access. (Benet Decl. ¶ 27 ("The idea . . . that Access would risk an asset worth billions of dollars in order to obtain millions of dollars in fees and profits from our publicly disclosed toehold position in Lyondell defies common sense and certainly does not reflect our thinking at the time. We were fully committed to the success of this transaction, and we had every reason to believe it would succeed.").) The Court credits Blavatnik's testimony that he invested with a view to enhance the profitability of the newly created LBI, not to defraud Lyondell's creditors.

2. The "Badges of Fraud" Doctrine

The Court also finds that the Trustee did not establish the required intent by proving badges of fraud. First, although the Court notes insolvency is not required under section 548(a)(1)(A), transfers rendering a debtor insolvent, or made while a debtor is insolvent, is one of the badges of fraud, and its presence is therefore relevant to whether a transaction was "actually fraudulent." *Freeland v. Enodis Corp*., 540 F.3d 721, 731 n.4 (7th Cir. 2008). For the reasons already discussed, the Trustee has not shown that Lyondell was insolvent at the time the Toehold Payments were made. An application of the badges of fraud doctrine only buttresses this conclusion.

The bankruptcy definition of an insider is inclusive, not exclusive. *See* 11 U.S.C. § 101(31). However, even assuming that Toehold Payment 1 was made to an insider (from Basell to Nell), the badges of fraud theory fails. Toehold Payment 1 was not a transfer of essential assets; there were no pending lawsuits related to the transaction; no party absconded; and the transfer was not for substantially all of the debtor's assets. And, the mechanics of the transaction indicate that this was not a heist being committed in the dead of night. Toehold Payment 2 is even farther removed from being an intentional fraudulent transfer, as Merrill Lynch is plainly not an insider. Further, the Toehold transactions were negotiated between two sophisticated parties as a result of arms' length dealing. Toehold Payment 2, then, was hardly a carefully hidden, fraudulent transaction, and the Trustee procured no evidence supporting this allegation.

3. *Even if Smith Did Intend to Hinder Delay or Defraud Creditors, His Intent Cannot Be Imputed to Basell*

The Trustee relies on the *Hofmann* decision, and *Pereira v. WWWRD US, LLC (In re Waterford Wedgwood USA, Inc.)*, 500 B.R. 371 (Bankr. S.D.N.Y. 2013), in support of the argument that Smith's intent can be imputed to Basell AF. However, neither case supports the proposition that Smith's intent, while it can be imputed *vertically* to Lyondell, could also be imputed *horizontally* across to the acquiring entity (Basell AF). The Trustee also asserts an agency theory in the alternative, which for the reasons discussed below, also fails.

Waterford is inapplicable to this case. In *Waterford*, a purchaser ("KPS") completed two sale agreements, a sale (the "Main Transaction") and an asset purchase agreement (the "APA"), with the plaintiffs being sellers under the APA. *Id.* at 376. The Main Transaction governed non-US assets, and the APA governed US assets. *Id.* The court held, unremarkably, that the two sale agreements could be collapsed into one single transaction under the "integrated transaction" doctrine for evaluating whether or not the debtor received "reasonably equivalent value." *Id.* at 374. In fact, *Waterford* was not even an intentional fraudulent transfer case (it was a constructive fraudulent transfer case), and it held nothing regarding imputing the intent of a target company's CEO to the acquiring side's business entity. The issue was a narrow one, namely whether transactions could be collapsed when determining whether "reasonably equivalent value" was received. *Id.* at 378 ("At issue here is whether the Plaintiffs received reasonably equivalent value for the transfer.").

It is uncontroversial that the collapsing doctrine can be applied where form must give way to substance. *See HBE Leasing*, 48 F.3d at 636. "The paradigmatic scheme is . . . [where] one transferee gives fair value to the debtor in exchange for the debtor's property, and the debtor then gratuitously transfers the proceeds of the first exchange to a second transferee. The first transferee thereby receives the debtor's property, and the second transferee receives the consideration, while the debtor retains nothing." *Id.* at 635.

Two prongs must be satisfied in order to apply the collapsing doctrine. "First, the consideration received from the first transferee must be reconveyed by the debtor for less than fair consideration or with an actual intent to defraud creditors. If the debtor retains the consideration, or transfers it for valuable consideration, its estate is not unfairly diminished and the initial transfer is not fraudulent." *Official Comm. Of Unsecured Creditors v. JP Morgan Chase Bank, N.A. (In re M. Fabrikant & Sons, Inc.)*, 394 B.R. 721, 731 (Bankr. S.D.N.Y. 2008) (internal citations and quotations omitted). "Second, the initial transferee must have actual or constructive knowledge of the entire scheme that renders the exchange with the debtor fraudulent." *Id.* (citations omitted).

However, the Trustee attempts to use the term "collapsing doctrine" in an unorthodox way. The collapsing doctrine has been used to combine multiple transactions (as in *Waterford*) and, per *Hofmann*, can be used to impute the intent of a corporation's officer to *the corporation of which he is an officer*. Such applications of the collapsing doctrine are "vertical," in that they do not involve imputing the intent of purchasers to sellers or vice-versa. The Trustee's theory would expand the collapsing doctrine "horizontally," allowing bankruptcy trustees to impute the intent of company officer A to corporation B. The Trustee was directly asked to provide support for such authority, and was unable to do so. (*See* 2/2 Trial Tr. (Closing Argument) 73:19–74:5.) The Court has not been able to find a case allowing such an unprecedented expansion of the collapsing doctrine and it declines to do so here. Doing so would upend conventional wisdom, making a corporation not only liable for the actions of its officers (which is uncontroversial), but making a corporation accountable to the officers of a wholly unrelated corporation.

Further, the Trustee's theory of imputing the intent of an alleged fraudulent transferor toward a transferee (or in this case, a new entity) would be directly opposed to a long line of case law holding that the intent of the transferor, not the transferee, is the relevant inquiry for section 548(a)(1)(A). *Jackson v. Mishkin (In re Adler, Coleman Clearing Corp.)*, 263 B.R. 406, 451 (S.D.N.Y. 2001) ("[F]or the purposes of avoidance pursuant to § 548 the transferee's good faith or lack of it does not matter."); s*ee also* 5 COLLIER ON BANKRUPTCY ¶ 548.04[2] (16th 2016) ("Section 548(a)(1)(A) does not contain any reference to the state of mind or knowledge of the transferee. The only inquiry concerning actual intent that matters is that of the debtor: whether the debtor causing the transfer or incurring the obligation intended to hinder, delay or defraud its creditor.") In effect, the Trustee, by this novel theory, is attempting to contravene this longstanding principle of fraudulent transfer law through the backdoor, making the transferee's intent the main focus of the inquiry. The Court declines to reach that result.

The Trustee also overstates the holding of the district court in *Hofmann*. *Hofmann* squarely held that Smith's intent (if proven) could be imputed to Lyondell and that the facts alleged in the complaint were sufficient to survive a motion to dismiss. *Hofmann,* 554 B.R. at 648 ("Smith's knowledge and intent in connection with the LBO may be imputed to Lyondell."). *Hofmann* held nothing about the ability of Smith's knowledge and intent in connection with the LBO to be imputed toward Basell. The Trustee's application of the collapsing doctrine fails.

In any event, since the Trustee failed to prove wrongdoing by Smith, the intent required to sustain an actual fraudulent transfer claim is lacking, even if the collapsing doctrine permitted horizontal imputation, which the Court concludes it does not.

4. Smith was not an Agent of Basell

The Trustee's alternate theory of an agency relationship also fails. Agency requires that "[t]he alleged agent must have acted (1) for the benefit of, (2) with the knowledge of, (3) with the consent of, and (4) under the control of, the principal." *Consumer Fin. Prot. Bureau v. NDG Fin. Corp.*, No. 15-CV-5211 (CM), 2016 WL 7188792, at *8 (S.D.N.Y. Dec. 2, 2016) (citing *Grove Press, Inc. v. Angleton*, 649 F.2d 121, 122 (2d Cir. 1981)). It is difficult to reconcile the allegation that Smith "fabricated" the projections "specifically to induce Blavatnik to pay a price for Lyondell beyond what a realistic valuation would support[,]" *Hofmann*, 554 B.R. at 641 (citation omitted), with the idea that Smith also acted for benefitted the principal he was seemingly defrauding. The Trustee did not address this contradiction at trial and failed to support his agency theory with evidence.

5. Lyondell Had No Property Interest in the Toehold Payments

Given that intent cannot be imputed horizontally, it is apparent that Count 2 independently fails because Lyondell does not have a property interest in either Toehold Payment. Lyondell was not the borrower or physical transferor of either Toehold Payment. Further, the Trustee failed to establish that Lyondell had any control over the funds used to make Toehold Payments 1 or 2. Finally, although Lyondell was one of 51 guarantors of the credit facilities, that cannot independently provide a basis for asserting that it had a property interest in all cash borrowed from the lenders, including the Toehold Payments, especially in light of the contractual limitations on liability (and corresponding liens) included in those credit facilities.

C. Preference

1. Lyondell is the Relevant Debtor

The Court finds that the Trustee has failed to prove by a preponderance of the evidence that LBI was insolvent at the time of the October Repayments. Maxwell, the Trustee's only insolvency expert for October 2008, testified about LBI on a consolidated basis. The Trustee did not argue that Lyondell (as opposed to LBI) was the relevant debtor for the preference claim until his post-trial brief and closing arguments. The Trustee's decision to switch focus from LBI to Lyondell forced the Trustee to extrapolate Lyondell's stand-alone financial condition from Maxwell's testimony regarding LBI's financial condition on a consolidated basis.

Lyondell held legal title to the bank account from which the transfers were made. The account was solely in its name, and it had the ability to use the funds in the account to pay off creditors of its choosing, exemplified by the payments to Access. Furthermore, the Defendants did not put forth enough facts that would support a conclusion that Access was in complete control of the commingled account or at least present facts that would show that Lyondell had limited use of the commingled account. Just because Lyondell was an indirect and wholly owned subsidiary of LBI, transfers of interest in Lyondell's property do not equate to transfers of LBI's property. *Regency*, 216 B.R. at 377 ("At most, the transfers diminished the underlying value of the [subsidiary's] shares, but this does not amount to a transfer of Holdings's property."). The presumption that funds belong to the entity in whose name the account is established is inapplicable in this case because the account contained commingled funds. However, the presumption is not necessary to reach the above conclusion. Thus, Lyondell is the relevant party for ascertaining whether the Trustee can avoid the $300 million transfer to Access under section 547(b), and therefore, when analyzing the insolvency requirement of section 547(b), the analysis should be limited to Lyondell.

2. The Trustee Has Not Proven That Lyondell Was Insolvent in October 2008

a) <u>Maxwell's Testimony Is Not Persuasive</u>

The Trustee bears the burden to prove that the relevant borrower under the Access Revolver (either LBI or Lyondell) was insolvent on the dates of the October Repayment. *See In re Roblin Indus., Inc.*, 78 F.3d at 34. For the reasons discussed in the Facts section of this Opinion, the Court finds the expert testimony of Anders Maxwell unreliable. *See supra*, Sections IV.M and IV.N. Accordingly, the Court will not extrapolate Lyondell's stand-alone insolvency based on Maxwell's unreliable testimony regarding LBI on a consolidated basis. It bears repeating that the Trustee changed course on this issue at the eleventh hour, after arguing for the entire trial that LBI was the relevant entity for this determination. Because Maxwell's testimony is the only evidence the Trustee has put forward regarding Lyondell's (or LBI's, for that matter) insolvency at the time of the October Repayments, the Trustee has not carried his burden to prove that the October Repayments were an avoidable preference.

b) <u>Emails Mentioning Bankruptcy Are Not Persuasive as to Balance-Sheet Insolvency</u>

The Trustee also relies on several internal LBI email chains that reference the possibility of bankruptcy. The Trustee cites, among others, an October 9, 2008, internal Access email noting that LBI might need to draw on the Access Revolver "under extreme circumstances," "likely on or close to Chapter 11." (PX-605 (Email from Afota to Benet, re: Notes on LBI Meeting, dated 10/9/2008).) Upon being informed that LBI needed to draw on the Access Revolver, Blavatnik responded "thats [sic] very bad." (PX-603 (Email among Blavatnik, Trautz, et al., re: Access Revolver, dated 10/9/2008).)

Although these emails may show that LBI employees were considering bankruptcy as a future possibility, none of this internal discussion shows that LBI was actually balance-sheet insolvent at the dates of the October Repayments. LBI was no doubt experiencing serious financial stress. A bankruptcy filing may have been likely, but the applicable test for a preference claim is not whether management at the company was considering a chapter 11 filing. The test is balance-sheet insolvency. The Court has considered the emails and other evidence introduced at trial showing that LBI considered the possibility of bankruptcy, and finds them unpersuasive as to balance-sheet insolvency.

D. Breach of Contract

1. AI International's Performance Was Not Excused Under the MAC Clause

The Defendants do not contest that a contract existed between the parties or that AI International refused to fund the requested draw in December 2008. Rather, the Defendants argue that LBI's impending chapter 11 filing constituted a material adverse change, excusing AI International's performance under the Access Revolving Credit Agreement's MAC clause. (*See* ECF Doc. # 906 ("Defendants' Post-Trial Brief") at 208–10.) The Defendants urge that LBI's preparations for bankruptcy are analogous to a decline in revenues, citing *Pan Am Corp. v. Delta Air Lines*, 175 B.R. 438, 492 (S.D.N.Y. 1994) (concluding that a significant revenue shortfall, including a $23 million shortfall in a single month, constituted material adverse change).

The Court will not infer a solvency requirement where none was drafted by the parties. The Access Revolving Credit Agreement (as well as the 2007 Revolver, which served as the model for the Access Revolver) was drafted with a solvency requirement *at the time of closing*. *See supra* Section IV.K.2. Both parties agree that the Access Revolving Credit Agreement (like the 2007 Revolver) did not include a solvency requirement *at the time of draw*. *See supra* Section IV.K.2. The comparison to the 2007 Revolver is apt, but the Court notes a significant difference between the 2007 Revolver and the Access Revolver: the 2007 Revolver was a senior secured credit facility, while the Access Revolver was unsecured. Potential preference concerns under the 2007 Revolver were minimal, because even if the borrowers were determined to be insolvent at the time of a draw, the borrowing would be secured. The 2007 Revolver did not contain an ongoing solvency requirement for the good reason that it was largely unnecessary, given the security for the loan. The Access Revolver contained no such security interest (and consequently carried a higher interest rate, as the parties have noted). This consideration makes it even less likely that the parties intended the Access Revolver to contain an ongoing solvency requirement, when the agreement it was based on had every reason *not* to contain such a requirement.

As in *JC's East* and *River Terrace*, this Court will consider the entirety of the agreement to discern the parties' intent, rather than reading the MAC clause in isolation. *See JC's East,* 1995 WL 555765, at *3; *River Terrace*, 10 Misc. 3d at *4–5. The inclusion of a solvency requirement at the time of closing highlights the lack of such requirement at the time of a loan draw request. The parties were clearly capable of drafting a solvency requirement, as they did to require the borrower's solvency as of the closing of the agreement. That the parties did not include a solvency requirement as a condition precedent to a draw on the Access Revolver evinces the parties' intent that no such requirement should apply.

Importantly, the Defendants did not indicate, and the Court was unable to locate in its own research, any case inferring a solvency requirement from a MAC clause similar to that at issue here. The Court finds the Defendants' reliance on *Pan Am Corp.* unpersuasive. The *Pan Am Corp.* court found that the company's dramatically declining ticket sales and revenue, not its insolvency, constituted a material adverse change—the company was *emerging* from bankruptcy, not contemplating it, and the MAC clause defense was based on Pan Am's business performance, not its insolvency. *See Pan Am Corp.*, 175 B.R. at 493. In contrast, the Defendants here assert that the impending chapter 11 filing *itself* triggered the MAC clause. (*See* Defendants' Post-Trial Brief at 210 ("LBI had engaged counsel to prepare for a bankruptcy filing and was in fact on the verge of making that filing . . . . It is readily apparent that a draw request under those circumstances was designed to provide a cheap (and unsecured) alternative to DIP financing for a bankruptcy . . . .")[39] The parties had the opportunity to include an ongoing

[39] The Defendants make only a single mention of the "business conditions giving rise to" the impending bankruptcy without explaining what "business conditions" beyond the bankruptcy support their claim. (Defendants'

solvency provision in the Access Revolving Credit Agreement when it was drafted and executed in 2008, but they did not. The Defendants cannot now stretch the MAC clause to include it. Accordingly, this Court finds that the MAC clause does not create a solvency requirement at the time of the loan draw request, and AI International breached its obligation to LBI and Lyondell to fund the draw request in December 2008.

2. Damages

As noted above, only restitutionary damages are available to the Trustee on its breach of contract claim. *Lyondell I*, 544 B.R. at 92 ("[T]he limitation on damage clause, even though the Court has found it enforceable, does not preclude recovery of restitution.") The Trustee asserts, in the single paragraph of its post-trial brief dedicated to the breach of contract claim, that "approximately $12 million in fees were paid by [LBI and Lyondell]" under the Access Revolving Credit Agreement between March 27, 2008, and the Petition Date (the "Commitment Fee"). (Trustee's Post-Trial Brief at 98–99; Trustee's Proposed Findings of Fact, ECF Doc. # 909 ¶ 996.) Notably, while the Trustee has consistently estimated the Commitment Fee at $12 million (*see Lyondell I*, 544 B.R. at 90–91 (Judge Gerber noting that "The Trustee further argues . . . he is still entitled to restitution for approximately $12 million in fees"); ECF Doc. # 837 at 41–42 (estimating Commitment Fee at $12 million)), the Defendants do not contest the amount of the Commitment Fee. The Defendants instead argue that the Trustee has not subtracted the benefits of the Access Revolver from the amount of the total Commitment Fee. (ECF Doc. # 906, Defendants' Post-Trial Brief at 210.)

Post-Trial Brief at 210.) This one-off mention of "business conditions" is not enough to overcome the Defendants' overwhelming reliance on LBI's impending bankruptcy.

Restitution "aims to restore the nonbreaching party to as good a position as the one she occupied before the contract was made, without attempting to compensate her for consequential harms." *360 Networks Corp. v. Geltzer (In re Asia Glob. Crossing, Ltd.)*, 404 B.R. 335, 341 (S.D.N.Y. 2009). As the court in *Asia Global Crossing* put it, restitution damages may be characterized as "the value of the benefit the defendant has unjustly retained." *Id.* at 342. The Court is also guided by the Restatement of Restitution in its calculation of damages here. "When restitution is intended to strip the defendant of a wrongful gain, the standard of liability is not the value of the benefit conferred but the amount of the profit wrongfully obtained. Unjust enrichment in such cases is measured by the rules of § 51(4)–(5)." RESTATEMENT (THIRD) OF RESTITUTION AND UNJUST ENRICHMENT § 49 (2011). Section 51 provides that, with an exception for valuing goods at market value that is inapplicable here, "the unjust enrichment of a conscious wrongdoer . . . is the net profit attributable to the underlying wrong. The object of restitution in such cases is to eliminate profit from wrongdoing while avoiding, so far as possible, the imposition of a penalty." *Id.* § 51.

With scant argument from the parties on either side of this issue, the Court finds that the most equitable way to calculate restitutionary damages in this case is to estimate the benefits paid for but not received by LBI. LBI unquestionably derived some benefit from the $12 million Commitment Fee, most notably in the form of the liquidity provided by the October Draw. The $300 million October Draw constituted 40% of the $750 million total amount of the Access Revolver. The Court finds that the best way to "eliminate profit from wrongdoing while avoiding . . . the imposition of a penalty" is to award as restitutionary damages the amount of the Commitment Fee minus 40%, to represent the amount of benefits derived by LBI in connection with the October Draw. Accordingly, the Trustee is entitled to recover 60% of $12 million, or $7.2 million—representing the value unjustly retained by Access.

E. Claims Under Luxembourg Law

By way of background, and as explained by both parties' experts, Luxembourg is a civil law country. Accordingly, Luxembourg courts must render their decisions on the basis of the applicable laws and regulations. In interpreting laws and regulations, a Luxembourg judge is not bound by *stare decisis* as are courts in the United States. Court precedents are of persuasive nature only. However, to the extent that there is case law on a given subject matter, in particular case law at the level of the Court of appeal or the Court of cassation, a judge would consider that case law persuasive. In analyzing previously decided cases, courts primarily rely on the core principles, and the facts of such previously decided cases will usually be analyzed only to determine if there are specific circumstances surrounding the case at issue which make the core principles inapplicable. As explained below, Counts 6 and 7 arise under the Luxembourg Civil Code and the Companies Act of August 10, 1915. The Luxembourg Civil Code is based on the French Napoleonic Code of 1804, although subsequently modified. The Companies Act of August 10, 1915, as subsequently amended, is the main act providing a regulatory framework to companies operating under Luxembourg law.

For the reasons explained below, the Trustee fails to prove his claims for tort breach of fiduciary duties under Luxembourg law against Blavatnik or Access Industries as *de facto* managers of Basell or LBI, against Kassin as *de jure* manager of the GP, or against Blavatnik, Kassin, or Benet as members of the Supervisory Board of LBI.

1. The Trustee Fails To Prove his Claim Against Blavatnik or Access Industries as De Facto *Managers of Basell or LBI*

The Trustee has the burden of proving that (i) Blavatnik or Access acted as *de facto* director of Basell and LBI; (ii) their actions in that capacity constituted a "fault" or misconduct" within the meaning of Luxembourg law; and (3) such misconduct caused harm to Basell and LBI. (*See supra* SectionV.E.2(a).) The Trustee introduced sufficient evidence at trial to prove that Blavatnik and Access acted as *de facto* directors of Basell and LBI. However, as explained in Section VI.A.2, the Trustee failed to prove at trial that LBI was insolvent as of the Closing Date. It follows that the Trustee's claim against Blavatnik or Access for breach of fiduciary duties under Articles 1382 and 1383 of the Luxembourg Civil Code must also fail, because the Trustee has not proven that any "fault" occurred. Indeed, the Court concludes that Basell and LBI were comfortably solvent and adequately capitalized at the Closing Date. The evidence also established a good business reason for pursuing and completing the Merger. Obviously, things turned out quite badly, but hindsight does not support a finding of fault or misconduct.

a) <u>Blavatnik and Access Acted as De Facto Directors of Basell and LBI</u>

The record shows clear evidence that Blavatnik and Access took affirmative and independent acts of management of Basell and LBI, in lieu of conduct by the managers of the GP. As discussed above (*see supra* Section V.E.2(1)), the parties disagree as to whether the alleged *de facto* director must have substituted itself for the *de jure* managers, or whether simply controlling the *de jure* managers is sufficient. The Court finds this distinction largely semantic; whether characterized as control or as "substitution," the Court holds that under either formulation of the test, Blavatnik's level of control over the *de jure* managers was high enough to form the basis for a finding of *de facto* directorship under Luxembourg law.

The Court has already discussed at length Blavatnik's involvement with the Merger negotiations. (*See supra* Sections IV.C–F.) Blavatnik held key decision-making power in the Access group and personally represented Basell in the merger negotiations with Lyondell.

Blavatnik founded Access and serves as its chairman. (10/21 Trial Tr. (Blavatnik) at 1016:10–22, 1069:12–14, 1079:4–23; 1082:9–12, 1083:23–1084:6.) Blavatnik directly or indirectly owns 100% of Access and its wholly-owned subsidiaries. (*Id*. at 1069:15–17.) The managers of the GP understood that Access (and therefore Blavatnik) was the ultimate owner of Basell and that he was the ultimate decision maker: for instance, Trautz testified at trial that the reason he turned down the position of Chairman of LBI was, in part, because he believed that the board would defer to Blavatnik rather than to him were he to take the position, stating: "[W]hen we came to the chairman position, I said to Len, 'Len, this is a privately owned company who has an owner, and it doesn't make sense to me to sit at the head of the table as chairman and you as the owner sit in the room and discuss something, because it's natural that everybody would look at you at the end and not at me.'" (Trautz Dep. Tr. at 121:22–122:9.) As ultimate owner of the company, Blavatnik was in position to give "instruct[ions]" to his "team," the members of which were to give him "their best advice." (Blavatnik 2009 Decl. ¶ 17.)

Blavatnik's role in the management of Access's subsidiaries was so prevalent that board members of Basell entities were unsure what board they sat on. (11/1 Trial Tr. (Benet) at 2013:9–14:5 (Benet was "not sure what the formal name of the [Basell] entity [he was sitting on the board of] was"); 10/31 Trial Tr. (Kassin) at 1751:25–52:10 (Kassin was "not sure" and "couldn't recall" whether, prior to the merger, he was a member of the managing board of Basell GP); 11/2 Trial Tr. (Thorén) at 2419:24–20:8 (Thorén couldn't recall whether he was "a manager or an executive vice president of [Access Industries Management, [LLC]" and whether he was a manager at any time of Basell Funding S.a.r.l.); *id.* at 2421:14–21 (Thorén didn't recall whether he was a manager of NAG Investments, LLC or Basell Funding S.a.r.l.); Alex Blavatnik Dep. Tr. 38:3–20 (A. Blavatnik saying "I think I'm—I was or may be still—I think I was the manager for [Basell Funding S.a.r.l].").)

The Court has considered the expert declaration of Pieter Van der Korst, and notes Van der Korst's explanation that Basell B.V., the Dutch company which sat below Basell AF in Access' corporate structure, was primarily "the entity where the business of the Basell group of companies was run." (Van der Korst Report, DX-815 ¶ 6.) Van der Korst maintains that Blavatnik's involvement in the merger negotiations and other corporate decision-making for Basell and LBI was appropriate because Blavatnik acted in his official capacity "as a member, and the Chairman, of the Supervisory Board of Basell B.V., the company in the Basell family where strategic decisions were discussed and approved." (*Id.* ¶ 28.) But corporate formalities matter. Although the Court finds this explanation of Blavatnik's behavior plausible in a practical sense, it does not change the analysis under Luxembourg law.

Accordingly, the Court finds that Blavatnik and Access carried out affirmative and independent activity in the management of the combined entity in the context of the Merger, on a long-term and repeated basis, and in lieu of the managers of the GP. The Court thus finds that the Trustee has met his burden of proving that Blavatnik and Access acted as *de facto* directors of Basell and LBI. It follows that in their *de facto* capacity, Blavatnik and Access were exercising acts of management, but had no contractual relationship with LBI. *See CA October 1997 Decision*. Count 6, seeking liability of Blavatnik or Access on a contractual basis pursuant to Article 59 § 1 of the Companies Act, must therefore be rejected. As explained in Section

V.E.2(a), Blavatnik and Access's liability as *de facto* managers must be assessed under tort law pursuant to Articles 1382 and 1383 of the Luxembourg Civil Code.

b) <u>Blavatnik Did Not Commit a Fault or Misconduct That Resulted in Remediable Harm to Basell or LBI</u>

In addition to proving *de facto* directorship, the Trustee must prove that Blavatnik's conduct constituted a "fault or "misconduct" within the meaning of Luxembourg law under Articles 1382 and 1383 of the Luxembourg civil Code. Luxembourg authorities have not addressed the relevant standard of conduct under which such "fault" or "misconduct" must be scrutinized, and this Court is not prepared to extend Luxembourg law by addressing legal issues unresolved by Luxembourg authorities. *See Nortel Networks*, 469 B.R. at 504. However, to the extent that Blavatnik's management activities would not rise to mere "misconduct" under the ordinary standard of liability, they would of course not rise to a "fault severable from the manager's function" under the heightened standard. Accordingly, since the Court finds below that Blavatnik's actions do not rise to a fault under the "mere misconduct" standard, it does not need to make a legal determination as to the applicable standard under Luxembourg law.

The Trustee alleges that Blavatnik (i) placed his own personal interests above those of Basell, by extracting over one billion dollars in capital from Basell just before the merger; (ii) knowingly set detrimental parameters for funding the merger; and (iii) imposed an unreasonably short diligence time to complete the merger. The Trustee, however, fails to prove any of these allegations, as the Trustee fails to prove that Basell was insolvent as of the closing of the Merger and thus that Blavatnik's actions were not in the best interest of Basell and LBI.

The Trustee has not proven that Blavatnik placed his own interest above and to the detriment of Basell and LBI in withdrawing liquidity from Basell in the context of the Merger. On December 7, 2007, Basell distributed $100 million to NAG, which is owned by Blavatnik.

(*See* 10/21 Trial Tr. (Blavatnik) at 1077:20–78:01.) This distribution was the exercise by NAG, and indirectly by Blavatnik, of its right to a share of the company's dividends. Similarly, on the Closing Date, Basell Funding and Basell respectively paid approximately $523.8 million to Nell (JX-36 (Stock Purchase Agreement)) and $674.3 million to Merrill Lynch Equity Derivatives as Toehold Payments I and II. (JX-74 (Closing Funds Flow Memorandum) at .005.) As previously explained in Section VI.A, the Trustee has not proven that the Toehold Payments were fraudulent transfers. Finally, on the same day, Basell paid Nell approximately $127.6 million pursuant to the 2007 Management Agreement. (JX-74 (Closing Funds Flow Memorandum) at .008.) However, the Trustee did not prove at trial that Nell failed to provide the agreed-upon services, or that Nell's fees were unreasonable, especially in light of the Trustee's failure to prove Basell's insolvency as of the Closing Date. Accordingly, Blavatnik cannot be held liable for paying Nell for the services provided by it pursuant to the 2007 Management Agreement.

Further, the Trustee did not establish at trial that the Merger financing was detrimental to the combined entity. The Court finds today that the Trustee did not prove LBI's capital structure on the Closing Date was unsound. (*See supra* Section VI.A.1.) The Trustee's expert agrees that managers receive the deference of a "business judgment rule" under Luxembourg law. (*See supra* Section V.E.2(a)(2).) Given that the Trustee has not proven LBI was insolvent on the Closing Date, the Court will not find that Blavatnik breached his duty to act as a prudent and diligent director. The Trustee's allegation that Blavatnik imposed an unreasonably short diligence time to complete the merger must be rejected for the same reasons. Accordingly, this Court finds that Blavatnik has not committed an actionable fault or misconduct as *de facto* manager of Basell and LBI. The Trustee's claim therefore fails.

In any event, even if the Court found that Blavatnik had committed a "fault" within the meaning of Luxembourg law, the Trustee fails to prove the proximate causal relationship between Blavatnik's alleged misconducts and the alleged harm to the combined entity. According to the Trustee, damages incurred by LBI include, *inter alia*, (i) $598.4 million in professional and other fees in connection with the Merger (including approximately $127 million paid to Nell); (ii) at least $1 billion in additional interest expenses in 2008; (iii) at least $1.795 billion in additional interest expense during LBI's bankruptcy proceeding; (iv) $390 million of professional fees incurred and paid during the bankruptcy proceeding; and (v) $36 million in fees incurred in connection with the ABL upsizing (part of a total $230–$430 million in fees and interest expenses, which total includes interest expenses noted in the above categories). (Trustee's Post-Trial Brief at 78.) However, the Trustee fails to prove that these costs would not have been incurred had Blavatnik not committed the alleged misconducts. Particularly, the Trustee did not establish that the interest expenses and professional and other fees in connection with the Merger would have been reduced had the GP Managers affirmatively managed Basell instead of Blavatnik. Nor did the Trustee prove such direct causal relationship in relation to the additional interest and professional expenses incurred during LBI's bankruptcy proceeding. As the Court finds today, the Trustee failed to prove that LBI's chapter 11 filing was the result of Blavatnik's alleged misconduct, rather than of the aftermath of the Great Recession of 2008. Accordingly, the Trustee's tort claims under Luxembourg law against Blavatnik and Access Industry as *de facto* managers of the combined entity fail.

2. *The Trustee Fails To Prove his Claim Against Kassin and Bigman as Managers of the GP*

The Court finds for the following reasons that the Trustee fails to prove his claim against Kassin as individual manager of the GP for his alleged abdications of duty in the conduct of his formal role based on Article 59 § 2 of the Companies Act and, in the alternative, on Articles 1382 and 1383 of the Luxembourg Civil Code.

a) The Trustee Fails To Prove a Claim Under Article 59 § 2 of the Companies Act

The Trustee contends that, under Article 59 § 2 of the Companies Act, Kassin should be held liable for violating Article 191 of the Companies Act and Article 9.1 of the GP's articles of association for abdicating his responsibility as a manager of the GP and following the direction of Blavatnik in taking such steps as were necessary to cause the Merger and related transactions to occur.

However, as the Trustee's expert on Luxembourg law concedes, the question whether a *de jure* director can be held liable to third parties for a breach of Article 59 § 2 of the Companies Act because he did not comply with his statutory obligation to affirmatively manage the company has not been addressed by Luxembourg courts. (Thiebaud 2016 Report, PX-813 at 39.) Thiebaud cites two Luxembourg court decisions that he claims can be interpreted as having held liable *de jure* directors that have not fulfilled all their functions as directors in the company under Article 59 § 2 of the Companies Act. (*Id.* at 39–40.)

These decisions are distinguishable from this case. Both of them held the *de jure* director liable for failing to manage the company, but were predicated on a breach of a mandatory prescription of the Companies Act. Tribunal d'arrondissement de et à Luxembourg [Luxembourg district court], August 14, 2001, 69686 (holding the director liable under Article 59 § 2 for performing banking activities in breach of the limitation of the corporate object of the company as expressly defined in its articles of association and in breach of express provisions of the Companies Act in failing to convene the annual general meeting of the shareholders of the company to approve the annual financial statement of the company and in failing to publish the balance sheet and the profit and loss account of the company in the Luxembourg official gazette); Tribunal d'arrondissement de et à Luxembourg [Luxembourg district court], May 30, 1980, 240/80, *aff'd*. Cour d'appel [CA] [court of appeal], March 1, 1982, 5748 (holding the director liable under Article 59 § 2 for failure to prepare the financial statement of the company and submit them to the general meeting of the shareholders for their approval and subsequent publication in the Luxembourg official gazette).

Here, the Trustee alleges a breach of Article 59 § 2 for failing to affirmatively manage the company, but is unable to point to any breach of a mandatory prescription of the Companies Act or the company's articles of association. Luxembourg courts have never held directors liable under these circumstances. "[I]n the absence of direct precedent," holding Kassin liable under Article 59 § 2 of the Companies Act for failure to manage the company would thus be "usurp[ing] the function of the legislative authorities" of Luxembourg by extending foreign law. *See Nortel Networks,* 469 B.R. at 504. Accordingly, this Court finds that the Trustee fails to prove a claim under Article 59 § 2 of the Companies Act against Kassin as an individual manager of the GP.

In any event, even if Kassin committed a fault under Article 59 § 2 of the Companies Act, the Trustee has failed to prove the direct causal relationship between his failure to manage the combined entity and the alleged financial harm to LBI, for the same reason he failed to prove causation and damages with respect to the claims against Blavatnik and Access.

b) The Trustee Fails To Prove a Tort Claim Under Articles 1382 and 1383 of the Luxembourg Civil Code

The Trustee further alleges that, if Kassin is not held liable under Article 59 § 2 of the Companies Act, his conduct should be assessed under Articles 1382 and 1383 of the

Luxembourg Civil Code to determine whether a misconduct that is severable from his functions as manager of the GP was committed.

Similarly to the Trustee's claim under Article 59 § 2 of the Companies Act, the question whether a *de jure* director can be held liable to third parties for a breach of Articles 1382 and 1383 for failing to manage the company, and whether such misconduct is severable from the director's functions, has not been addressed by Luxembourg courts. In support of the Trustee's argument, Thiebaud cites three Luxembourg and French cases that held the director liable for committing a "fault that can be separated from the functions of the director." However, the courts in these cases held management liable where the director took *affirmative management actions*, in contrast to the allegations of inaction here. *District Court 2007 Decision* (holding that the decision of directors to make excavation works to build a property on a land against the recommendation of experts, which caused damages to neighboring property, was misconduct severable from their functions as managers); Cour de cassation [Cass.] [supreme court for judicial matters], com., May 18, 2010, 09-66172 (Fr.) (holding that the decision of the director of a company specialized in landscaping to carry out construction work, not authorized under the company's articles of association and without subscribing to the mandatory insurance policy, was misconduct severable from his functions as manager); Cour de cassation [Cass.] [supreme court for judicial matters], com., December 17, 2013, 12-25638 (holding that the decision of the director to retain goods in the company's inventory after selling those goods to a buyer, while misleading a new director to sell the same goods to another buyer, was misconduct severable from his functions as manager). This distinction matters. Luxembourg courts have never held that a director's *failure* to act constituted misconduct severable from his or her functions as manager. The Court thus finds that holding Kassin liable under Articles 1382 and 1383 for failure to manage the company would be to "usurp the function of the legislative authorities" of Luxembourg by extending foreign law. *See Nortel Networks*, 469 B.R. at 504. Accordingly, this Court finds that the Trustee has failed to prove a claim under Article 1382 and 1383 of the Luxembourg Civil Code against Kassin as individual manager of the GP.

As previously explained, even if the Court were to find that Kassin committed a misconduct severable from his functions as manager, the Trustee provides no persuasive evidence as to the direct causal relationship between the his failure to manage the combined entity and the alleged financial harm to Basell and LBI.

3. The Trustee Fails to Prove his Claim Against Blavatnik, Kassin and Benet as Members of the Supervisory Board of LBI

The Trustee also asserts a claim against Blavatnik, Kassin, and Benet as members of the Supervisory Board of LBI under Article 59 §§ 1 or 2 of the Companies Act, for failing to exercise their "veto rights" under the LBI's Articles of Association to prevent the upsize of the ABL Facilities and the Access Revolver or for failing to exercise their mandates as members of the Supervisory Board. This claim also fails.

Central to the Trustee's claim against the members of the Supervisory Board of LBI is the allegation that Blavatnik, Kassin, and Benet had, in that capacity, a right to veto a number of decisions taken by LBI's management. Article 16 of LBI's Articles of Association does provide for the Supervisory Board's "prior approval" of certain management acts that "shall be submitted to the Supervisory Board by the management." (LBI Articles of Association art. 16.) Similarly, Article 15 makes a reference to "the authorizations required pursuant to Article 16." (LBI Articles of Association art. 15.) The use by these provisions of the expressions "approval" and "authorizations" in isolation suggests that the Supervisory Board possessed a veto right over certain acts of LBI's management.

However, the provisions of a company's articles of association must be read and understood as a whole. In that regard, Article 15 § 1 expressly provides that "the Supervisory Board shall carry out the permanent supervision of the management of the Company by the manager (*without being authorized to interfere with such management*), including the supervision of its operations and the business of the company as well as its financial situation, including more in particular its books and accounts." (LBI Articles of Association art. 15 § 1 (emphasis added).) Such express limitation to the Supervisory Board's powers appears on its face hardly compatible with any alleged "veto right" that the Supervisory Board would exercise against the management's decisions, implying that article 15 sections 1 and 3 of LBI's articles of association are directly contradictory. However, reading the articles of association as a whole reveals a different answer. Article 15 sections 1 and 3 are not irreconcilable because each of them encompasses distinct management acts. Under section 1, the Supervisory Board is to "carry out the permanent supervision of the management of the company by the manager (without being authorized to interfere with such management)": in other words, the Supervisory Board is to supervise (but not interfere with) ordinary business activities. On the other hand, under section 3, management must submit certain activities enumerated in Article 16 to the Supervisory Board for "authorization." The activities listed in Article 16 relate to decisions of greater importance to LBI, *e.g.*, "any granting of security"; "any investment in fixed assets with a value exceeding thirty million euro (EUR 30,000,000.-) per investment." (LBI Articles of Association art. 16 §§ b, f.) It is a stretch to characterize the Supervisory Board's "authorization" as a "veto right," but the articles of association clearly contemplate that the Supervisory Board will be involved with the activities listed in Article 16.

Of particular relevance here, LBI's management was required to submit for "prior approval" to the Supervisory Board "the entry into of a credit facility (howsoever called) with a term of up to one year and exceeding twenty million euro (EUR 20,000,000.-) and the entry into any credit facility (howsoever called) with a term exceeding one year of fifty million euro (EUR 50,000,000.-) or more, *unless the relevant facility had been included in a previously approved business plan and/or financing plan*." (LBI Articles of Association art. 16 § d (emphasis added).) Both the Access Revolver and the upsize of the ABL Facilities qualified for this requirement. The Access Revolver provided for a $750 million revolving facility, entered into on March 27, 2008, and to be paid back by September 28, 2009, at the latest. (*See* JX-51 (Access Revolving Credit Agreement).) The ABL Facilities were upsized by $600 million on April 30, 2008. (JX-54.)

The Defendants do not argue, and have introduced no evidence showing, that the approval of the Access Revolver and the upsize of the ABL Facilities were ever submitted to the Supervisory Board for prior approval. However, Article 16 § (d) waives management's duty to seek the Supervisory Board's prior approval if "the relevant facility had been included in a previously approved business plan and/or financing plan." The ability to borrow $750 million on an unsecured basis was first contemplated by LBI and the Banks at the time of the Merger in the form of a debt basket. (JX-45 (Senior Credit Agreement, dated December 20, 2007).) On March 27, 2008, LBI, Basell Finance, and Lyondell executed the Access Revolving Credit Agreement in the amount of $750 million, with many of the provisions of the Access Revolving Credit Agreement taken verbatim from the 2007 Senior Credit Agreement. (*Compare* JX-45 (Senior Credit Agreement) *with* JX-51 (Access Revolving Credit Agreement).) Similarly, the ability to upsize the ABL Facility by $600 million was first considered in the context of the Merger (JX-22 at .039–40 (Commitment Letter, dated October 29, 2007)) and was later provided for in the ABL Facility Agreement by means of an "accordion" feature, executed by Basell and LBI, among others, on the date of the Merger. Thus the plan to enter into the Access Revolver and upsize the ABL Facility are both contemplated in the Merger financing documents, which had already been approved in the context of the Merger.

Therefore, the Court finds that the Access Revolver and ABL Facilities upsizing had already been approved during the Merger. Accordingly, the Trustee did not prove at trial that LBI's Supervisory Board failed to exercise its "veto right" with respect to those facilities.

The Court notes that even if it found that such veto right was conferred upon the members of LBI's Supervisory Board, the Trustee did not prove under Article 59 § 1 that the upsizing of the ABL Facilities or the approval of the Access Revolver were not in the corporate interest of LBI, much less that these decisions were not even *guided* by the corporate interest of LBI. (LBI Articles of Association art. 15 § 3.) The ABL Facilities' upsizing and the Access Revolver provided sources of liquidity to LBI, during a time of increasing market volatility and liquidity challenges. The Trustee did not even attempt to prove at trial that these liquidity sources were not in LBI's corporate interest; in fact, the Trustee submitted significant evidence that LBI needed *more* liquidity. It strains credulity that the Trustee argued zealously that LBI's liquidity was insufficient, yet challenges two of LBI's most significant liquidity facilities as not in LBI's corporate interest.

4. Without an Underlying Luxembourg Violation, the Texas Aiding and Abetting Claim Also Fails

In Count 18, the Trustee alleges that AIH and AI Chemical aided and abetted the Supervisory Board's and the GP Managers' breach of their fiduciary duties owed to LBI under Luxembourg law. Judge Gerber ruled that Count 18 is governed by Texas law. (ECF Doc. #

698.) Texas law requires the Trustee to prove "(1) the existence of a fiduciary relationship; (2) that the third party defendant knew of the fiduciary relationship; and (3) that the third party defendant was aware that it was participating in a breach of that relationship." *See Meadows v. Hartford Life Ins. Co.*, 492 F.3d 634, 639 (5th Cir. 2007). The Court holds today that the Trustee has not proven that there was an underlying breach of fiduciary duty under Luxembourg law. The Texas claims thus fall along with the Luxembourg claims.

VII. CONCLUSION

These were well-lawyered, hard fought cases that have lasted many years, with many written decisions by Judge Gerber when he presided over the cases and by me since the cases were reassigned after Judge Gerber retired. Many of the original claims were resolved by motion or settlements. There are additional Lyondell cases awaiting the outcome of this trial. The results reflected in this lengthy decision may well be dispositive of some or all of the issues in those remaining cases, too. Based on a very complete trial record, as reflected in the extensive findings of fact included in this Opinion, the Trustee has succeeded in prevailing on only one claim; the Defendants have prevailed on all of the others.

Defendants' counsel shall prepare and settle a judgment consistent with this Opinion within fourteen (14) days from the date of this Opinion, pursuant to Local Bankruptcy Rule 9074-1.

IT IS SO ORDERED.

Dated: April 21, 2017
New York, New York

Martin Glenn
MARTIN GLENN
United States Bankruptcy Judge