No. 25-50855

In the United States Court of Appeals for the Fifth Circuit

MOHAMMAD BOZORGI, KEN CALDERONE; MANOHAR K. RAO, *INDIVIDUALLY AND ON BEHALF OF ALL OTHERS SIMILARLY SITUATED*; ALL PERSONS OR ENTITIES WHO, BETWEEN SEPTEMBER 14, 2020 AND OCTOBER 12, 2023, PURCHASED OR OTHERWISE ACQUIRED CASSAVA SCIENCES, INC. SECURITIES,

Plaintiffs–Appellees,

v.

CASSAVA SCIENCES, INCORPORATED; REMI BARBIER; ERIC J. SCHOEN; LINDSAY BURNS,

Defendants–Appellants.

On Appeal from the United States District Court
for the Western District of Texas, Austin Division,
Case No. 1:21-cv-00751-DAE

MOTION FOR LEAVE TO FILE BRIEF OF CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA AS *AMICUS CURIAE* SUPPORTING DEFENDANTS–APPELLANTS

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SUPPLEMENTAL CERTIFICATE OF INTERESTED PERSONS

Pursuant to Fifth Circuit Rule 28.2, I supplement the certificate of interested persons provided in the Brief of Defendants–Appellants by naming the following persons who have an interest in the outcome of this litigation. These representations are made so that the judges of this Court may evaluate possible disqualification or recusal.

***Amicus Curiae*:**
U.S. Chamber of Commerce

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/s/ *Anthony J. Lucisano*
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MOTION FOR LEAVE TO FILE BRIEF OF *AMICUS CURIAE*

Pursuant to Federal Rules of Appellate Procedure 27 and 29(a)(3), the Chamber of Commerce of the United States of America ("Chamber") respectfully requests leave to file the attached brief as *amicus curiae* in support of Defendants-Appellants and reversal. *Amicus* requested Plaintiffs-Appellees' consent to file the brief, but they did not supply that consent and instead "take no position on the *amicus* brief's filing," thereby necessitating this motion. Defendants-Appellants are unopposed to this motion and consent to the filing of the Chamber's proposed brief.

The Chamber is the world's largest business federation. It represents approximately 300,000 direct members and indirectly represents the interests of more than 3 million companies and professional organizations of every size, in every industry sector, and from every region of the country. An important function of the Chamber is to represent the interests of its members in matters before Congress, the Executive Branch, and the courts. To that end, the Chamber regularly files *amicus curiae* briefs in cases, like this one, that raise issues of concern to the nation's business community. Here, many of *amicus*'s members are subject to U.S. securities laws and will be adversely affected if the decision below is not corrected.

Submission of this brief is "desirable," and the matters asserted herein "are relevant to the disposition of the case." FED. R. APP. P. 29(a)(3)(B). The proposed *amicus* brief will argue that the *Basic* presumption rests on two assumptions: that

(1) information is quickly digested in a well-developed market and incorporated into stock prices, and (2) investors rely on the integrity of stock prices in buying or selling securities. In the decades since *Basic*, courts have applied a judicially created list of factors to evaluate market efficiency, thereby triggering the presumption. Those factors must be applied consistent with *Basic's* core principles, the key linchpin of which is price impact. Instead, the lower courts have effectively created an end-run around *Basic*, reflexively applying those factors as a checklist rather than a helpful analytical tool.

This case is a striking example of that unfortunate trend. Finding the surface-level factors for an efficient market satisfied, the district court deemed the *Basic* presumption appropriate despite compelling evidence that Cassava Sciences, Inc.'s ("Cassava") stock price was information-agnostic and its investors did not trade in reliance on the integrity of that stock price. The district court glossed over that evidence of quintessentially *in*efficient market behavior by mechanically applying indirect factors of market efficiency.

The Chamber's proposed brief will urge this Court to remind district courts that market efficiency must be rigorously evaluated in light of *Basic's* core principles, with a keen judicial eye to the particular market dynamics of each stock. This is especially important when evaluating what have become known as "meme stocks," which are not driven by the same market forces as those underlying traditional securities.

Absent that guidance, lower courts will continue to do what the district court did here, engaging in rote application of the judge-made factors and certifying one securities class action after another. American businesses and capital markets will suffer as a result, for certification of securities class actions can impose crushing litigation costs and *in terrorem* settlement pressure. As companies flock to Texas and its soon-to-be-opened Texas Stock Exchange, those problems will be especially pronounced in this Circuit.

Pursuant to Federal Rule of Appellate Procedure 29(a)(4)(E), we certify that no party's counsel authored the brief in whole or in part; no party or party's counsel contributed money intended to fund the brief's preparation or submission; and no person other than *amicus*, its counsel, and its members contributed money intended to fund the brief's preparation and submission.

* * *

Given its substantial interest in this case, the Chamber respectfully requests the Court to grant it leave to file the proposed brief.

January 22, 2026

Respectfully submitted,

/s/ Anthony J. Lucisano

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CERTIFICATE OF COMPLIANCE

1. This Motion complies with the type-volume limits of Federal Rule of Appellate Procedure 27(d)(2) because it contains 635 words, excluding the parts of the Motion exempted by Federal Rule of Appellate Procedure 32(f).

2. This document complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type-style requirements of Federal Rule of Appellate Procedure 32(a)(6) because it has been prepared in a proportionally spaced typeface using 14-point Times New Roman font.

/s/ *Anthony J. Lucisano*
Anthony J. Lucisano

Counsel of Record for Amicus Curiae

CERTIFICATE OF CONFERENCE

I certify that during the week of January 12, 2026, counsel for *amicus* curiae conferred with counsel for Plaintiffs-Appellees and Defendants-Appellants. Counsel for Plaintiffs-Appellees did not supply consent to the filing of the proposed *amicus* brief and instead indicated that Plaintiffs-Appellees "take no position on the *amicus* brief's filing." Counsel for Defendants-Appellants confirmed that Defendants-Appellants consent to the filing of the proposed *amicus* brief and are unopposed to this motion.

/s/ *Anthony J. Lucisano*
Anthony J. Lucisano

Counsel of Record for
Amicus Curiae

CERTIFICATE OF SERVICE

I certify that on January 22, 2026, the foregoing was electronically filed through this Court's CM/ECF system, which will send a notice of filing to all registered users.

/s/ *Anthony J. Lucisano*
Anthony J. Lucisano

Counsel of Record for
Amicus Curiae

Exhibit A

No. 25-50855

In the United States Court of Appeals for the Fifth Circuit

MOHAMMAD BOZORGI, KEN CALDERONE; MANOHAR K. RAO, *INDIVIDUALLY AND ON BEHALF OF ALL OTHERS SIMILARLY SITUATED*; ALL PERSONS OR ENTITIES WHO, BETWEEN SEPTEMBER 14, 2020 AND OCTOBER 12, 2023, PURCHASED OR OTHERWISE ACQUIRED CASSAVA SCIENCES, INC. SECURITIES,

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Pursuant to Fifth Circuit Rule 28.2, I supplement the certificate of interested persons provided in the Brief of Defendants–Appellants by naming the following persons who have an interest in the outcome of this litigation:

***Amicus Curiae*:**
U.S. Chamber of Commerce

Counsel for *Amicus*:
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The Chamber of Commerce of the United States of America ("Chamber") is a tax-exempt, not-for-profit organization incorporated in the District of Columbia. The Chamber has no stock or parent corporation, and no publicly held company has 10% or greater ownership in the Chamber.

/s/ *Anthony J. Lucisano*
Anthony J. Lucisano

Counsel of Record for Amicus Curiae

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INTEREST OF *AMICUS CURIAE*[1]

The Chamber of Commerce of the United States of America ("Chamber") is the world's largest business federation. It represents approximately 300,000 direct members and indirectly represents the interests of more than 3 million companies and professional organizations of every size, in every industry sector, and from every region of the country. An important function of the Chamber is to represent the interests of its members in matters before Congress, the Executive Branch, and the courts. To that end, the Chamber regularly files *amicus curiae* briefs in cases, like this one, that raise issues of concern to the nation's business community. Here, many of *amicus*'s members are subject to U.S. securities laws and will be adversely affected if the decision below is not corrected.

INTRODUCTION AND SUMMARY OF ARGUMENT

Nearly four decades ago, the Supreme Court created a rebuttable, classwide "presumption of reliance" for putative securities class actions, throwing a lifeline to lawsuits that would otherwise fail to satisfy Rule 23's predominance requirement. *Basic Inc. v. Levinson*, 485 U.S. 224, 245-47 (1988). That "*Basic* presumption" rested on two assumptions about rational market behavior: that (1) information is

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[1] No counsel for any party authored this brief in whole or in part, and no entity or person, aside from *amicus curiae*, its members, or its counsel, made any monetary contribution intended to fund the preparation or submission of this brief. *See* Fed. R. App. P. 29(a)(4).

quickly digested in a well-developed—*i.e.*, "efficient"—market and incorporated into stock prices, and (2) investors rely on the integrity of stock prices in buying or selling securities.

Without guidance on how to determine whether the market for a *particular* stock satisfies the aspirational *prototype* of market efficiency that *Basic* envisioned, lower courts were thrust into the role of economist. Courts coalesced around a set of eight judicially created factors—known as the *Cammer/Krogman* factors—used to deem markets well-developed and trigger the *Basic* presumption. But, despite multiple admonitions from this Court (and others), district courts have come to treat those factors as a mechanical, one-size-fits-all checklist divorced from *Basic*'s core principles and actual market behavior. Hence, factors that are supposed to be merely helpful analytical tools in scrutinizing market efficiency have become a blueprint for reflexively applying the *Basic* presumption in nearly every case involving stocks traded on a national exchange.

Meanwhile, history has shown that market behavior has departed with increasing frequency from the tidy assumptions underlying *Basic*'s "ideal[]" market. 485 U.S. at 244. The Covid-era phenomenon of so-called "meme stocks" is the latest example of that trend. Rather than efficiently incorporating new public information, an increasing number of stocks experience volatile price swings untethered from the release of new, value-relevant information. And rather than investors rationally relying on market-price integrity, retail investors in these stocks engage in frenzied trading behavior disconnected from the supposed integrity of the stock price. The emergence of such stocks should serve as a stark reminder that context and the individual characteristics of a particular stock—not entrenched bromides about market behavior—ought to matter in assessing whether market efficiency exists in any particular case.

The decision below is a troubling culmination of these recent trends. The district court mechanically ticked through the *Cammer/Krogman* factors for an efficient market, finding them satisfied for Cassava Sciences, Inc.'s ("Cassava") stock and certifying the class. But it cast aside compelling evidence that undermined the *Basic* presumption here. Hallmark indicators of an *in*efficient market were thus overtaken in the market-efficiency analysis by indirect "factors" that would apply to nearly every stock on a national exchange.

A course correction is sorely needed. In reversing the class certification order, this Court should emphasize that market efficiency must be rigorously evaluated in light of *Basic's* core principles, with a keen judicial eye to the particular market dynamics of each stock. Absent that guidance, lower courts will continue to do what the district court did here, engaging in rote application of the *Cammer/Krogman* factors and certifying one securities class action after another. American businesses and capital markets will suffer as a result, as certification of securities class actions can impose crushing litigation costs and *in terrorem* settlement pressure. With the recent migration of companies to Texas and the advent of the Texas Stock Exchange, those ill effects will be especially pronounced in this Circuit.

ARGUMENT

I. Securities class actions depend on *Basic*'s presumption of reliance and economic assumptions that must be rigorously tested.

A serious assessment of market efficiency and the applicability of the *Basic* presumption cannot occur in a vacuum, divorced from the fundamental premise of *Basic* or the ever-changing realities of the market at issue. Nor should courts lose sight of the fact that "market efficiency" at most represents an indirect proxy for "price impact"—the requisite showing that the influx of new information (and thus the alleged misrepresentations) actually influenced a stock's price.

A. The *Basic* presumption rests on a pair of assumptions about market behavior that do not always match reality.

To bring a claim under Section 10(b) of the Securities Exchange Act of 1934 and SEC Rule 10b–5, plaintiffs must prove that they relied on a defendant's misrepresentation when buying securities. *Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 267 (2014) ("*Halliburton II*"). The Supreme Court in *Basic*, however, perceived two problems with enforcing the reliance element for securities-fraud claims. First, requiring plaintiffs to prove direct reliance "would place an unnecessarily unrealistic evidentiary burden on the Rule 10b–5 plaintiff who has traded on an impersonal market." *Basic*, 485 U.S. at 245. And second, "[r]equiring proof of individualized reliance from each member of the proposed plaintiff class" would make class certification under Rule 23 virtually impossible because individual issues would "overwhelm[] the common ones." *Id.* at 242.

Circumventing those roadblocks, the Supreme Court in *Basic* relied on the "fraud-on-the-market theory" to hold that "securities fraud plaintiffs can in certain circumstances satisfy the reliance element of a Rule 10b–5 action by invoking a rebuttable presumption of reliance." *Halliburton II*, 573 U.S. at 268. To invoke the *Basic* presumption, a plaintiff must show "(1) that the alleged misrepresentations were publicly known, (2) that they were material, (3) that the stock traded in an efficient market, and (4) that the plaintiff traded the stock between the time the misrepresentations were made and when the truth was revealed." *Id.*

The *Basic* presumption itself relies on two underlying assumptions about how rational securities markets behave. First, the Court presumed that "the market price of shares traded on well-developed markets reflects all publicly available information, and, hence, any material misrepresentations." *Basic*, 485 U.S. at 246. Second, the Court assumed that "[a]n investor who buys or sells stock at the price set by the market does so in reliance on the integrity of that price," *id.* at 247, finding it "hard to imagine that there ever is a buyer or seller who does not rely on market integrity. Who would knowingly roll the dice in a crooked crap game?" *Id.* at 246-47 (quoting *Schlanger v. Four-Phase Sys. Inc.*, 555 F. Supp. 535, 538 (S.D.N.Y. 1982)).

These assumptions about market behavior, however, are just that—*assumptions*. *See Halliburton II*, 573 U.S. at 272-73 (acknowledging that "*Basic* recognized that market efficiency is a matter of degree and accordingly made it a matter of proof" and "never denied the existence of such investors" who do not rely on the integrity of the stock price). As this Court has explained, "the relevant question is whether the market for a *particular security* is efficient, because a market can be open and developed for some securities and not for others." *Bell v. Ascendant Sols., Inc.*, 422 F.3d 307, 315 (5th Cir. 2005) (emphasis added). Thus, "simply . . . plead[ing]" market efficiency does not suffice; the "burden of *proving* th[e] prerequisites," including "market efficiency," "still rests with plaintiffs." *Halliburton II*, 573 U.S. at 276.

B. Market efficiency—and thus the judicially created "factors" for analyzing it—provide only an indirect proxy for establishing the "fundamental premise" of price impact.

"*Basic*'s 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." *Erica P. John Fund, Inc. v. Halliburton Co.*, 563 U.S. 805, 813 (2011) ("*Halliburton I*"). This showing—known as "price impact"—is therefore the linchpin of the analysis; without it, there is no *Basic* presumption. *See Halliburton II*, 573 U.S. at 278 ("In the absence of price impact, *Basic*'s fraud-on-the-market theory and presumption of reliance collapse.").

"[M]arket efficiency," in turn, is nothing more than "an indirect way of showing price impact." *See Halliburton II*, 573 U.S. at 281. That foundational principle is key to understanding the proper role of the *Cammer/Krogman* factors (discussed further below, *infra* Part II.A). Economic theory teaches that "a market is generally efficient in incorporating publicly available information into a security's market price." *Amgen Inc. v. Conn. Ret. Plans & Tr. Funds*, 568 U.S. 455, 462 (2013). This makes it "reasonable to *presume* that a particular public, material misrepresentation will be reflected in the security's price." *Id.* (emphasis added). But that presumption must be held to a "rigorous, though preliminary, standard[] of proof [for] the market efficiency determination." *Unger v. Amedisys Inc.*, 401 F.3d 316, 322 (5th Cir. 2005).

II. The district court erred by treating market efficiency as a check-the-box exercise divorced from *Basic*'s core premise and market realities.

The *Cammer/Krogman* factors courts use to identify efficient markets should not be reflexively employed as an end-run around *Basic*'s underlying principles. The conclusion that the market for a given stock satisfies a majority of those factors may shed little light on whether the market actually bears the hallmarks of efficiency and rational investor behavior that drive *Basic*'s presumption and its fundamental premise of price impact.

The decision below erred by treating the *Cammer/Krogman* factors as a mere tallying exercise, resulting in its finding that a stock bearing the telltale signs of an inefficient "meme stock" was nevertheless entitled to the *Basic* presumption. ROA.6273 ("Because all the *Cammer/Krogman* factors favor a finding that Cassava Securities were traded in an efficient market during the Class Period, the Court concludes that Plaintiffs are entitled to a classwide presumption of reliance under *Basic*.") (emphasis modified); *contra Bratya SPRL v. Bed Bath & Beyond Corp.*, 752 F. Supp. 3d 34, 55 (D.D.C. 2024) (denying class certification as to a market with meme-stock tendencies). This Court should correct that error and remind district courts that the *Cammer/Krogman* factors, at most, are merely one tool in service of *Basic*'s fundamental premise, not an end in themselves. Faithful adherence to those principles and close scrutiny at the class-certification stage provide critical checks on securities class actions and the crushing burdens they impose on American businesses.

A. The *Cammer/Krogman* factors must not be used as a mechanical checklist that can resolve every case.

The eponymous *Cammer/Krogman* factors come from a pair of decades-old district court decisions. *See Cammer v. Bloom*, 711 F. Supp. 1264 (D.N.J. 1989); *Krogman v. Sterritt*, 202 F.R.D. 467 (N.D. Tex. 2001). The *Cammer* court identified five factors relevant to market efficiency: (1) average weekly trading volume during the class period; (2) the number of securities analysts that followed and reported on the company's stock; (3) the extent to which market makers and arbitrageurs traded in the stock; (4) whether the company was entitled to file an S–3 registration statement; and (5) whether empirical facts showed a cause/effect relationship between unexpected corporate events or financial releases and an immediate response in the company's stock price. *Cammer*, 711 F. Supp. at 1286-87. The *Krogman* court added three more: (6) the company's market capitalization, which is calculated as the number of shares multiplied by the prevailing share price; (7) bid-ask spread, which is the difference between the price at which investors are willing to buy the stock and the price at which current stockholders are willing to sell their shares; and (8) float, which is the percentage of shares held by the public rather than insiders. *Krogman*, 202 F.R.D. at 478. Together, these are commonly known as the *Cammer/Krogman* factors.

These factors merely aim to *describe* perceived features of market efficiency, not to *prove* it directly. *See Bratya*, 752 F. Supp. 3d at 55 (observing that the *Cammer/Krogman* factors are not a "guarantee of market efficiency"); Geoffrey Christopher Rapp, *Proving Markets Inefficient: The Variability of Federal Court Decisions on Market Efficiency in* Cammer v. Bloom *and Its Progeny*, 10 U. MIAMI BUS. L. REV. 303, 319 (2002) (hereinafter, "*Proving Markets Inefficient*") (explaining that the *Cammer/Krogman* factors "are characteristics one would observe about those companies assumed to trade on an efficient market"). In fact, only one of the eight factors—the fifth factor, which assesses informational cause and effect on stock prices—is a direct indicator of market efficiency. *See In re*

Petrobras Sec., 862 F.3d 250, 276 (2d Cir. 2017) ("All but one of the *Cammer* factors examine indirect indicia of market efficiency for a particular security . . . ."); *Bratya*, 752 F. Supp. 3d at 54-55 (distinguishing the "indirect" factors from the "fifth *Cammer* factor [that] looks to direct empirical evidence"); *Proving Markets Inefficient*, *supra*, at 319 ("other than the factor that measures the historical responsiveness of price to unannounced information, none of these factors can be used directly to predict efficiency"). The upshot is that nearly all of these factors serve as an *indirect* indicator of market efficiency, which is itself only an "indirect proxy for price impact." *Halliburton II*, 573 U.S. at 281.

Because most of the factors are "technically satisfie[d]" for every stock traded on a national exchange (like the New York Stock Exchange or Nasdaq), a finding of market efficiency inevitably follows when courts apply them in a mechanistic way. *Bratya*, 752 F. Supp. 3d at 55. As a result, "false positives" abound given that many of the factors "actually have no bearing on market efficiency." Rapp, *Proving Markets Inefficient*, *supra*, at 321; *id.* (citing a study concluding that "only two of the eight factors" systematically distinguished between inefficient and efficient markets). And, because courts are at sea on how to weigh the factors, inconsistency plagues judicial outcomes. *See* Donald C. Langevoort, Basic *at Twenty: Rethinking Fraud-on-the-Market*, WIS. L. REV. 151, 167 (2009) ("*Cammer* is unclear what is to be done except examine the factors in order. It invited an ad hoc approach informed by expert testimony, but in fact largely unconstrained."); *Proving Markets Inefficient*, *supra*, at 317 (examining the "variability of post-*Basic* evaluations of market efficiency").

In 2005, this Court twice addressed the *Cammer/Krogman* factors and attempted to ameliorate some of their weaknesses. In *Unger*, the Court cautioned that the factors do "not represent an exhaustive list" and "must be weighed analytically, not merely counted." 401 F.3d at 323. It further explained that the factors are not all created equal, with the cause-and-effect factor constituting "one of the most important market-efficiency factors." *Id.* at 324. And in *Bell*, this Court held that "a market can be open and developed for some securities and not for others," thus requiring a bespoke approach based on the "characteristics of the *individual stock itself*." *Bell*, 422 F.3d at 315 (citing *Cammer*, 711 F. Supp. at 1281 (emphasis added)). In doing so, the Court emphatically rejected the suggestion that the "mere fact that a stock trades on a national exchange . . . necessarily indicate[s] that the market for that particular security is efficient." *Id.* at 313.

This Court has not addressed the *Cammer/Krogman* factors in the two decades since *Bell* and *Unger*. During that time, decisions like the one rendered below have proliferated. The district court violated *Unger*'s admonition by "incorrectly us[ing] all [the *Cammer/Krogman*] factors it found in favor of market efficiency as a checklist rather than an analytical tool." 401 F.3d at 325. It "dutifully tick[ed] off each one" of those factors by making observations that could be said about any stock trading on a national exchange, *Bratya*, 752 F. Supp. 3d at 55, giving short shrift to the unique "characteristics of the individual stock itself," *Bell*, 422 F.3d at 315.

In fact, the district court declared that it was "legally" *prohibited* from considering Cassava's "meme stock argument." ROA.6261. It mistakenly believed that doing so would have barred it from "apply[ing] the *Cammer/Krogman* factors in securities-fraud cases when the defendant argues that the stock was a meme stock or that the market was inefficient." ROA.6261. This reasoning is fatally flawed. Indeed, by treating the *Cammer/Krogman* factors as mutually exclusive from the evidence of actual market behavior, the district court strayed from this Court's admonitions to examine holistically whether the individual characteristics of Cassava's stock resembled the efficient market *Basic* hypothesized.

The problem, then, was not that the district court applied the *Cammer/Krogman* factors, but that it mechanistically deployed those factors in derogation of record evidence that demonstrated the anomalous behavior of Cassava's stock. The district court therefore erred in treating a purported satisfaction of "the *Cammer/Krogman* factors" as *compelling* "a finding that Cassava Securities were traded in an efficient market during the Class Period." ROA.6273.

Consider the district court's analysis of the "average weekly trading volume" factor. Applying the default *Cammer* rule that a "two percent" average weekly trading volume indicates a "strong presumption" of efficiency, the district court deemed Cassava's eye-popping 48.99% weekly trading volume to be "one of the most important factors" in favor of efficiency. ROA.6264 (citing *Cammer*, 711 F. Supp, at 1286). But a meaningful examination of that factor, in the context of Cassava's meme-stock characteristics, should have pointed in precisely the *opposite* direction. As Judge McFadden explained in a similar context, such a "hyperactive trading volume seems less an indication that traders are responding to new value-relevant information than that they are reacting to (or participating in) market manipulation" and the frenzied trading behavior often associated with meme stocks. *Bratya*, 752 F. Supp. 3d at 58; *see also id.* (explaining that "the astronomical volume and share turnover rates during the Class Period do not signal market efficiency any more than tachycardia [an irregularly fast heartbeat] signals a healthy heart").

That example and others discussed below, *infra* Part II.B, and in Appellants' Brief (at 42-49), demonstrate how *inefficient* market forces often go undetected by uncritical application of the *Cammer/Krogman* factors. *See Bratya*, 752 F. Supp. 3d at 57 (noting that "most of the *Cammer* factors . . . are 'static' indicators that say nothing about whether a market is undergoing a temporary period of inefficiency," and therefore are "largely irrelevant as indicators of market efficiency" in periods of "high volatility and short squeeze dynamics"). This Court should therefore reverse and reaffirm that the context of a particular stock dictates how the *Cammer/Krogman* factors must be applied.

B. Examining the "meme stock" nature of Cassava's stock reveals that neither of *Basic*'s critical assumptions is present.

Rather than robotically applying the *Cammer/Krogman* factors, the district court should have assessed the factors with a view to discerning whether Cassava's stock, despite its meme-stock characteristics, satisfied the key components of the fraud-on-the-market presumption. Specifically, it should have evaluated the factors in light of whether Cassava's stock evidenced *Basic*'s constituent assumptions—*i.e.*, that (1) information was quickly digested and incorporated into Cassava's stock price, and (2) the purported class of Cassava investors relied on the integrity of its stock price. Only if district courts maintain this crucial focus can they ensure that market efficiency serves as a meaningful proxy for *Basic*'s fundamental premise of price impact.

The district court overlooked that obligation by fixating on whether Cassava satisfied its preferred definition of a "meme stock"—a currently *undefined* phenomenon. ROA.6262-63; *see* John W. Bagby & Nizan Geslevich Packin, *Meme-Manipulation: Towards Reinvigorating the Regulation of Speculative Devices*, 74 AM. U. L. REV. 1155, 1168 (2025) (hereinafter, "*Meme-Manipulation*") ("[meme stocks'] definitions are vague, which makes definitive metrics elusive"); Dhruv Aggarwal, Albert H. Choi & Yoon-Ho Alex Lee, *The Meme Stock Frenzy: Origins and Implications*, 96 S. CAL. L. REV. 1387, 1412-13 (2024) (hereinafter, "*The Meme*

Stock Frenzy") (explaining why meme stocks are hard to define). But useless labels should not drive the market-efficiency analysis; the "*characteristics* of the individual stock itself" do. *Bell*, 422 F.3d at 315 (emphasis added). And here, the market behavior of Cassava's stock—characterized by wild price swings and frenzied trading of online retail investors—is what should have mattered. A context-sensitive analysis of Cassava's stock, viewed through the lens of *Basic*'s constituent presumptions, would have led to a different outcome.

Informational efficiency. This Court's precedent recognizes that informational cause and effect is "one of the most important" factors in assessing market efficiency, *Unger*, 401 F.3d at 324, mirroring *Basic*'s recognition that efficient stocks rapidly incorporate public information into their market price. But the district court divorced this factor from *Basic*'s maxim by relying on a cookie-cutter event study that purported to show statistically significant price movements on days with new, value-relevant news. ROA.6267-71. In doing so, the district court committed the same error corrected in *Unger*. *See* 401 F.3d at 325 (holding that evidence of a few isolated positive and negative announcements that allegedly caused the company's stock prices to change "is insufficiently probative" to make a finding of market efficiency). Worse still, it failed to grapple with evidence that even on days when *no* "new news" was released Cassava's stock fluctuated wildly. *See, e.g.*, ROA.6459 (identifying days on which there was "no new information in any of the press articles and analyst reports cited by [plaintiffs' expert], or discussed in social media, that could explain the stock price change . . . in a manner consistent with market efficiency").

Far from being a mere gripe about the "accuracy" with which information is incorporated into the market price, *contra* Pls. Resp. 13, this evidence of information-agnostic price swings undermines *Basic*'s efficient-market assumption because it suggests a lack of correlation between news days and price impact. *Bratya*, 752 F. Supp. 3d at 64 (explaining how a security's "volatility . . . poses a challenge in conducting a proper event study" to prove market efficiency). Despite such compelling evidence, and contrary to this Court's instruction to consider "[t]he overall volatility of the stock price," *Unger*, 401 F.3d at 325, the district court forged ahead as though those anomalies were irrelevant. That is far from the "complete analysis of 'fraud on the market' indicators" this Court requires. *Id.*

Compounding these errors, when Cassava criticized the reliability of plaintiffs' event studies by claiming that they "did not consider other factors affecting stock price, such as high social media activity and the effect of high borrowing costs on the ability to short Cassava's stock," ROA.6270, the district court declined to *resolve* that issue or determine whether Plaintiffs' event studies were sufficiently reliable. It instead held that that dispute could be resolved "through vigorous cross-examination and the presentation of contrary evidence" and concluded that plaintiffs' disputed event studies were "sufficient evidence *at this stage of the case* to show a causal relationship." ROA.6271 (emphasis added).

This was error. The *Basic* presumption is a matter of evidentiary proof. *See Halliburton II*, 573 U.S. at 283 (holding that market efficiency "must be proved before class certification"). Therefore, a district court, acting as a trier of fact, must resolve all factual disputes—and consider all probative evidence—before certifying a class; it cannot save threshold questions for resolution at a later date. *See Goldman Sachs Grp., Inc. v. Ark. Teacher Ret. Sys.*, 594 U.S. 113, 114, 122 (2021) ("a court has an obligation before certifying a class to 'determine that Rule 23 is satisfied" and "cannot conclude that Rule 23's requirements are satisfied without considering *all* evidence relevant to price impact") (quoting *Comcast Corp. v. Behrend*, 569 U.S. 27, 35 (2013)); *Unger*, 401 F.3d at 321 ("The plain text of Rule 23 requires the court to 'find,' not merely assume, the facts favoring class certification.").

This Court should instruct lower courts to apply the critical cause-and-effect factor in a way that respects *Basic*'s theoretical underpinnings by ensuring that price movements reflect the incorporation of material public information—rather than market manipulation by investors or other factors. Only then will market efficiency be a worthwhile proxy for presuming that misrepresentations affected the market price.

Reliance on integrity of market price. *Basic*'s fraud-on-the-market presumption rests on not only informational efficiency, but also an assumption that "[a]n investor who buys or sells stock at the price set by the market does so in reliance on the integrity of that price." *Basic*, 485 U.S. at 247. Evaluating the nature and motivation of a company's investors is critical to assessing the "characteristics of the individual stock itself," and to ensuring that market-efficiency analysis remains tethered to *Basic*'s fundamental premise of price impact. *Bell*, 422 F.3d at 315; *cf. Cammer*, 711 F. Supp. at 1286-87 (recognizing that presence of market makers and arbitrageurs is relevant to market efficiency).

Meme-stock investors do not trade in reliance on the stock's price as a proxy for the underlying value of the company. Instead, they trade with indifference to it. *See* Bagby & Packin, *Meme-Manipulation*, *supra*, at 1168 ("Generally, a meme stock is overvalued due to non-traditional, non-market forces; their prices and trading volumes are largely driven by some cult-like affinity consideration and other non-financial drivers."); Aggarwal, et. al., *The Meme Stock Frenzy*, *supra*, at 1401 (explaining that meme stock trades are "emotionally driven based on the underlying companies' cultural relevance. There is no indication that meme stocks prices reflect information about the companies' underlying fundamentals.").

That paradigm further negates the assumptions upon which *Basic* relies. Just as the presence of market makers and arbitrageurs may enhance market efficiency by ensuring that public information is quickly reflected in market price, the presence of a substantial number of meme-style investors—and a corresponding constraint on short-selling—defeats market efficiency by disconnecting price from public information. *See Bratya*, 752 F. Supp. 3d at 58, 59 (holding *Basic* not satisfied based on evidence that "traders [we]re . . . reacting to (or participating in) market manipulation" and there were "[c]onstraints on arbitrageurs' ability to short sell a stock," which "impede efficiency since traders cannot easily incorporate their negative view of a stock into its price"). In such a chaotic environment, it is impossible to presume that any alleged misrepresentation affected the market price. Consequently, the type and motivation of investors in a company's stock is a key "characteristic" that courts must consider in evaluating market efficiency under the *Cammer/Krogman* factors or otherwise.

C. Courts must closely scrutinize market efficiency to guard against the crushing burden of securities class actions.

Courts have long "recogni[zed] that litigation under Rule 10b-5 presents a danger of vexatiousness different in degree and in kind from that which accompanies litigation in general." *Blue Chip Stamps v. Manor Drug Stores*, 421 U.S. 723, 739 (1975). "[N]uisance filings, targeting of deep-pocket defendants, [and] vexatious discovery requests" are common in such actions. *Merrill Lynch, Pierce, Fenner & Smith Inc. v. Dabit*, 547 U.S. 71, 81 (2006). And the massive damages figures and "cost of discovery often force[] innocent parties to settle frivolous securities class actions." H.R. Conf. Rep. No. 104-369, at 37 (1995); *see also* Jessica Erickson, *Investing in Corporate Procedure*, 99 B.U. L. REV. 1367, 1382-83 (2019) ("Potential damages in securities class actions can easily rise to hundreds of millions of dollars, which means . . . defendants . . . are often willing to settle meritless claims to avoid . . . risking the company's financial stability.").

Despite congressional efforts to rein in securities litigation with the Private Securities Litigation Reform Act of 1995 and the Securities Litigation Uniform Standards Act of 1998, filings have only proliferated. Cornerstone Research, *Securities Class Action Filings: 2024 Year in Review*, at 1 (2025) (available at https://www.cornerstone.com/wp-content/uploads/2025/01/Securities-Class-Action-Filings-2024-Year-in-Review.pdf). "To put this in the simplest terms, the likelihood of a U.S.-listed company getting hit with a securities suit is the highest it has ever been." Kevin LaCroix, *Federal Court Securities Suit Filings Remain at Elevated Levels*, D&O Diary (Jan. 1, 2020) (available at https://www.dandodiary.com/2020/01/articles/securities-litigation/federal-court-securities-suit-filings-remain-at-elevated-levels/). As a result, the enormous costs of that litigation are spread across all U.S. public companies, including many of the Chamber's members, which must pay more for insurance and to access capital, all while competing with overseas counterparts not subject to the same constant litigation threat. *See* Carl E. Metzger & Brian H. Mukherjee, *Challenging Times: The Hardening D&O Insurance Market*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Jan. 29, 2020) (available at https://corpgov.law.harvard.edu/2020/01/29/challenging-times-the-hardening-do-insurance-market/).

Against this backdrop, requiring sufficient proof of market efficiency comes at a critical inflection point in a securities case. "[C]lass certification may be the backbreaking decision that places 'insurmountable pressure' on a defendant to settle, even where the defendant has a good chance of succeeding on the merits." *Regents of Univ. of Cal. v. Credit Suisse First Bos. (USA), Inc.*, 482 F.3d 372, 379 (5th Cir. 2007) (quoting *Castano v. Am. Tobacco*, 84 F.3d 734, 746 (5th Cir. 1996)). Moreover, "[b]ecause th[e] [market efficiency] inquiry can prove decisive for class certification," *Unger*, 401 F.3d at 322, "a district court should conduct a rigorous market efficiency analysis," *In re DVI, Inc. Sec. Litig.*, 639 F.3d 623, 633 (3d Cir. 2011), *abrogated on other grounds by Amgen Inc. v. Conn. Ret. Plans & Tr. Funds*, 568 U.S. 455 (2013).

A further admonition that market efficiency cannot be treated as a mechanistic exercise would be especially timely in this Circuit. Texas—the starting point for this case and already a hotbed for securities litigation—is experiencing an influx of publicly traded companies. *See* Reuters, *Factbox-To the Lone Star State: Corporate Migration to Texas Takes Off*, U.S. NEWS AND WORLD REPORT (Mar. 18, 2025) (available at https://money.usnews.com/investing/news/articles/2025-03-18/factbox-to-the-lone-star-state-corporate-migration-to-texas-takes-off) ("An increasing number of companies are relocating their headquarters to Texas, drawn by lower taxes, business-friendly regulations and a growing talent pool.”). That corporate migration, coupled with the upcoming opening of the Texas Stock Exchange, means that Texas district courts are poised to become even more inundated with securities litigation than they already are. *See* Press Release, Texas Stock Exchange, TXSE Group Inc announces SEC approval of Texas Stock Exchange (Sep. 30, 2025). This Court should accordingly instruct lower courts to remain vigilant in scrutinizing proof of market efficiency in light of *Basic*’s underlying principles at the class-certification stage.

* * *

The district court’s refusal to meaningfully grapple with the meme-stock phenomenon and the market dynamics of Cassava’s stock mandates reversal in this case. While the Supreme Court declined to overrule *Basic* in *Halliburton II*, it required plaintiffs to establish market efficiency at the class-certification stage and reaffirmed the centrality of price impact to the *Basic* presumption. Under this framework, a perfunctory application of the *Cammer/Krogman* factors formulated decades ago simply will not suffice in evaluating market efficiency. This Court should confirm that a more searching, context-sensitive judicial inquiry is required.

CONCLUSION

The Chamber respectfully requests this Court to reverse the district court's decision.

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Respectfully submitted,

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I certify that on January 22, 2026, the foregoing was electronically filed through this Court's CM/ECF system, which will send a notice of filing to all registered users.

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