

SUPREME COURT OF THE STATE OF NEW YORK  
COUNTY OF NEW YORK

PEOPLE OF THE STATE OF NEW YORK,  
By LETITIA JAMES,  
Attorney General of the State of New York,

Plaintiff,

– against –

EXXON MOBIL CORPORATION,

Defendant.

Index No. 452044/2018

IAS Part 61  
Hon. Barry R. Ostrager

**PLAINTIFF’S MEMORANDUM OF LAW IN OPPOSITION TO  
DEFENDANT’S MOTION *IN LIMINE* TO EXCLUDE  
THE PROPOSED TESTIMONY OF ELI BARTOV**

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### PRELIMINARY STATEMENT

Exxon Mobil Corporation (“ExxonMobil”) seeks to exclude the trial testimony of Dr. Eli Bartov based on an assortment of unfounded disagreements with his expert opinion. In his report, Dr. Bartov conducted a detailed event study analysis and concluded that ExxonMobil’s stock price was inflated due to the company’s alleged misrepresentations. In addition, Dr. Bartov analyzed ExxonMobil’s long-lived asset impairment evaluations and concluded that (i) ExxonMobil’s omission of GHG proxy costs from its cost projections in its 2015 impairment testing was contrary to the applicable accounting guidance, and (ii) had ExxonMobil included such costs, its Mobile Bay asset would have been subject to an impairment loss.

ExxonMobil has not challenged Dr. Bartov’s credentials or his relevant experience, and for good reason. Dr. Bartov has a Ph.D in accounting and is a Professor of Accounting at the Stern School of Business at NYU, where he has taught since 1992. (Affirmation of Jonathan Zweig Ex. A, Bartov Rpt. ¶ 1.) His academic research, which has been widely cited, has focused on topics that are highly relevant to his analysis in this matter, including capital markets’ use of accounting information, and impairment of long-lived assets. (*Id.* ¶¶ 4-5.) In addition to teaching, Dr. Bartov has consulted for major financial institutions including Citadel Investment Group and Goldman Sachs Distressed Proprietary Investing, and lectured before numerous others. (*Id.* ¶ 9.) He has also served as a member of the Financial Accounting Standards Committee of the American Accounting Association, which advises the Financial Accounting Standards Board on contemporary accounting issues. (*Id.* ¶ 6.) Over the course of his career, Dr. Bartov has performed hundreds of event studies, many of which has been published in top-tier academic journals. (Zweig Ex. B, Bartov Tr. 26:10-18.)

Rather than challenging his qualifications, ExxonMobil questions the methodology Dr.

Bartov used in his event study and his impairment analysis. ExxonMobil contends that Dr. Bartov's testimony should be excluded because it is "unreliable and lacking proper foundation" and "speculative and contrary to the evidentiary record." Neither of these assertions is remotely true. Dr. Bartov's event study is based on a traditional regression model, which is the standard method for calculating damages in a securities case, and his impairment analysis is based on a straightforward application of Accounting Standards Codification 360 ("ASC 360"). Neither of these analyses is premised "on the type of 'novel science' implicating the concerns articulated in *Frye*." See *Nonnon v. City of New York*, 32 A.D.3d 91, 103 (1st Dep't 2006), *aff'd*, 9 N.Y.3d 825, 874 N.E.2d 720 (2007); see also *id.* (explaining that *Frye* is concerned only with "whether the experts' deductions are based upon principles that are sufficiently established to have gained general acceptance as reliable").

Dr. Bartov's analysis and methodology are fundamentally sound, and ExxonMobil will have a full opportunity to question him during cross-examination. Ultimately, the Court will be in the best position to weigh Dr. Bartov's expert opinion, along with all of the other evidence, after considering his testimony at trial. See *Kortright Capital Partners LP v. Investcorp Investment Advisers Ltd.*, 392 F. Supp. 3d 382, 397 (S.D.N.Y. 2019) (noting that, in bench trials, "there is no possibility of prejudice and no need to protect the factfinder from being overawed by 'expert' analysis," and concluding that, "unless the disputed evidence is wholly irrelevant or so speculative as to have no probative value, a court may freely receive the evidence and disregard it later," if appropriate (internal citations, brackets, and ellipses omitted)).

## **BACKGROUND**

### **I. Dr. Bartov's Event Study**

An event study is the standard method for measuring damages resulting from securities

fraud. Here, Dr. Bartov conducted an event study to assess whether ExxonMobil's alleged misrepresentations caused the company's stock price to be artificially inflated. Dr. Bartov's event study consisted of (1) identifying dates on which information concerning the truth of ExxonMobil's alleged misrepresentations was revealed to the market (*i.e.*, "corrective disclosures"); and (2) using a regression model to estimate the portion of ExxonMobil's stock price movement caused by the alleged misrepresentations ("abnormal returns") and also to exclude price effects unrelated to the alleged misrepresentations.

To identify potential corrective disclosures, Dr. Bartov conducted a systematic search on Dow Jones Factiva for news articles from major publications between April 1, 2014 and October 24, 2018 relating to ExxonMobil and containing the following keywords: (1) "climate change"; (2) either "investigate" or "investigation"; and (3) either "risks" or "allegations." There were 318 results. Dr. Bartov reviewed these results and determined that 310 were irrelevant or duplicative, which left eight potential corrective disclosure dates.

Next, Dr. Bartov ran a regression model to estimate the portion of ExxonMobil's stock price movement that resulted from the revelation of ExxonMobil's alleged misrepresentations. (Bartov Rpt. ¶ 53.) Based on the regression results, he estimated the "abnormal return" on each corrective disclosure date. He then tested the statistical significance of the abnormal returns, which he reported at the "commonly accepted" 5% significance level ( $p\text{-value} \leq 0.05$ ), as well as the 10% significance level ( $p\text{-value} \leq 0.1$ ), which, he explained, "can also provide useful information."<sup>1</sup> (*Id.* ¶ 62.) Dr. Bartov identified three dates on which ExxonMobil's stock price had a statistically

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<sup>1</sup> At a 5% significance level, there is at least a 95% chance that the stock drop was the result of corrective disclosures. At a 10% significance level, there is at least a 90% chance that it was the result of corrective disclosures.

significant abnormal return, one at the 5% level and two at the 10% level:

- On **January 20, 2016**, the Los Angeles Times announced that California Attorney General Kamala Harris was investigating whether ExxonMobil “repeatedly lied to the public and its shareholders about the risk to its business from climate change—and whether such actions could amount to securities fraud and violations of environmental laws.” (*Id.* ¶ 65.) Dr. Bartov’s event study showed an abnormal decline in ExxonMobil’s stock price of 2.14% on this date, with a *p*-value of 0.02 (2%), indicating statistical significance at the 5% level. (*Id.* ¶ 65.)
- On **September 20, 2016**, news broke that the SEC was investigating how ExxonMobil was accounting for the future costs of complying with climate change regulations when assessing future asset values. (*Id.* ¶ 67.) Dr. Bartov’s event study showed an abnormal decline in ExxonMobil’s stock of 1.72% on this date, with a *p*-value of 0.082 (8.2%), indicating statistical significance at the 10% level. (*Id.* ¶ 67.)
- On **June 2, 2017**, the New York State Office of the Attorney General (“OAG”) stated in a court filing that it “had evidence of ‘potential materially false and misleading statements by Exxon’ that could have led investors to think the U.S. oil giant company properly assessed the risks when it actually ignored a formula to estimate the impact of future environmental regulation on new deals.” (*Id.* ¶ 68.) Dr. Bartov’s event study showed an abnormal decline in ExxonMobil’s stock price of 1.43% on this date, with a *p*-value of 0.051 (5.1%), just short of the 5% threshold, but indicating statistical significance at the 10% level. (*Id.* ¶ 68.)

Finally, in reporting the inflation per share of ExxonMobil stock that was corrected by these disclosures, Dr. Bartov provided two separate estimates, one that considered only results statistically significant at a 5% level (*i.e.*, abnormal returns on January 20, 2016), and one that considered results statistically significant at a 10% level (*i.e.*, abnormal returns on all three dates). (Bartov Rpt. ¶ 70.)

## II. Dr. Bartov’s Assessment of ExxonMobil’s Impairment Evaluation

Dr. Bartov’s expert opinion concerning impairment is based upon the application of ASC 360, which provides a three-step process for recognizing and measuring the impairment of long-lived assets under Generally Accepted Accounting Principles (“GAAP”). It is undisputed that ASC 360 provides the applicable accounting standard. The dispute between the parties, as it relates to impairment, concerns whether ExxonMobil’s exclusion of GHG proxy costs from its cost



projections for purposes of its impairment evaluations prior to 2016 violated ASC 360 and the company's representations to investors. ASC 360 requires that economic assumptions used for purposes of impairment analysis must be "reasonable in relation to the assumptions used in developing other information used by the entity for comparable periods, such as internal budgets and projections . . . or information communicated to others." ExxonMobil takes the view, based on little more than its own assertion, that this rule was inapplicable to its impairment testing for its Mobile Bay asset in 2015. Dr. Bartov disagrees, based on substantial evidence and sound reasoning, as set out below. ExxonMobil also overlooks basic factual errors and substantial analytical flaws in the opinion offered by its own accounting expert, Linda MacDonald, which the Court will be in a position to weigh against Dr. Bartov's testimony at trial.

### **ARGUMENT**

#### **I. Dr. Bartov's Event Study Uses Generally Accepted Methods and Draws on Extensive Relevant Evidence**

Dr. Bartov's testimony that ExxonMobil's stock price was artificially inflated due to the misrepresentations alleged in the Complaint is properly founded on the results of his event study analysis, as well as his expertise in interpreting those results. It is undisputed – by the parties and their experts – that an event study is an appropriate method of measuring harm to investors from a company's misrepresentations. Nor is there any question that Dr. Bartov's event study follows the generally accepted framework for conducting an event study, which consists of identifying potential corrective disclosures and then applying a regression model to estimate the extent to which the price effects were caused by the corrective disclosures. At the first step, Dr. Bartov employed a rigorous and comprehensive search of credible news outlets to identify dates when potentially corrective information was reported and thus revealed to the market. At the second step, Dr. Bartov used a regression model to calculate the price impact that, with a high degree of

statistical certainty, resulted from the corrective disclosures, as opposed to other market factors. Finally, Dr. Bartov reported the results of this analysis at both a 5% significance level and a 10% significance level, and set out in detail the statistical relationship between the corrective disclosures and the abnormal returns. Dr. Bartov's methodology was thus consistent with generally accepted practices.

**A. Dr. Bartov Appropriately Considers Event Study Results at the 5% and 10% Levels of Significance**

Dr. Bartov used an event study to assess the impact of ExxonMobil's alleged misrepresentations on the company's stock price. This methodology meets the standard for admissibility under New York law because it is "generally regarded as reliable by the scientific community." *Guzman ex rel. Jones v. 4030 Bronx Blvd. Assocs. L.L.C.*, 54 A.D.3d 42, 46 (1st Dep't 2008). ExxonMobil's own expert, Dr. Allen Ferrell, does not claim otherwise. (See Ferrell Tr. 39 (Q: ...[I]s the event study a generally accepted way to measure harm to investors from the corrective disclosure of alleged misrepresentations? A: Yes. . . . Generally speaking, an event study is the standard tool that's used in that analysis.")) The Court of Appeals has made clear that "the *Frye* test . . . requires no more" than establishing "the general reliability" of the expert's methodology. *People v. Wesley*, 83 N.Y.2d 417, 426 (1994).

Here, ExxonMobil seeks to exclude Dr. Bartov's testimony because of the way in which he reported his results – in particular, because he did not restrict his conclusions to results that were significant at a 5% level. However, Dr. Bartov's decision to report results at a 10% significance level for consideration by the finder of fact is no basis to exclude expert testimony, as it has no bearing on the soundness of his methodology. ExxonMobil offers no support for the novel – and drastic – suggestion that an expert's testimony should be excluded based not on the methodology employed by the expert, but rather on the expert's conclusions. (See ExxonMobil

Br. at 8.) *See also Nonnon*, 32 A.D.3d at 103 (“*Frye* is not concerned with the reliability of a certain expert’s conclusions, but instead with whether the experts’ deductions are based on principles that are sufficiently established to have gained general acceptance as reliable[.]” (internal citations and quotation marks omitted)).

To the contrary, “absolute certainty and the exclusion of every other possibility” is not required in order for an expert to properly draw a causal connection. *In re Anthony M.*, 63 N.Y.2d 270, 280-81 (1984). Courts considering whether to admit expert testimony based on event study analysis have held that “stock price movement is important and a valid way of assessing the existence of a cause-effect relationship, even if the movement is not statistically significant.” *Dean v. China Agritech*, No. CV 11-01331, 2012 WL 1835708, at \*3 (C.D. Cal. May 3, 2012). Similarly, courts have rejected the notion that the reliability of an expert’s methods should be determined by the statistical significance of the expert’s findings. *See Carpenters Pension Tr. Fund of St. Louis v. Barclays PLC*, 310 F.R.D. 69, 89 (S.D.N.Y. 2015) (crediting expert’s argument that “statistical significance” is not the “be all and the end all” of a “cause-and-effect relationship”).

In this case, Dr. Bartov determined that the results of his event study were statistically significant, and reported those results at both the 5% level and the 10% level. He finds that “there are three days on which ExxonMobil’s stock price had a statistically significant abnormal return (one day at the 5% level: January 20, 2016[;] and two days with statistically significant abnormal returns at the 10% level: September 20, 2016 and June 2, 2017).” (Bartov Rpt. ¶ 64.) Dr. Bartov’s report explains that while the 5% significance level is “commonly accepted,” discussing results at the 10% level is also appropriate because doing so “can provide useful information.” (*Id.* ¶ 62.)

ExxonMobil’s own expert concurs that “[t]here’s nothing wrong with reporting ten

percent.” (Zweig Ex. C, Ferrell Tr. 184:9-10.) Moreover, Dr. Ferrell testified that *he himself reported at the 10% level* in his expert report. (*Id.* (“I in fact report ten percent in my expert report.”)) As Dr. Bartov explained at his deposition, reporting results at the 10% level is particularly appropriate here because the abnormal returns on one of the disclosure dates – June 2, 2017 – demonstrated a *p*-value of 0.051, only 1/10th of one percentage point outside of the 5% significance level. (Bartov Tr. 376.) In other words, there is a 94.9% chance that the stock price movement Dr. Bartov found on June 2, 2017 was due to ExxonMobil’s corrective disclosure on that date, and only a 5.1% chance that it was due to other causes. According to Dr. Bartov, excluding the price effect on that date would have been “completely arbitrary.” *Id.*

The sources cited by ExxonMobil in support of its motion, and by its expert in his report, similarly refute the contention that reporting findings at the 10% significance level is inappropriate. For example, the Eleventh Circuit in *FindWhat Investor Group v. FindWhat.com* held that event study analysis need only “eliminate[e] other possible explanations for th[e] price drop, so that the factfinder can infer that it is *more probable than not* that it was the corrective disclosure—as opposed to other possible depressive factors—that caused at least a ‘substantial’ amount of the price drop.” 658 F.3d 1282, 1312 (11th Cir. 2011) (emphasis added). A finding at the 10% significance level is informative and clearly sufficient to support such an inference, regardless of whether it constitutes a scientific certainty. *See also* Federal Judicial Center, *Reference Manual on Scientific Evidence* 320 (3d ed. 2011) (“Although the 5% criterion is typical, reporting of more stringent 1% significance tests or less stringent 10% tests can also provide useful information.”); Dunbar, Frederick C., and Tabak, David, I., “Materiality and Magnitude: Event Studies in the Courtroom,” NERA Working Paper Series no. 34 (1999) (“It is not clear what level of statistical significance corresponds to a legal definition of materiality. . . . [T]he 95% confidence

level is commonly used, while the 90% and 99% level are also options.”).

**B. Each of the Three Corrective Disclosure Dates Identified by Dr. Bartov Represented Unique and Incremental Revelations Concerning the Truth of ExxonMobil’s Misrepresentations**

Dr. Bartov’s methodology for identifying corrective disclosure dates is detailed above at page 3 and described in paragraphs 57–59 of his expert report. In short, Dr. Bartov searched Dow Jones Factiva for news articles with various keywords including “climate change” between April 1, 2014, the day after ExxonMobil published two false and misleading reports, and October 24, 2018, the date the Complaint in this action was filed.<sup>2</sup> Running keyword searches over news databases is a standard methodology for gathering events that may have had market impact. (*See* Bartov Tr. 310:3-12 (describing standard steps in conducting event studies).) Dr. Bartov reviewed all of the search results and, after eliminating duplicates, was left with eight potential corrective disclosure dates. One of these dates demonstrated a statistically significant price impact at the 5% level (January 20, 2016), and two others demonstrated a statistically significant price impact at the 10% level (September 20, 2016 and June 2, 2017).<sup>3</sup>

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<sup>2</sup> ExxonMobil also observes that “ExxonMobil’s stock experienced no statistically significant price increase” when the March 31, 2014 reports were issued. (ExxonMobil Br. at 3.) However, it is widely accepted that misrepresentations can – and often do – introduce positive price inflation even in the absence of a single statistically significant “price increase” event. *See In re Vivendi, S.A. Secs. Litig.*, 838 F.3d 223, 259 (2d Cir. 2016) (holding that “securities-fraud defendants cannot avoid liability for an alleged misstatement merely because the misstatement is not associated with an uptick in inflation”). As the *Vivendi* court explained, misrepresentations can build over time – just as the OAG alleges here – and a defendant is liable for fraudulent statements that maintain those misrepresentations even if there is no proof that they introduce statistically significant price inflation by themselves. *See also* Ferrell Tr. 137 (admitting that whether absence of price reaction to misrepresentation is significant “depends on the facts and circumstances”).

<sup>3</sup> ExxonMobil argues, without support, that Dr. Bartov should have conducted his event study by determining when each individual misstatement cited in the Complaint was revealed to the market. (ExxonMobil Br. 16.) Many of those misrepresentations are overlapping, calling into question the practicality of such an approach. Ultimately, ExxonMobil’s mere disagreement with Dr. Bartov’s analysis is immaterial on this motion. *See Carpenters Pension Tr. Fund*, 310 F.R.D. at 90 (“While Dr. Finnerty’s

Inevitably, the qualitative assessment of how significant the information revealed on each date was to the market involves a degree of judgment. That is precisely why Dr. Bartov conducted an event study: to assess, on a quantitative and statistical basis, the significance of those disclosures to the market. Dr. Bartov's event study shows that the price movements that followed each disclosure was highly unlikely to have occurred due to random chance. Indeed, ExxonMobil's own expert conceded that the ultimate test of the significance of a particular disclosure to the market is the event study result itself. (Ferrell Tr. 85:2-7 (“What I would rely upon for whether the market viewed this language . . . as new value relevant information would be the event study result.”).)

Further, an examination of the corrective disclosures themselves demonstrates the soundness of Dr. Bartov's conclusion that each revealed new information to the market concerning the misrepresentations alleged in the Complaint.

*1. January 20, 2016: Announcement of Investigation into ExxonMobil's Climate Change Risk Disclosures*

On January 20, 2016, the Los Angeles Times announced that the California Attorney General was investigating whether “Exxon Mobil Corp. repeatedly lied to the public and its shareholders about the risk to its business from climate change—and whether such actions could amount to securities fraud and violations of environmental laws.” (JX970.) ExxonMobil's assertion that the article “makes no mention of . . . ExxonMobil's statements concerning the risks climate change posed to its business,” (*see* ExxonMobil Br. at 13), is demonstrably false. To the contrary, the newspaper reported that the company had potentially “lied to the public and its

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analysis is necessarily subjective, that does not mean his opinion is speculative or without any methodological constraints. As a practical matter, researchers conducting event studies will often have to rely on subjective assessments.”).

shareholders about the *risk to its business from climate change.*” (JX970.)

Shifting tack, ExxonMobil then argues that the announcement of California’s investigation into similar subject matter as the previously announced New York investigation was “merely confirmatory.” (ExxonMobil Br. at 14.) Not so. As explained in the case law cited by ExxonMobil, “confirmatory information” is “information *already known* by the market.” *FindWhat Inv’r Grp. v. FindWhat.com*, 658 F.3d 1282, 1311 n.28 (11th Cir. 2011) (emphasis added). That California would be investigating ExxonMobil about whether it “lied to the public and its shareholders about the risk to its business from climate change” was not known to the market until January 20, 2016. Courts have repeatedly held that “the disclosure of an investigation into a particular business practice” is “sufficiently specific to constitute corrective disclosure with respect to alleged misstatements” about that business practice. *Plumbers & Pipefitters Nat’l Pension Fund v. Orthofix Int’l N.V.*, 89 F. Supp. 3d 602, 620 (S.D.N.Y. 2015); *see also In re IMAX Sec. Litig.*, 587 F. Supp. 2d 471, 485–86 (S.D.N.Y. 2008) (report of SEC investigation into company’s use of particular accounting technique was sufficient to constitute corrective disclosure); *In re Take-Two Interactive Sec. Litig.*, 551 F. Supp. 2d 247, 286–90 (S.D.N.Y. 2008) (disclosure of SEC investigation “into certain stock option grants” was sufficient to constitute corrective disclosure). This is particularly so in cases, like this one, where “the truth slowly emerged through a series of partial disclosures.” *See Take-Two*, 511 F. Supp. 2d at 288. ExxonMobil’s attempt to downplay the significance of the California Attorney General’s announcement is ultimately refuted by Dr. Bartov’s event study, which found that this event was statistically significant at the 5% level, with only a 2% chance of the abnormal returns being due to other factors.

2. *September 20, 2016: Revelation of ExxonMobil's Internal Price of Carbon as Subject of SEC Investigation*

On September 20, 2016, the Wall Street Journal reported that the SEC was “investigating how Exxon Mobil Corp. values its assets in a world of increasing climate-change regulations.” (PX305.) This article specifically revealed that ExxonMobil was being investigated for potential misrepresentations about the “price Exxon uses to assess the ‘price of carbon’—the cost of regulations such as a carbon tax or a cap-and-trade system to push down emissions—when evaluating certain future oil and gas prospects.” (*Id.*) Prior to this disclosure, the market would not have been aware that ExxonMobil’s representations concerning its climate regulatory risk management, including its use of an internal “price of carbon,” also implicated the company’s method of “valu[ing] its assets” and “evaluat[ing] the economic viability of its projects.” (*Id.*)

ExxonMobil does not even address the September 20, 2016 date in its critique of Dr. Bartov’s report, and it is unclear why it believes the specific information about ExxonMobil’s use of a “price of carbon” in asset valuation and investment decision-making revealed in the Wall Street Journal article does not constitute a corrective disclosure. In any event, this position contradicts the deposition testimony of ExxonMobil’s own expert, who admitted that there was at least enough relevant information disclosed on September 20, 2016 that he would proceed to the second step (*i.e.*, event study) to determine whether there had been a corrective disclosure. (*See* Ferrell Tr. 85:2-7.) ExxonMobil’s attempt to exclude Dr. Bartov’s testimony based on his identification of September 20, 2016 as a corrective disclosure date, with only an 8.2% chance of the abnormal returns being due to other factors, is therefore without merit.

3. *June 2, 2017: OAG Files Documents with Court Revealing ExxonMobil's Deception*

On June 2, 2017, the OAG filed a motion to compel in this Court, which set forth in detail



the basis for the OAG's investigation, and specified substantial supporting evidence, much of which was ultimately included in the Complaint in this action. As the Wall Street Journal reported that day, the filing "disclosed for the first time some of the specific evidence [the OAG] ha[d] collected in its long-running probe." (PX310.) Quoting the OAG's motion, a Reuters article stated that the OAG had "evidence of 'potential materially false and misleading statements by Exxon' that could have led investors to think the U.S. oil giant company properly assessed the risks when it actually ignored a formula to estimate the impact of future environmental regulation on new deals." (PX311.) That article further noted that the filings "offer[ed] a *rare look inside an ongoing fraud investigation.*" (PX311 (emphasis added).)

The articles on this date readily meet the test for corrective disclosures, as they not only contain, but highlight, information tending to "reveal[] an alleged misstatement's falsity." *Richman v. Goldman Sachs Grp., Inc.*, 868 F. Supp. 2d 261, 282 (S.D.N.Y. 2012). ExxonMobil's claim that June 2, 2017 "merely announce[d] the existence of an investigation" (ExxonMobil Br. at 12) is simply false. Indeed, ExxonMobil's own expert witness conceded that the corrective disclosure on this date is "not an announcement of [an] investigation," but rather the filing of documentary evidence substantiating the OAG's basis for investigating ExxonMobil's GHG proxy cost disclosures. (Ferrell Tr. 92-94.) That documentary evidence included, for example, internal ExxonMobil emails acknowledging that the company's belated efforts to revise its internal carbon price guidance to match its public disclosures reflected a "huge change." (PX045.) The OAG's June 2, 2017 filing, along with news reports summarizing it, revealed substantial new information to the market, and Dr. Bartov's event study analysis found that ExxonMobil's stock price drop on that day had only a 5.1% chance of being due to other factors.

### C. Dr. Bartov Employed a Sound Methodology to Address Confounding Factors

ExxonMobil's argument that Dr. Bartov failed to address confounding factors is also without merit. The regression component of the event study is designed specifically to determine whether "the price changes at issue in a case were related to or unrelated to the representations in dispute *by eliminating other factors*, such as the effects on stock price of market and industry information." *United States v. Martoma*, 993 F. Supp. 2d 452, 458 (S.D.N.Y. 2014) (emphasis added) (quotation marks omitted). The only confounding factors not inherently addressed by the event study are other "news stories, statements, or events that coincide with relevant event dates and that themselves potentially affect the company's stock price." *Bricklayers & Trowel Trades Int'l Pension Fund v. Credit Suisse Sec. (USA) LLC*, 752 F.3d 82, 89 (1st Cir. 2014) Dr. Bartov explained in his report that he ruled out the possibility that "some other news story[] moved the stock price on any given day," by conducting broad searches on Dow Jones Factiva for any articles about ExxonMobil and any headlines containing the word "Exxon" on the date of each disclosure, as well as one trading day beforehand. Only after conducting this methodical review did he conclude that there were no potentially confounding factors (*i.e.*, other ExxonMobil-specific news) on the relevant dates. (Bartov Rpt. ¶ 85.)

ExxonMobil relies on cases in which the expert completely failed to account for significant confounding factors or "simply made a judgment call as to confounding factors without any methodological underpinning." *Bricklayers & Trowel Trades Int'l Pension Fund v. Credit Suisse Sec. (USA) LLC*, 752 F.3d 82, 95 (1st Cir. 2014); *see also Cornell v. 360 W. 51st St. Realty, LLC*, 22 N.Y.3d 762, 785 (2014) (medical expert failed to explain why he attributed symptoms to mold when they could be caused by non-mold-related diseases). That simply is not the case here.

ExxonMobil mischaracterizes the law and the factual record when it argues that Dr. Bartov improperly "ignored" the possibility that price drops following announcements of investigations

were due to “the costs that might result from the investigation itself, rather than the revelation of underlying misstatements.” (ExxonMobil Br. at 16.) In fact, Dr. Bartov testified that he had considered – and ruled out – that theory for several reasons, including ExxonMobil’s own failure to identify such costs as significant in its financial disclosures. (Bartov Tr. 347:22-348:8.) He also cited the theory’s broad rejection by members of the relevant scientific community, *id.* 339-41. Finally, even if Dr. Bartov had not addressed ExxonMobil’s particular investigative-cost theory, that would not be a basis for excluding his testimony, since an expert is only required to “rule out *obvious* alternative causes,” not speculative ones. *Tardif v. City of New York*, 344 F. Supp. 3d 579, 601 (S.D.N.Y. 2018) (emphasis added).

In short, ExxonMobil’s attempts to poke holes in Dr. Bartov’s event study have proven fruitless. It is free to try again during cross-examination, but there is no basis to exclude Dr. Bartov’s testimony.

## **II. Dr. Bartov’s Impairment Analysis is Based on a Straightforward Application of ASC 360**

ExxonMobil also contends that Dr. Bartov’s testimony concerning impairment testing should be excluded because it is “speculative and contrary to the evidentiary record.” In essence, ExxonMobil is arguing that the Court should not have the benefit of hearing Dr. Bartov’s testimony because it is inconsistent with ExxonMobil’s theory of the case. That is no reason to exclude expert testimony. And indeed, Dr. Bartov explained at his deposition that ExxonMobil’s purported defense is based on semantic games that do not go to the substance of his analysis. The Court will be in a position to weigh Dr. Bartov’s expert opinion, along with all of the other evidence concerning impairment, at trial.

As discussed above, ExxonMobil does not question Dr. Bartov’s credentials as an accounting expert. In contrast to Dr. Bartov, Linda MacDonald, ExxonMobil’s accounting expert,

is neither a Ph.D nor a professor. (Zweig Ex. D, MacDonald Tr. 15, 19-20.) Excluding the prospective testimony of an unquestioned expert with far superior academic credentials to the individual ExxonMobil has put forward would be unjustified.

#### **A. Dr. Bartov's Impairment Analysis is Well-Supported**

Dr. Bartov's expert opinion is based upon the application of ASC 360, which provides a three-step process for recognizing and measuring the impairment of long-lived assets. In Step 1, a company considers whether an indicator or "trigger" of impairment is present. (Bartov Rpt. ¶ 19.) One impairment trigger listed in ASC 360 is a current-period loss combined with "a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset[.]" ASC 360-10-35-21(e); (Bartov Rpt. ¶ 20.) If a trigger for impairment testing exists, a company must test the recoverability of the carrying value of the asset on the company's books (*i.e.*, "Step 2"). A company's projections of undiscounted future cash flows for impairment testing purposes must "incorporate the entity's own assumptions about its use of the asset." ASC 360-10-35-30; (Bartov Rpt. ¶¶ 22-26.) Those economic assumptions must be "reasonable in relation to the assumptions used in developing other information used by the entity for comparable periods, such as internal budgets and projections . . . or information communicated to others." (*Id.*) ExxonMobil represented to investors that it complied with this rule, stating in its 2015 Form 10-K that its "[c]ash flows used in impairment evaluations," as required by ASC 360, "make use of the Corporation's price, margin, volume, and cost assumptions developed in the annual planning and budgeting process, and are consistent with the criteria management uses to evaluate investment opportunities." (Bartov Rpt. ¶ 33; Zweig Ex. E, ExxonMobil's 2015 Form 10-K at 57.) Lastly, if the undiscounted cash flows for a long-lived asset are less than its carrying value, then the company must measure the impairment loss by determining the amount by which the carrying value exceeds

the asset's fair value (*i.e.*, "Step 3"). (Bartov Rpt. ¶ 28.)

Based on this framework, Dr. Bartov concluded that (1) ExxonMobil violated ASC 360 and its own representations that it complied with that rule by not including its publicly disclosed GHG proxy costs in its cost projections in testing its Mobile Bay asset (a natural gas and natural gas liquids-producing asset in the Gulf of Mexico) for impairment in 2015 (*id.* at ¶ 37-38, 43-44); and (2) had ExxonMobil included those costs, its Mobile Bay asset would have been subject to an after-tax impairment loss of \$320 million to \$478 million (*id.* at ¶ 46-51).

ExxonMobil contends that Dr. Bartov's expert opinion should be excluded because "he bypasses Step 1—which he presumes to be satisfied—and begins his analysis . . . at Step 2," even though ExxonMobil determined that "there was no trigger at Step 1." (ExxonMobil Br. at 18-19.) However, when ExxonMobil posed this argument to Dr. Bartov at his deposition, Dr. Bartov rebutted it thoroughly, applying his expertise to conclude that, however ExxonMobil labelled its 2015 Mobile Bay impairment analysis, it was required to apply assumptions that were reasonable in relation to those set out in its budgets, projections, and public disclosures.

First, Dr. Bartov testified that, in his opinion, for the Mobile Bay asset in 2015, "ExxonMobil, in effect, completed Step 2[.]" (Bartov Tr. 151.) As Dr. Bartov noted in his report, in ExxonMobil's Step 1 analysis of whether an impairment trigger existed at Mobile Bay, the company "calculated the undiscounted future cash flows associated with Mobile Bay (thereby effectively completing Step 2 or impairment testing)[.]" (Bartov Rpt. ¶ 37.) Dr. Bartov also cited the testimony of ExxonMobil's Assistant Controller and Accounting Policy Manager that, as a matter of course, ExxonMobil uses the very same cash flow model at Step 1 to evaluate whether there are projections of future cash flow losses under ASC 360-10-35-21(e) as it uses at Step 2 to determine whether an asset's carrying value is recoverable. (Bartov Rpt. ¶ 35.) Indeed, Linda

MacDonald, ExxonMobil's accounting expert, acknowledged in her testimony that ExxonMobil "encompassed within . . . the step one an assessment of the recoverability of the carrying amount of Mobile Bay." (MacDonald Tr. 91-92).<sup>4</sup>

Second, Dr. Bartov opined that, when ExxonMobil tested its undiscounted future cash flows for impairment purposes at Mobile Bay in 2015, it should have done so in a manner consistent with its public statements and GAAP rules, regardless of whether that testing was labelled a Step 1 or Step 2 analysis. Dr. Bartov explained:

[I]f they use future cash flows as a trigger, they should compute the future cash flow correctly. So if they miscalculate the future cash flow, and as a result, they got positive cash flow where the cash flow is negative, you have a problem right there. So it doesn't matter whether you call it trigger or not. . . . Either way, the burden is on you to use measures that are consistent with your public disclosure and the accounting guidance.

(Bartov Tr. 172.) After being asked further questions about whether the Mobile Bay testing should be categorized under Step 1 or Step 2, Dr. Bartov added: "You are here arguing about semantics. You are not arguing here about the substance of the analysis. . . . it doesn't make any difference to the analysis in the conclusion." (Bartov Tr. 174, 176.)

In essence, ExxonMobil's argument is that when a company creates a cash flow forecast to evaluate whether an impairment trigger exists, accounting rules set no bounds on the economic assumptions that may be incorporated into that analysis, irrespective of what the company has publicly represented or uses in its internal budgets and projections. Dr. Bartov's expert opinion counsels otherwise. For example, suppose that a company publicly represented that it believed that future oil prices will be \$50/barrel, and that it incorporated that price in its investment

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<sup>4</sup> See also *id.* at 93-94 ("they performed a step one analysis and they were assessing for potential impairment triggers, and as part of that analysis, and that testing, they also considered the recoverability of the Mobile Bay carrying value as a -- you know, they performed a recoverability assessment.").

decisions and planning. Suppose further that in cash flow forecasting for its impairment trigger analysis, the company assumed that future oil prices will be \$200/barrel. That impairment trigger analysis would be a sham, but under ExxonMobil's flawed argument, it would present no concerns under GAAP. ExxonMobil is free to advance that position at trial, but it has no business trying to exclude a highly qualified accounting expert with a different view. And tellingly, when Ms. MacDonald was asked whether, in her opinion, the reasonability requirement of ASC 360-10-35-30 applied to cash flow forecasts used for purposes of a Step 1 impairment trigger analysis, she refused to directly answer, stating only that "all of the guidance here would apply to varying degrees and would need to be considered.[.]" (MacDonald Tr. 94-97.)

ExxonMobil also attempts to downplay its 2015 Mobile Bay impairment cash flow model by arguing that it merely served to "confirm the absence of a trigger event" (ExxonMobil Br. at 21), but there is no substantive difference between testing to "confirm the absence" of a trigger, and testing to determine whether a trigger exists. Given the undisputed fact that, as noted by PricewaterhouseCoopers ("PwC"), Mobile Bay was subject to a current-period loss in 2015 (PNYAG0001268, Docket No. 373 (Brooks Ex. 12) at 5), the question of whether it also had projections of future losses was undoubtedly significant under ASC 360-10-35-21(e), which provides that a current-period loss together with a projection of future losses constitutes an example of an impairment trigger. As Dr. Bartov found, adding GHG proxy costs to ExxonMobil's analysis of future cash flows in its 2015 impairment testing at Mobile Bay results in projections of future losses – at both Step 1 and Step 2, as the cash flow models used for those steps are identical – which would have required ExxonMobil to take an impairment loss.

#### **B. Linda MacDonald's Accounting Opinion Is Based on Fundamental Factual Errors**

ExxonMobil's critique also ignores the substantial flaws in the analysis of its own

accounting expert, Linda MacDonald. For example, in her report, Ms. MacDonald argues that the reason for ExxonMobil's inclusion of GHG proxy costs in its 2016 impairment testing, but not in 2015, was the ratification of the Paris Agreement and update to ExxonMobil's Corporate Plan Dataguide ("Dataguide"). (Zweig Ex. F, MacDonald Rpt. ¶ 59-70.) However, this analysis is founded on a basic factual mistake. Ms. MacDonald testified that, to her understanding, the difference between ExxonMobil's corporate planning guidance in 2015 and 2016 was that the 2015 Dataguide included only costs associated with "currently enacted" legislation (MacDonald Tr. 286-87), while the 2016 Dataguide "also incorporated GHG costs that were associated with potential future GHG regulations[.]" (*Id.* at 151.) This is a fundamental misunderstanding: it is undisputed that the GHG proxy costs in the Dataguide applicable to the Mobile Bay asset were identical in 2015 and 2016, and that those costs reflected the anticipated effects of *future* regulation. Thus, Ms. MacDonald opined on whether ExxonMobil complied with a requirement to use economic assumptions in its impairment evaluations that were reasonable in relation to those used in its projections, budgeting, and public disclosures, while under the mistaken impression that the very assumption in question – costs associated with *future* climate regulation – was not included in the 2015 Dataguide.

Likewise, Ms. MacDonald wrote in her report that, based on a conversation she had with Neil Higgins, the individual responsible for ExxonMobil's impairment testing at Mobile Bay in 2015 and 2016, she understood that the 2015 Mobile Bay model contained non-GHG-related "errors" that understated the cash flows associated with the asset by an amount in excess of the GHG proxy costs that Dr. Bartov analyzed. (MacDonald Rpt. ¶ 89-91.) As Dr. Bartov explained at his deposition, this is "irrelevant to 2015 because [ExxonMobil] had no knowledge of this error in 2015 . . . [and] using hindsight information just distorts the analysis and renders the analysis



misleading and meaningless.” (Bartov Tr. 281-82.) But in any event, Mr. Higgins testified at his deposition that the 2015 Mobile Bay model did not contain “errors” or account for costs “improperly,” directly contrary to Ms. MacDonald’s account of their conversation. (Zweig Ex. G, Higgins Tr. 147.) Further, contrary to Ms. MacDonald’s statement that Mr. Higgins told her that he had analyzed the effect of such errors and had found it to be greater in magnitude than the GHG proxy costs that Dr. Bartov analyzed (MacDonald Rpt. ¶ 91), Mr. Higgins testified that he never performed such an analysis. (Higgins Tr. 155.)

In light of these and other major flaws in Ms. MacDonald’s analysis, the OAG does not believe that the Court will see fit to assign substantial weight to her opinion at trial. Nonetheless, the OAG is not seeking to exclude Ms. MacDonald’s testimony on the papers, and is more than willing for the Court to decide these issues after assessing the qualifications and reasoning of both experts.

### **CONCLUSION**

For all the foregoing reasons, Dr. Bartov’s testimony should not be excluded.

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**Certification of Compliance with Word Count**

Pursuant to Rule 17 of the Rules of Practice for the Commercial Division of the Supreme Court, I certify that this brief complies with that rule because it contains 6,783 words, exclusive of the caption, table of contents, table of authorities, and signature block. In making this certification, I relied on Microsoft Word's "Word Count" tool.

Dated: October 11, 2019  
New York, New York

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