

No. 20-222

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In the  
Supreme Court of the United States

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GOLDMAN SACHS GROUP, INC., ET AL., PETITIONERS,

v.

ARKANSAS TEACHER RETIREMENT SYSTEM, ET AL.,  
RESPONDENTS.

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*ON PETITION FOR A WRIT OF CERTIORARI  
TO THE UNITED STATES COURT OF APPEALS  
FOR THE SECOND CIRCUIT*

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**BRIEF OF FINANCIAL ECONOMISTS AS *AMICI  
CURIAE* IN SUPPORT OF PETITIONERS**

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## STATEMENT OF INTEREST OF *AMICI CURIAE*

*Amici curiae* are individuals who teach, research, and write about financial economics. The *amici* have also served as testifying and consulting experts in connection with economic issues, including significant experience with securities class action cases.<sup>1</sup> *Amici* have an interest in ensuring that the securities laws are interpreted to accurately reflect current economic scholarship. *Amici* also have an interest in ensuring that the economic principles used in securities class actions are correctly identified and applied by the federal judiciary to reflect the economically appropriate approach for the protection of public companies and their investors alike. *Amici* are able to offer a unique perspective on the evaluation of price impact from an economic perspective that can aid the Court in resolving important issues presented by the Petition. Some of the *amici* previously sought and were granted leave to file *amicus* briefs before the United States Court of Appeals for the Second Circuit. Although each individual *amicus* may not endorse every statement made herein, this brief reflects the consensus of the *amici* that rigorous economic analysis

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<sup>1</sup> Pursuant to Rule 37.6, *amici* affirm that no counsel for any party authorized this brief in whole or in part, and that no person other than *amici* and their counsel made a monetary contribution to its preparation or submission. Counsel of record for all parties received notice at least 10 days prior to the due date of *amici's* intention to file this brief. All parties have consented to the filing of this brief.

that considers the nature of the challenged statements is required to determine whether a set of challenged statements caused price impact.

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## INTRODUCTION AND SUMMARY OF ARGUMENT

This case presents a compelling opportunity for the Court to intervene because the Second Circuit’s decision prevents meaningful economic analysis of price impact at the class certification stage, contrary to Supreme Court precedent holding that defendants may defeat class certification of a securities class action “through direct as well as indirect...evidence” that the alleged misstatements had “price impact.” *Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 283 (2014) (“*Halliburton II*”).

Here, the Second Circuit’s decision excluded a critical component of that evidence by holding that it is unnecessary to “consider the nature of the alleged misstatements in assessing whether and ‘why the misrepresentations did not, in fact, affect the market of [the] stock.’” *Ark. Teacher Ret. Sys. v. Goldman Sachs Grp., Inc.*, 955 F.3d 254, 279 (2d. Cir. 2020) (Sullivan, J., dissenting) (“*ATRS II*”) (citation omitted). Contrary to the Second Circuit’s exclusion of alleged misstatements as price impact evidence, an analysis of the content of alleged misstatements is a key part of an economic assessment of price impact. Focusing only on stock price reactions on the alleged corrective disclosure dates can lead to incorrect conclusions regarding price impact and thus result in class certification being granted in securities class actions where the alleged misstatements actually had no price impact.

*Halliburton II*, 573 U.S. at 281-82 (“Price impact is...an essential precondition for any Rule 10b-5 class action.”).

Focusing only on stock price reactions on alleged corrective disclosure dates and ignoring the challenged statements themselves prevents a complete economic analysis of price impact. Price movement following an alleged corrective disclosure does not by itself prove that prices were distorted as a result of an alleged fraud. Ignoring the challenged statements themselves when evaluating their price impact at the class certification stage is at odds with economic theory and not defensible from an economic perspective.<sup>3</sup> Judge Sullivan was correct when he observed, “I don’t see how a reviewing court can ignore the alleged misrepresentations when assessing price impact.” *See ATRS II*, 955 F.3d at 279 (Sullivan, J., dissenting).

Economic analysis, including an assessment of the alleged misstatements themselves, is required to determine whether those statements actually affected a company’s stock price, i.e., whether they had price impact. In this case, Judge Sullivan noted that the approach adopted by the Second Circuit “strain[ed] to avoid looking at the [challenged] statements themselves,” but this type of information and

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<sup>3</sup> Price impact matters at class certification because the “fundamental premise [is that] an investor presumptively relies on a misrepresentation so long as it was reflected in the market price at the time of his transaction... If it was not, then there is no grounding for any contention that [the] investor[] indirectly relied on th[at] misrepresentation[] through [his] reliance on the integrity of the market price.” *Halliburton II*, 573 U.S. at 278 (internal quotations and citations omitted).

analysis is an important component of an economic analysis of price impact. *ATRS II*, 955 F.3d at 279 (Sullivan, J., dissenting). In other words, the Second Circuit's approach ignores that the nature of the challenged statements is a key factor in an economic analysis of price impact. From an economic perspective, analyzing the nature of the challenged statements and whether they potentially contain value relevant information is necessary when determining whether the statements actually affected the stock price, which we understand to be the core inquiry in assessing price impact. Hence, to assess price impact as described in *Halliburton II*, one should consider the nature of the challenged statements.

Using only evidence of price movement after an alleged corrective disclosure to establish price impact of the challenged statements is not defensible. In particular, price impact cannot be assumed when a company has merely expressed general business principles, as most public companies do, or if the statements did not cause price changes when they were made. When generalized statements about business principles are made, they may not be connected to any specific business activity and may not be associated with an impact on expected future cash flows or the risk-adjusted discount rate.<sup>4</sup> If that were the case, then those statements would have no price impact, and so could not and would not impact stock price.

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<sup>4</sup> A stock price reflects the present value of discounted future cash flows. The discount rate is a risk adjusted rate that reflects the firm's systematic risk.

Accordingly, in a situation in which a company is alleged to have made only generalized statements regarding business principles that were not met with any stock price reaction when they were made, an economist should test whether such statements had a price impact. One cannot look only at the stock price reactions on the alleged corrective disclosure dates as the Second Circuit appears to have done, as such price reactions can be a poor measure of the price impact of an alleged misrepresentation. For example, the stock price may have declined on these dates for many reasons, such as the filing of a regulatory enforcement action against a company or the release of negative confounding information about the company.

Instead, rigorous economic analysis is required to determine whether a stock price was affected by a particular statement. The Second Circuit's decision is contrary to the idea "that an investor presumptively relies on a misrepresentation so long as it [that misrepresentation] was reflected in the market price at the time of his transaction." *Halliburton II*, 573 U.S. at 278 (quoting *Erica P. John Fund, Inc. v. Halliburton Co.*, 563 U.S. 804, 813-14 (2011) ("*Halliburton I*"). Testing the nature of the challenged statements is often a key component of the economic analysis in evaluating whether the alleged representation "affected the market price in the first place," as described in *Halliburton II*. See 573 U.S. at 278. This Court's intervention is necessary because the Second Circuit's decision departed from current economic theory and the economic theory underlining this Court's prior decisions.

## ARGUMENT

### **I. Proper Price Impact Analysis Includes an Assessment of the Nature of the Alleged Misstatements**

An analysis of stock price changes is an important component of an economic assessment of price impact, but it is not by itself sufficient to reach a conclusion about price impact. It is a basic tenet of economic theory that not all types of publicly disclosed statements affect stock prices. Assuming efficient markets, stock prices reflect the present value of all current information about all expected future cash flows, discounted at a rate reflecting the firm's systematic risk.<sup>5</sup> If new, publicly disclosed, information changes investors' assessment of a firm's expected cash flows or its systematic risk, then that information will also affect the stock price. The corollary to this is that some statements will not affect the stock price because they do not affect either the firm's current expected cash flows or perception of its systematic risk.

To determine whether a statement had price impact, examining the price reaction when the statement was made is a necessary but not sufficient part of the analysis. Similarly, price movement following an alleged corrective disclosure is

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<sup>5</sup> Finance literature distinguishes among several versions of the efficient market hypothesis. In this brief, we refer to the "semi-strong form" of efficiency, which implies that all public information is reflected in a stock's current market price and that security prices adjust to new publicly available information so that it is impossible to earn excess returns by trading on that information.

not sufficient to prove that prices were distorted in the first instance by allegedly fraudulent statements. As an initial matter, price reaction when a challenged statement was made and when an alleged corrective disclosure occurred, typically take place months apart in time and reflect temporally distinct market reactions to potentially different information. See Jill E. Fisch, *The Trouble with Basic: Price Distortion After Halliburton*, 90 Wash. U. L. Rev. 895, 922 (2013). A price reaction to an alleged corrective disclosure could provide circumstantial evidence of price impact, but there may be no causal relationship between the stock price distortion at the time of the misstatement and the stock price decline at the time of the alleged corrective disclosure.

Multiple factors may affect the price of a stock on the day of an alleged corrective disclosure, such as other corporate disclosures or other confounding information released contemporaneously with the alleged corrective disclosure. In addition, intervening confounding market developments or uncertainty about possible future developments may affect the price impact of the alleged corrective disclosure.

An economic analysis of price impact cannot focus only on whether a company's stock price changes immediately following a given statement. Looking only at the stock price changes following the statement could lead to incorrect conclusions about price impact. For example, one could falsely conclude that a

statement *had* price impact if it did not affect the price but was released along with other confounding information that caused a price change. Therefore, a determination of whether challenged statements had price impact involves more than examining stock price changes: an economist should also examine the alleged misstatements themselves.

An economist analyzing price impact should assess whether the alleged misstatements would be expected to affect the company's stock price. To do that, an economist might consider whether the alleged misstatements contain the type of information that affects stock prices. In an efficient market, stock prices are affected only by value-relevant information.<sup>6</sup> As noted above, value-relevant information for a publicly traded company is any information that would affect an investor's expectations about either the firm's expected future cash flows or its systematic risk.<sup>7</sup>

From an economic perspective, it cannot be assumed without analysis that the statements at issue convey information that investors would find value-relevant. For example, we understand that the alleged misstatements in this case are general statements about Goldman Sachs' business principles and management of its

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<sup>6</sup> Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. of Fin. 383, 415-416 (1970).

<sup>7</sup> See, e.g., Zvi Bodie, et al., *Investments* 350-354, 609-612 (10th ed. 2014).

conflicts of interests. General statements of this type may not affect the present value of a company's cash flows and thus may not be value-relevant. Hence, an economist should test whether these statements actually affected the stock price in order to determine whether there was price impact. Assuming that there is price impact without engaging in the economic analysis to determine whether the alleged misstatements "affected the market price in the first place" is contrary to economic theory and creates a substantial risk of securities class being certified where there was no price impact. *See Halliburton II*, 573 U.S. at 278. This Court's review is needed to address these profound issues.

## **II. From an Economic Perspective, a Subsequent Drop in Stock Price May Not Demonstrate Price Impact of An Alleged Misrepresentation**

In this case, the Second Circuit held that "if...a disclosure caused a reduction in a defendant's share price, [one] can infer that the price was inflated by the amount of the reduction." *ATRS II*, 955 F.3d at 265-66. However, price movement following an alleged corrective disclosure can be a poor measure of the price impact of an alleged misrepresentation, particularly if the stock price did not change when the misstatements were made. From an economic perspective one cannot simply conclude that the stock price had been affected by challenged statements just because a subsequent alleged corrective disclosure or event is associated with a decline in stock price. Stock prices may decline on a particular day for many reasons, such as

the filing of a regulatory enforcement action against a company or the release of negative confounding information about the company. Thus, the stock price decline does not, in and of itself, imply that prior statements affected the stock price, especially if those challenged statements are generalized statements about business principles. Hence, for the Second Circuit's approach to be correct, several conditions must be met. In order to determine whether those conditions are satisfied, an economist should examine whether, when, and how information contained in a challenged statement affected a company's stock price. Examining the nature of the statements at issue plays a critical role in that economic analysis.

*First*, there needs to be a direct connection between the alleged corrective disclosures and the alleged misrepresentation that allegedly affected the stock price. From an economic perspective, an economist should establish that the misstatements have a direct connection with the alleged corrective disclosures in order to use the price reaction following the alleged corrective disclosures as evidence of the alleged misstatements' price impact. Without considering the challenged statements, it is impossible to know whether the alleged corrective disclosures in fact corrected these misstatements. For example, an economist could examine the nature of the challenged statements to determine whether they reveal information about the company's present and future financial condition such that they could be expected

to affect its stock price and whether the alleged corrective disclosures are connected to this information.

*Second*, the price decline in question must be caused by the correction of the alleged misstatement and separated from any declines attributable to other confounding factors. Economists typically use an “event study” to measure a company’s stock price reaction to new information.<sup>8</sup> An event study can be used to remove the effects of market and industry factors from stock price changes. However, an event study does *not* automatically separate the price effects of company-specific information related to any alleged misstatements from stock price changes caused by other company-specific information disclosed at the same time that are unrelated to the alleged misstatements, i.e., confounding information. Furthermore, isolating the impact of confounding information is particularly important in a litigation setting that focuses on analysis of a single event at a single firm, because confounding information cannot be assumed to average out or be controlled for as in traditional, multi-event academic studies.<sup>9</sup> Thus, if more than one piece of company-specific information is disclosed on a particular day, an

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<sup>8</sup> An event study uses a regression analysis to examine whether a company’s stock price changed by more than would be expected based on its relationship with market and industry indices, and the movements of those indices.

<sup>9</sup> See, e.g., Campbell, J., Lo, A., and MacKinlay, A., *The Econometrics of Financial Markets*, Princeton University Press, 1997; Fama, E. F., Fisher L., Jensen C. M., and Roll R., *The Adjustment of Stock Prices to New Information*, *International Economic Review*, 10(1), 1-21.

economist must isolate the portion of the decline caused by the correction of the alleged misstatements from the portion caused by confounding events. In order to do that, an economist must examine the content of all the information released on the alleged corrective disclosure date(s) and decide what information, if any, relates to the allegations and what information, if any, is confounding. Then the economist must isolate the price impact, if any, of the allegation-related information. Additionally, an economist could examine whether similar alleged corrective disclosures in the past resulted in a company's stock price movements.

The bottom line, therefore, is that to assess whether the challenged statements at issue in a given matter had a price impact, one should examine those statements. Failing to examine the alleged misstatements and instead simply assuming price impact given a stock price decline following an alleged corrective disclosure precludes a full evaluation of whether “the alleged misrepresentation did not actually effect the stock's price—that is, [whether] the misrepresentation had no ‘price impact,’” as described in *Halliburton II*. See *Halliburton II*, 573 U.S. at 263-64, 278-79. The Second Circuit's decision will have a substantial impact on securities class actions and lower the bar for class certification by permitting class certification to be granted in the absence of price impact unless this Court intervenes.

## CONCLUSION

For all the foregoing reasons, the petition for a writ of certiorari should be granted.

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Respectfully submitted.

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