No. 23-970

In the Supreme Court of the United States

NVIDIA CORPORATION and JENSEN HUANG, *Petitioners*,

v.

E. OHMAN J:OR FONDER AB and STICHTING PENSIOENFONDS PGB,

Respondents.

On Writ of Certiorari to the United States Court of Appeals for the Ninth Circuit

BRIEF FOR RESPONDENTS

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QUESTIONS PRESENTED

This Court granted certiorari on the following questions arising under the Private Securities Litigation Reform Act (PSLRA), as drafted by the petitioners:

1. Whether plaintiffs seeking to allege scienter under the PSLRA based on allegations about internal company documents must plead with particularity the content of those documents.

2. Whether plaintiffs can satisfy the PSLRA's falsity requirement by relying on an expert opinion to substitute for particularized allegations of fact.

RULE 29.6 STATEMENT

Respondent E. Öhman J:or Fonder AB is wholly owned by E. Öhman J:or AB, a private entity. No publicly held corporation holds 10% or more of its stock.

Respondent Stichting Pensioenfonds PGB does not have a parent corporation. No publicly held corporation owns 10% or more of its stock.

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INTRODUCTION

Nvidia sells computer chips. The uniquely rapid power of Nvidia's chips makes them useful for video games but also ideal for the computationally intensive process of cryptocurrency mining. When crypto prices crashed in late 2018, so did Nvidia's revenue, forcing the company to slash half a billion dollars from its earnings projections in what CEO Jensen Huang called a "crypto hangover."

But throughout 2017 and 2018, when crypto prices were soaring, Nvidia told concerned investors a very different story: Over and over, it assured them that its booming revenues were from gaming—not volatile crypto sales. Yet, all along, Nvidia and Huang knew the truth: A large portion of its sales were going to crypto-miners.

A large institutional investor and a pension fund filed this shareholder suit to hold Nvidia accountable. Their complaint draws on a wealth of reliable sources that collectively paint a clear picture of securities fraud. These sources include firsthand accounts from former Nvidia executives in the United States, China, India, and Russia-all describing Nvidia's and Huang's constant internal tracking of crypto sales; a report by the Royal Bank of Canada independently concluding that Nvidia in fact earned \$1.95 billion from crypto-mining during the boom—\$1.35 billion more than it told the public; an analysis by economists with cryptocurrency expertise who confirmed these findings; contemporaneous analyst reports and market reactions; Nvidia's own public statements and SEC filings; internal documents and data sources; and the circumstances surrounding Nvidia's eventual disclosures and the resulting stock price drop.

The SEC eventually investigated, charged, and ordered Nvidia to pay civil penalties as part of a

settlement. The SEC's cease-and-desist order found that Nvidia had "information indicating that cryptomining was a significant factor" in its record sales and that its own "sales personnel, in particular in China, reported" on "significant increases in demand" from "cryptomining." App. 7a. Yet even as investors "routinely asked senior management" if crypto was driving sales, Nvidia concealed these facts, leaving "the misimpression" that its revenue "was not meaningfully impacted." *Id.* at 9a.

That the SEC charged Nvidia—and reached a settlement for millions of dollars in civil penalties—over the same deception first identified in this private action further undermines any suggestion that this is the type of frivolous suit that the PSLRA was meant to screen out. It is instead a model of the "meritorious private action" that Congress aimed to preserve—"an essential supplement" to, and forerunner of, public enforcement. *Tellabs, Inc. v. Makor Issues & Rights*, 551 U.S. 308, 313 (2007).

Because Nvidia can't plausibly deny that this complaint's many detailed allegations satisfactorily plead falsity and scienter with particularity under existing law, it urges this Court to play legislator and enact two new rules found nowhere in the PSLRA's text or the decision of any court. Nvidia's first rule is that allegations "based on" internal documents must be categorically excluded unless they detail the documents' "contents"—the very thing plaintiffs are least likely to have before discovery. Nvidia's second rule would categorically bar the use of factual allegations informed by expert analysis.

Both proposals epitomize the rigid approach that this Court rejected when it held in *Tellabs* that a complaint must be judged by looking at "*all* of the facts alleged, taken collectively," not by "scrutiniz[ing] each allegation in isolation." 551 U.S. at 322-23. This Court unanimously reaffirmed that same point in *Matrixx Initiatives v. Siracusano*, 563 U.S. 27, 48-49 (2011), again rejecting a "proposed bright-line rule" at odds with the need to "review all the allegations holistically."

On page 40 of its brief, Nvidia disclaims any effort to propose new bright-line rules, claiming instead to embrace *Tellabs* and *Matrixx*. This disclaimer rings hollow. The very nature of Nvidia's proposed rules categorical exclusions of certain kinds of allegations—is antithetical to a holistic approach. Nvidia cannot have it both ways: Either courts must consider all particularized allegations collectively, as *Tellabs* and *Matrixx* require, or they can craft bright-line rules (never adopted by Congress) to exclude certain kinds of allegations.

Even if considered on a blank slate, Nvidia's proposals are unsuitable for adoption because they pose significant administrability problems while serving no legitimate purpose. They would require courts to engage in arbitrary line-drawing, parsing complaints to assess which allegations are "based on" documents or when expert analysis "substitutes for" particularized allegations.

The problems with Nvidia's proposed rules are vividly illustrated by this case. How is a court to determine which allegations are "based on" internal documents when the complaint interweaves multiple sources? Take the allegation from former employees that an internal database showed that 60%-70% of Chinese sales went to miners. That is corroborated by both expert analysis and third-party reports. Is it still "based on" internal documents? And what makes an allegation about a document's "contents" sufficiently particular? For example, the complaint carefully details what Nvidia's sales system shows. Does Nvidia's rule demand *quotations* from those records before discovery? As for expert analysis, what makes such analysis "substitute" for particularized factual allegations (of which this complaint contains *many*)? And why would a court want to ignore well informed analysis of public, quantifiable data that corroborates other particularized allegations?

These difficulties show why this Court has been right to consistently reject bright-line rules as ill-suited to the inherently fact-specific inquiry the PSLRA demands. Nvidia's proposals are a recipe for confusion, not clarity.

This Court can answer the questions presented, decline to adopt Nvidia's proposed rules, and affirm the judgment below—without sitting as a district court, as Nvidia invites it to. But if the Court chooses to accept Nvidia's invitation and apply settled law to the facts, the complaint here passes with flying colors. It pleads scienter with detailed allegations about Nvidia's sales tracking systems and former executives' accounts of what the company and Huang really knew. This is more than enough to show that Huang was aware of Nvidia's heavy reliance on crypto. The complaint's allegations of falsity likewise suffice: Huang directly told investors asking pointed questions about crypto exposure that the crypto sales were "small" and confined almost entirely to a specialized product line. That was not true—not only according to an expert but also according to third-party analysts and Nvidia's own sales tracking systems.

In short, this is just the kind of "meritorious action" that the PSLRA allows to "move forward." *Tellabs*, 551 U.S. at 324. Nvidia's proposed rules, by contrast, are a solution in search of a problem. This Court should reaffirm *Tellabs* and *Matrixx* and affirm the judgment below.

STATEMENT OF THE CASE

A. Statutory background

1. Enacted in 1995, the PSLRA serves "twin goals": to "screen out frivolous cases," "while preserving investors' ability to recover on meritorious claims." *Tellabs*, 551 U.S. at 322, 324. "Private securities litigation," Congress found, "is an indispensable tool" for "defrauded investors" to "recover their losses without having to rely upon government action." H.R. Rep. No. 104-369, at 31 (1995).

To balance these goals, Congress amended the Securities Exchange Act of 1934 to require a private securities-fraud complaint to "specify each statement alleged to have been misleading" and "the reason or reasons why the statement is misleading." 15 U.S.C. § 78u-4(b)(1)(B). "[I]f an allegation regarding the statement or omission is made on information and belief, the complaint shall state with particularity all facts on which that belief is formed." Id. The complaint must also "state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind." Id. § 78u-4(b)(2)(A). By mandating that "all discovery ... shall be stayed during the pendency of any motion to dismiss," id. § 78u-4(b)(3)(B), the PSLRA requires plaintiffs to satisfy these standards based only on information gathered before filing suit.

2. Congress adopted these standards "to conform the language to Rule 9(b)'s notion of pleading with 'particularity." H.R. Rep. No. 104-369, at 41; *see* Fed. R. Civ. P. 9(b) (requiring complaints to "state with particularity the circumstances constituting fraud or mistake"). Before the PSLRA, courts diverged on how to apply Rule 9(b): "Could securities fraud plaintiffs allege the requisite mental state 'simply by saying that scienter

existed,' or were they required to allege with particularity facts giving rise to an inference of scienter?" *Tellabs*, 551 U.S. at 319. The Second Circuit followed the latter approach, holding that plaintiffs must "specifically plead those events which they assert give rise to a strong inference" of scienter. *Ross v. A.H. Robins Co.*, 607 F.2d 545, 558 (2d Cir. 1979)

Although the PSLRA did not "codify" this case law, Congress "adopt[ed] the Second Circuit's 'strong inference' standard." *Tellabs*, 551 U.S. at 332. Under that standard, complaints relying on "conclusory allegations" "barren of any factual basis" were routinely dismissed. *Conn. Nat'l Bank v. Fluor Corp.*, 808 F.2d 957, 962 (2d Cir. 1987). This avoided what Judge Friendly famously called "fraud by hindsight." *Denny v. Barber*, 576 F.2d 465, 470 (2d Cir. 1978). Complaints "typically [] sufficed," however, if they "specifically alleged defendants' knowledge of facts or access to information contradicting their public statements." *Novak v. Kasaks*, 216 F.3d 300, 308 (2d Cir. 2000) (surveying pre-PSLRA cases).

3. This Court in *Tellabs* gave guidance on how to apply the PSLRA's pleading standards. *First*, courts must "accept all factual allegations in the complaint as true." 551 U.S. at 322. *Second*, courts must consider "whether *all* of the facts alleged, taken collectively, give rise to a strong inference of scienter, not whether any individual allegation, scrutinized in isolation, meets that standard." *Id.* at 323. *Third*, a "strong inference" of scienter requires an inference that is "cogent and at least as compelling as any opposing inference of nonfraudulent intent." *Id.* at 314. Applying these principles, courts must ask: "When the allegations are accepted as true and taken collectively, would a reasonable person deem the inference of scienter at least as strong as any opposing inference?" *Id.* at 326.

The defendant in *Tellabs* argued that "several ... allegations" were not particularized enough to be considered in a holistic inquiry. *Id.* at 325. Although the complaint alleged that the CEO received sales reports from which he would have known that his statements about demand for the company's flagship product—were false, the defendant argued that these allegations lacked particularity because they failed to allege details like "what those reports say," *Tellabs* Oral Arg. Tr. 14, or their "precise dates," *Tellabs*, 551 U.S. at 325, This Court rejected that approach and "reiterate[d]" that "the court's job is not to scrutinize each allegation in isolation but to assess all the allegations holistically." *Id.* at 326.

B. Factual and procedural background

1. Rampant cryptocurrency speculation fuels "the biggest bubble in human history."

Cryptocurrencies are digital money that rely on decentralized networks of users instead of centralized intermediaries, like banks or governments. JA25-26. The underlying technology—known as a "blockchain"—is a ledger that records and verifies transactions using cryptography. *Id.* Those who verify transactions are called "miners," and are rewarded with cryptocurrency for their efforts. *Id.* Mining is computationally intense. JA26-27. "Miners with more computing power" can mine and profit on a "larger scale," triggering a "technological arms race" for computer chips like Nvidia's. *Id*

Speculation has caused crypto prices to "sw[i]ng wildly over their short history." JA30. Bitcoin—the first,

most popular cryptocurrency—went from obscurity to a \$1 billion market capitalization by early May 2013. *Id.* Six months later, it topped \$14 billion. *Id.* Bitcoin's success spawned hundreds of other digital currencies. JA31-32. Money poured into crypto ventures, as giddy investors looked to multiply their investments. *Id.* By 2017, prices reached their highest levels yet in a massive spike that has been compared to the 17th century's Dutch tulip mania as "the biggest bubble in human history."¹ The value of Ethereum, the second most popular currency, rose a staggering 13,000% that year. JA31-32.

2. The cryptocurrency bubble temporarily turbocharges Nvidia's sales—at the expense of its core gaming business.

Since Huang founded Nvidia in 1993, its core business has been powering video-game graphics. JA18. Nvidia's "crown jewel," and "the product line on which [it] built its reputation," was its brand of graphics-processing unit (GPU) called "GeForce"—"a favorite among video-game enthusiasts." JA3, 23. Gaming was Nvidia's most important chip market "by a large margin," accounting for more than half of its nearly \$10 billion in 2018 revenue. JA3, 23.

When crypto-miners realized that GPUs "could execute the computationally intensive work of cryptomining hundreds of times faster" than other chips, GPU demand "skyrocketed." JA28. Miners bought GeForce GPUs in bulk, ordering thousands of units each, to build mining "farms"—data centers housing rows of mining

¹ See Bitcoin and its rivals offer no shelter from the storm, The Economist, Feb. 10, 2018; see Thomas Heath, Is Bitcoin Another Tulip Craze Or a Legitimate Investment?, Wash. Post, Sept. 14, 2017.

servers, each running multiple GPUs. JA27-29, 65-68 (statements of four former employees).

All these sales created "an intense but transient ... demand" for GeForce GPUs. JA15. The result was protracted "shortages ... so great that retailers ... began limiting the number of GPUs that customers could buy." JA67. Gamers and miners paid "a premium of 20% to 30%," creating a supply crunch in their mad-dash competition for any GPUs available. JA10, 32, 66-68. The demand came with risk: If crypto prices fell and mining became unprofitable, the surge could vanish overnight. JA29-30. Were that to happen, it would result in a glut of Nvidia's product on the market, both from the excess GPUs manufactured by Nvidia in anticipation of higher demand and from miners "selling used GPUs ... when mining becomes unprofitable." JA30, 85. That, in turn, would weaken prices and cut into Nvidia's profits.

3. Nvidia hides its cryptocurrency exposure from investors and analysts.

The "cryptocurrency boom served as rocket fuel for Nvidia[] ... supercharging the revenues of [its] most-watched segment." JA4. In May 2017, Nvidia announced first-quarter gaming revenues of \$1.02 billion—a 49% annual increase. JA33. It "reported similarly spectacular numbers each quarter for the next year." *Id*.

According to Nvidia's public filings, this sales spike "was due primarily to increased revenue from sales of GeForce GPU products *for gaming*." JA104 (emphasis added). Nvidia, however, recorded every GeForce sale as a "gaming" sale, regardless of the buyer. In truth, as the complaint in this case details, Nvidia's remarkable sales growth was driven not by gamers, but "largely by sales to cryptocurrency miners" who "were buying up GeForce GPUs in droves, often in bulk purchases of thousands or tens of thousands." JA6, 39.

Nvidia "not only knew about, but *encouraged*" these off-label sales. JA11. At quarterly sales meetings, Huang and other top executives pursued opportunities to target big commercial miners, including a large deal with a well-known crypto-mining outfit. JA45-46. Internally, Nvidia predicted a 60% rise in GeForce sales in 2018 based on increased mining demand. JA57.

In mid-2017, Nvidia launched a new GPU line marketed specifically to miners. Unlike its GeForce sales, Nvidia did not report this product's purchases as "gaming" sales, but as part of "an ancillary catch-all" category called "Original Equipment Manufacturer," or "OEM," which comprised only 5% to 10% of revenue. JA5, 22-23. This apparent separation between gaming and mining sales "creat[ed] the impression" that, while Nvidia was chasing *some* crypto-related sales, it had "insulated" its core gaming business "from crypto-related volatility" and "the crash in demand that would follow the cryptocurrency markets' inevitable bust." JA5.

Nevertheless, crypto-miners "continued to purchase enormous numbers of GeForce GPUs." Pet. App. 11a. Sales of Nvidia's specialized mining product, however, were lackluster. "Contrary to [Nvidia's] public statements," the new product "had not absorbed anywhere close to a majority of cryptominers' demand." JA6. At the height of the crypto boom in January 2018, Nvidia revised its GeForce license agreement to expressly permit GPU use in crypto-mining farms—an implicit recognition that "industrialized mining firms were in fact buying up GeForce GPUs on a massive scale." JA12, 69-71.

4. Facing repeated inquiries from analysts and investors, Nvidia repeatedly and expressly denies that mining-related sales are driving its GeForce revenues.

By May 2018, GeForce revenues reached \$1.723 billion, representing "a 68% year-over-year increase, and approximately 2.5 times the revenue ... two years prior." JA33. Analysts and investors worried that Nvidia's spectacular growth was attributable not to gaming but to mining, which "was at risk of disappearing if the economics of mining turned negative." *Id.*

They had reason for concern. Nvidia's chief rival, AMD, had been "burned in a different cryptocurrency boom earlier that decade." JA4. AMD "watched its sales numbers—and its share price—skyrocket as cryptominers hoarded its GPUs, only to see both plunge when cryptocurrency prices crashed." *Id.* Now, with "cryptocurrency markets again catching fire and GeForce sales rising, analysts began to question whether [Nvidia] would fall prey to the [same] boom-and-bust cycle." *Id.* Throughout 2017 and 2018, they pressed company officials "for assurances that the surge in sales was not being driven by cryptocurrency." JA33.

But rather than admitting that most of its GeForce sales were to crypto-miners, Nvidia executives "assuaged these concerns by repeatedly telling investors ... that they were closely monitoring the cryptocurrency market's effect," and that the gains were attributable to strong demand from gamers. JA5-6, 34-36. Huang, for example, repeatedly told investors and analysts that crypto-related sales were a "small" portion of revenues and would "remain small" in the future. JA34-35. Nvidia "repeatedly assured the market—often in direct response to analyst *questions*—that mining sales consisted almost entirely of" crypto-specific "OEM" sales. JA5 (emphasis added). Officials "repeatedly and falsely assured investors and analysts that NVIDIA met virtually all of crypto-miners' demand for its GPUs through" these sales, "ignoring or obscuring the fact that most of [its] crypto-related sales almost two-thirds—came from its flagship GeForce" line. JA37.

For example, in announcing "record revenue" of \$2.23 billion for the second quarter of 2018, Huang claimed that Nvidia "serve[d] the vast ... majority of the cryptocurrency demand out of that specialized product." JA37-38. Two days later, he said in a published interview that Nvidia's sales to crypto-miners "represented only ... \$150 million or so"-the same amount that the company attributed to OEM sales. Id. He did the same the following quarter, stating in a November 2017 interview that Nvidia's crypto-related sales were "[m]aybe \$70 million"—again matching OEM revenues-and suggesting that Nvidia had sold few or no GeForce GPUs to crypto-miners. Id., JA101-03.

Nvidia's SEC filings also "ascribed [its] swelling revenues to robust gaming demand, not cryptocurrency." JA5-6. Its second-quarter filing for 2018, which announced a 59% year-over-year increase in GPU revenue, falsely represented that the increase "was due primarily to increased revenue from sales of GeForce GPU products for gaming." JA99. As one former employee acknowledged: Nvidia "lied to everyone." JA53.

Yet analysts widely believed Nvidia's claims that "strong gaming fundamentals" were driving its record profits, crediting its public assertions. JA35-36. An August 2017 JPMorgan report, for example, repeated Nvidia's claims that mining-related sales were "not a significant portion of [its] business" and that Nvidia "remain[ed] focused on ... gaming." JA35-36. Another report published in November was similar. *Id*.

5. Huang and other company executives know, but refuse to admit, that Nvidia's record "gaming" sales were driven mostly by crypto-mining.

In truth, Huang "fully understood" that "mining was driving the spike in GeForce sales." JA6. Although Nvidia typically sells its GPUs to device manufacturers rather than directly to end users, the complaint alleges that the company "kept meticulous track of who was buying its GPUs"-not just from Nvidia, but from "others down the distribution chain as well." JA24, 41-42, 55. As Huang once told analysts: "We monitor the inventory in the channel continuously, not only from the guys that buy from us, but where the parts go after that—who they sell to, and who they sell to." JA24 (emphasis added). Similarly, Huang assured investors on an earnings call that Nvidia monitors "sellout"—i.e., the resale of GPUs by its customers— "literally every day." Id. That, he explained, is how Nvidia manages its inventory: "We don't manage inventory on selling," he said, "we manage inventory on sellout." Id.

Nvidia and Huang monitored downstream cryptorelated sales in several ways detailed in the complaint:

First, "[m]ultiple former employees" confirmed that Huang and other executives had access to an "internal sales database that consolidated GeForce sales data from around the world and identified GeForce sales to cryptominers." JA40, 43, 111. These employees explained that Nvidia paid its customers to submit forms "identifying who was buying [their] completed products." JA41-42, 55. According to the employees, this data went into the global database, which "specifically identif[ied] and quantif[ied] global GeForce sales to crypto-miners." JA6-7.

According to a former top Nvidia sales executive, this data showed crypto-miner demand for GeForce GPUs "exploding," with 60%-70% of GeForce sales in China going to miners. JA41, 44. Given that China is Nvidia's "largest market by far," accounting for up to half of its total GeForce sales, JA7, those sales alone accounted for up to 35% of Nvidia's total GeForce revenue in 2017—not the "small" amount that Huang repeatedly told investors. JA44. This sales data, according to the complaint, thus "made clear that miners, not gamers, were driving the rapid increase in GeForce revenues." JA40.

Nvidia's top executives were not just familiar with this data—they were, as one former senior account manager attested, "obsessed" with it. JA7-8, 44. A senior product manager at Nvidia's headquarters "confirmed that Huang personally reviewed [] sales data through the centralized sales database." JA43-44.

There's even a tape backing this up: A 2017 Nvidiaproduced video "show[s] Huang looking at the sales data in the database" and "congratulating" a vice president "on the increased sales." JA44.

Second, "internal technical data confirmed that crypto-miners had overrun the market for GeForce GPUs." JA10. Nvidia ships its GPUs with software called "GeForce Experience," which "transmit[s] usage data from users back to NVIDIA," allowing it to track in real time "whether consumers were using each GPU for gaming or for mining." *Id.*, JA51-54, 113-14.

A former senior executive with access to the data explained that it allowed Nvidia to see "how many of its GeForce GPUs were being used for mining," confirming that "over 60% of GeForce sales went to miners during the Class Period—a figure in line with ... the centralized sales database." JA11; *see also* JA53, 67-68, 96-98, 113-14. The employee confirmed that this data was maintained in a central database and compiled in monthly reports; he saw those reports personally and knew that they were sent directly to Huang, "who personally reviewed the data for each region." JA11, 53. All of Nvidia's top managers, a former employee recalls, "actually kn[e]w this data." JA113-14.²

Third, Nvidia's sales force, which knew that bulk orders from miners were taking off, "regularly reported miners' swelling demand for GeForce products" to Huang and other top officials. JA49-50, 54-55. For example, a former executive reported "directly, personally, and repeatedly communicat[ing] with" Jeff Fisher, Nvidia's head of gaming, and other company executives about exploding crypto demand for GeForce GPUs. JA20. Fisher—Huang's childhood friend and the company's "first salesman"—had an office down the hall from Huang and met with him frequently. JA 19-20, 151-53.

² Nvidia (at 15 & n.1) discounts the statements of this single former employee, identified in the complaint as "FE-5," because he later denied to Nvidia that he made some of them. The district court, however, denied Nvidia's motion to strike the employee's testimony. Given the existence of dueling declarations about what the employee said, and the risk that he feared retaliation, the district court found this to be a dispute of fact improper for resolution at the pleading stage. *See Iron Workers Loc. 580 Joint Funds v. NVIDIA Corp.*, 522 F. Supp. 3d 660, 672 (N.D. Cal. 2021). As the court explained, "there plainly are factual disputes concerning whether FE-5 provided some of the information attributed to him and the reasons for FE-5's disavowals." *Id.* In any event, the complaint's allegations regarding the other four former employees (FE-1 through FE-4) are unaffected.

Huang in fact held quarterly internal meetings where the sales team forecasted GeForce sales for him and other top executives. JA45-46 (statement of FE-1). Multiple Nvidia employees who attended these meetings confirmed that sales data on GeForce sales to crypto-miners was discussed. JA46-47 (statement of FE-1). Afterward, the data was "sent directly to Huang," who closely reviewed it. *Id.* (statement of FE-5). Likewise, "weekly reports sent directly to Huang at his request" regularly reported the effect of cryptocurrency mining on demand for GeForce GPUs and the resulting shortage of GeForce inventory. JA7, 49 (statement of FE-2). A former executive who received the emails confirmed that, during the 2017-18 crypto bubble, "almost all" these reports involved discussions of crypto-mining. JA49-50 (quoting FE-5).

Fourth, Fisher and his top deputies attended an internal presentation on the mining market, which warned that an "explosion of crypto-related sales of GeForce GPUs" was "driving GeForce revenues in China," causing GeForce sales to *almost double* in a short period. JA57-58. The presentation warned that Nvidia needed to "take care" of the problem. JA58.

After hearing the presentation, Fisher called the situation "dangerous" and privately commissioned a study of crypto-related demand in China to be presented to top GeForce executives. JA58-59. The study revealed that 1.5 million GeForce GPUs had been sold to Chinese cryptominers in the first eight months of 2017, producing, conservatively, \$225 million in crypto-related GeForce sales from the China market alone. JA60.



The complaint attaches verbatim the relevant slides from this internal corporate presentation. *See* JA59.

6. Nvidia's stock plummets when the crypto crash forces it to admit the truth.

From the beginning, Nvidia's "top executives ... knew that the spike in GeForce GPU sales was not sustainable," JA4, and the reckoning came when crypto markets crashed in the spring of 2018. JA12. As expected, once the "value of cryptocurrencies" went into "freefall" during the summer of 2018, "crypto-mining became unprofitable, and miners' demand for NVIDIA GeForce GPUs evaporated." *Id.* "So, too, did GeForce sales." *Id.* Worse, crypto miners flooded the aftermarket with secondhand GPUs they no longer needed, depressing demand and prices for new models. JA30-31, 39.

Only then did Nvidia begin to gradually back off from its earlier assurances. JA83-84. In August 2018, Huang blamed lowered revenue expectations on a drop in miningrelated sales, conceding for the first time that "probably ... a great deal" of miners had purchased GeForce GPUs. *Id.* Nvidia also disclosed that GeForce inventories had "ballooned more than 36% to \$1.09 billion, reflecting the glut of supply that followed the end of crypto-related demand." JA12-13. Nvidia's share price fell on the news, with analysts blaming the drop on crypto's collapse. JA83.

Then, in November 2018, Nvidia announced that it was slashing its quarterly earnings projections by half a billion dollars due to a "sharp falloff in crypto demand" for GeForce products—what Huang described as a "crypto hangover." JA12, 89. As one analyst noted, this disclosure stood "in sharp contrast to the comments [by executives] at the last earnings call." JA89. By the end of the following day, the stock was down 28.5% from its peak, from \$202 to \$145 per share. JA13, 92.

7. The Royal Bank of Canada assesses that Nvidia hid at least \$1.35 billion in miningrelated sales from the public.

Market analysts took note of Nvidia's precipitous stock price decline, and, in early 2019, a subsidiary of the Royal Bank of Canada (RBC) produced an independent report analyzing the effect of crypto-related sales on Nvidia's revenue. JA71. It found that Nvidia earned \$1.95 billion from crypto-mining during the boom—\$1.35 billion more than it publicly acknowledged. *Id.* Industry press "seized on the RBC analysis," producing headlines like, "Analyst says Nvidia lied about its cryptocurrency earnings to avoid stock crash: They may have concealed revenue to mask shrinking demand." JA72. One prominent industry publication observed that "the steep falls" in Nvidia's stock price, including at the end of the class period here, were "a strong incentive for Nvidia to mask large fluctuations in revenue." *Id*.

8. Shareholders sue Nvidia and allege, based on multiple independent sources, that Nvidia and Huang knew that most GeForce sales had been to miners.

The plaintiffs—a large institutional investor and a pension fund—filed this putative class action against Nvidia under the Securities Exchange Act of 1934, alleging that its executives made materially false and misleading statements to investors. JA17-18, 32-33, 94-96.

Drawing on a variety of independent sources, the complaint alleges that most GeForce sales were to cryptominers and that Huang and other company executives knew it. Together, the complaint's allegations paint a concrete picture of fraud—both as to falsity and scienter.

The plaintiffs interviewed five former Nvidia executives, who confirmed that Huang and other top Nvidia executives "were directly informed about and had access to copious sales and technical usage data showing the dramatic surge in cryptocurrency-related sales." JA20-22, 110. These executives included a senior products director who "personally met with Huang on a monthly basis" and a senior account manager who "directly, repeatedly communicated personally, and with [executives] about the explosion of cryptocurrencyrelated demand for GeForce GPUs and spoke with colleagues who attended meetings at which crypto-related sales data was presented to Huang." JA20-21, 43-44. The experience of these former employees established that, throughout 2017, miners were placing massive orders for GeForce GPUs—often in quantities of 50,000 or 100,000 at a time—and that Nvidia knew about the resulting shortages. JA65-67.

Although Nvidia seeks to collapse all the allegations into a single category of evidence—"internal company documents"—the complaint sets forth "multiple internal data sources" showing that executives tracked miningrelated sales and detailed what they knew—including, contrary to Nvidia's claims, the content of those sources. JA6-7.

- According to a former executive, Nvidia's internal database showed that 60%-70% of Chinese GeForce sales went to miners. JA41-45, 110-11.
- According to another, technical data from Nvidia's GeForce Experience software similarly showed that over 60% of GeForce sales were used for mining. JA10-11, 52-53.
- An internal study on crypto-mining commissioned by Fisher—which the complaint includes verbatim—proved that at least \$225 million of Nvidia's revenues were from Chinese cryptominers. JA59-62. About 1.5 million GeForce GPUs were sold to Chinese miners in the first nine months of 2017. JA60.
- Quarterly meetings, weekly reports, and emails confirmed that mining-related sales data was presented to Huang and other executives. JA45, 54-55.

"All of these data streams"—not just internal company documents—made the company and its

executives "aware that crypto-miners, not gamers, were behind [Nvidia's] surging GeForce sales." JA7.

The complaint cites additional sources confirming that most GeForce sales during the relevant period went to miners, not gamers. Among these was RBC's published report concluding that Nvidia earned \$1.95 billion in undisclosed crypto-related revenue. JA71.

The plaintiffs also retained an economic-consulting firm specializing in crypto markets "to conduct an independent analysis." JA73. This firm, Prysm Group, "designed and performed a rigorous demand-side analysis to determine ... revenues attributable to crypto-related sales from May 2017 through July 2018." JA74. It did so by measuring additional computing power that appeared on blockchain networks during this period and estimating the number of GPUs needed to supply it. JA73-78, 81-83. Consistent with RBC's findings, Prysm concluded that Nvidia earned \$1.7 billion in mining-related revenue during the class period—not its claimed \$602 million confirming that Nvidia "grossly understated its cryptorelated sales" by \$1.1 billion during that period. JA81-82.

9. The SEC investigates and settles charges with Nvidia for misleading investors about the impact of crypto-mining.

In 2022—years after the plaintiffs filed their complaint—the SEC investigated and reached a civil settlement with Nvidia over the same core conduct: misleading investors about the impact of cryptocurrency mining on profits in its gaming business. Press Release, SEC Charges NVIDIA Corporation with Inadequate Disclosures about Impact of Cryptomining (May 6, 2022) (App. 1a). Although the charges did not require a showing of scienter, the SEC found that Nvidia had "information indicating that cryptomining was a significant factor" in its unprecedented sales. See In the Matter of NVIDIA Corp. (May 6, 2022) (App. 7a ¶ 7). Its own "sales personnel, in particular in China, reported what they believed to be significant increases in demand for ... GPUs as a result of cryptomining." Id. But even though investors "routinely asked senior management" whether mining was driving revenue, Nvidia's quarterly and yearly filings pointedly omitted these facts. App. 9a ¶ 14. This omission was particularly misleading, the agency found, because the company *did* disclose the impact of cryptocurrencies on OEM sales during the same period, giving investors "the that Nvidia's revenue misimpression" "was not meaningfully impacted" by crypto-mining. Id ¶ 13.³

10. The court of appeals holds that the complaint satisfies the PSLRA's standards.

After the district court dismissed the complaint, finding it insufficient to plead scienter, Pet. App. 112a, 122a, the Ninth Circuit reversed. It held that the plaintiffs adequately alleged that Huang acted with scienter, pointing to former executives' statements that they prepared reports for him and attended meetings in which he discussed mining sales. Pet. App. 41a-43a, 55a. These statements, taken as true, support a strong inference that he "reviewed sales data showing that a large share of []

³ "Without admitting or denying the SEC's findings, NVIDIA agreed to a cease-and-desist order and to pay a \$5.5 million penalty." App. 2a. As Nvidia correctly observes (at 39 n.4), the SEC charges were against Nvidia, not Huang, and concerned only its SEC filings, not its many other public misstatements and omissions.

GeForce GPUs ... were being used for crypto mining." Pet. App. 36a-43a.

Nvidia also sought affirmance on the alternative ground that the complaint failed to adequately plead falsity because Prysm's analysis was unreliable. The court rejected that argument, finding that the report's "detailed analysis" cleared the PSLRA's "demanding" bar. Pet. App. 17a-34a. The court also stressed that the falsity allegations did not rest on this report alone. RBC's "rigorous" analysis reached a "nearly identical" conclusion, Pet. App. 46a, and multiple other allegationsincluding former employees' "detailed accounts" that miners were buying up large quantities of GPUs and "[t]he sudden and substantial reduction of NVIDIA's projection" after the crypto earnings crash independently established the "likelihood that a very substantial part of NVIDIA's revenues" were from mining. Pet. App. 23a, 25a, 44a-48a. The "totality of detailed allegations," the court concluded, "easily satisfies the PSLRA pleading standard for falsity." Pet. App. 46a.

SUMMARY OF ARGUMENT

I. This Court's decisions in *Tellabs* and *Matrixx* establish that courts must holistically assess whether a complaint's allegations give rise to a strong inference of scienter and are sufficiently particularized. That directive flows from the PSLRA's text, which requires complaints to "state with particularity facts giving rise to a strong inference" of scienter. As *Tellabs* and *Matrixx* make clear, this text requires that the "facts" alleged, when taken as a whole, meet these requirements—not that any individual paragraph or source cited, when taken on its own, does so.

Nvidia proposes a new categorical rule that would bar plaintiffs from alleging scienter "based on" allegations about internal company documents unless they can plead the "contents" of the documents with particularity. That rule finds no support in the statutory text or precedent. It is antithetical to this Court's holistic inquiry. It would be unworkable, requiring arbitrary line-drawing about what it means for scienter to be "based on" internal documents or for the "contents" of the documents to be pleaded with particularity. And it would serve no legitimate purpose that is not already served by the holistic inquiry.

When the correct holistic inquiry is applied, as *Tellabs* and *Matrixx* require, the complaint here easily satisfies the requirement of particularity and gives rise to a strong inference of scienter. It alleges in painstaking detail how Nvidia's CEO and other executives constantly monitored multiple data streams showing that crypto-mining was driving the booming sales of its flagship GeForce product. The inference that they knew that their public statements were false is not just cogent and at least as likely as any innocent explanation—it is the *only* reasonable inference to be drawn from these highly particularized allegations.

II. Nor does the PSLRA preclude reliance on expert analysis to support allegations of falsity—Nvidia's second proposed categorical rule. The statute's text focuses on whether the "facts" supporting falsity are stated with particularity. It says nothing about the *source* of those facts. Expert analysis often provides factual matter that contributes to plausible inferences of falsity. This Court recognized as much in *Matrixx*, when it held that a complaint containing allegations based on medical-expert opinions sufficiently pleaded a claim under the PLSRA.

Nvidia's proposed rule is incompatible with this text and precedent and with the basic distinction between "matters of allegation" and "matters of evidence." Joseph Story, *Commentaries on Equity Pleadings* § 252 (1838). It also leads to bizarre results. If Nvidia's rule were the law, courts would have to treat identical factual allegations differently depending on whether they are attributed to an expert—a senseless distinction. And this proposed rule, no less than Nvidia's first rule, is hopelessly unclear and would be difficult for courts to administer in practice.

At any rate, the falsity allegations in this case do not depend on expert analysis. They draw on multiple independent sources, including internal Nvidia data, former employee accounts, and third-party market analysis. Together, these allegations provide concrete details showing that Nvidia substantially understated its reliance on volatile crypto-related sales. They adequately plead falsity under the PSLRA.

ARGUMENT

As this Court made clear in *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 313-14 (2007) and *Matrixx Initiatives, Inc. v. Siracusano*, 563 U.S. 27, 48-49 (2011), the PSLRA's pleading standards require a holistic assessment of the complaint with respect to two questions: (1) whether the allegations are sufficiently particularized—that is, whether they allege in sufficient detail the facts indicating both falsity and scienter—and (2) whether they give rise to a strong inference of scienter.

This case exemplifies how a complaint satisfies those two inquiries through detailed allegations from a wealth of varied sources, including internal data streams, former employee accounts, and independent market analyses. In contrast, Nvidia's proposed categorical rules—excluding allegations "based on" corporate documents unless their specific "contents" are pleaded, and excluding allegations derived from expert analysis—find no support in the PSLRA's text and history. This Court should reject Nvidia's approach and reaffirm what it held in *Tellabs* and *Matrixx*: that the PSLRA's pleading standards apply not to individual allegations about internal documents or expert analysis, but to the entire complaint.

I. The plaintiffs have adequately pleaded scienter.

A. A complaint pleads scienter under the PSLRA if it states in sufficient detail facts that, as a whole, create a strong inference of scienter.

1. The PSLRA requires plaintiffs in securities-fraud cases to "state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind." 15 U.S.C. § 78u-4(b)(2). This means that the "facts" alleged in the complaint, as a whole, must "giv[e] rise to a strong inference" of scienter and be "state[d] with particularity." *Id.* It does not mean that every paragraph or cited source must itself carry this burden.

This Court held exactly that in *Tellabs*. It set forth three "prescriptions" for courts applying this statutory text. 551 U.S. at 322. First, courts must "accept all factual allegations in the complaint as true." Id. Second, "courts must consider the complaint in its entirety," as well as "documents incorporated into the complaint by reference" and "matters of which a court may take judicial notice." *Id.* The key question is "whether *all* of the facts alleged, taken collectively, give rise to a strong inference of scienter. not whether any individual allegation. scrutinized in isolation, meets that standard." Id. at 323. Third, that "strong inference of scienter" must be "cogent and at least as compelling as any opposing inference of nonfraudulent intent." Id. at 314.

In interpreting the statute, the *Tellabs* Court rejected the very argument that Nvidia makes here. The defendant in *Tellabs* claimed that "several ... allegations [were] too vague or ambiguous to contribute to a strong inference of scienter"—in other words, that they were insufficiently particularized to be considered in the holistic inquiry. Id. at 325. Like Nvidia here, the defendant argued that the complaint was deficient because it did not detail the contents of internal documents. Although it alleged that the CEO had received sales reports indicating that his statements about demand for the company's flagship product were false, the defendant argued that the allegations lacked particularity because they failed to allege the details of "what those reports sa[id]," Tellabs Oral Arg. Tr. 14, or their "precise dates," Tellabs, 551 U.S. at 325. The defendant argued that these details were necessary to plead scienter because one of the plaintiffs' theories of liability involved the statements the CEO had made "condon[ing] the practice of 'channel stuffing,' under which [the company] flooded its customers with unwanted products." Id. According to the defendant, knowing the "precise dates" and contents of the reports was "critical to distinguish" between "legitimate" and "illegitimate" channel stuffing. Id. at 325. Nevertheless, the Court rejected the argument that these allegations could not be considered at all as part of the holistic inquiry. Although the Court "agree[d] that omissions and ambiguities count against inferring scienter," it "reiterate[d]" that "the court's job is not to scrutinize each allegation in isolation but to assess all the allegations holistically." Tellabs, 551 U.S. at 326.

This Court unanimously reiterated the same point a few years later in *Matrixx*. There, the Court again rejected a defendant's "proposed bright-line rule" (one that would have "requir[ed] an allegation of statistical significance to establish a strong inference of scienter"). *Matrixx*, 563 U.S. at 48-49. Instead, the Court reaffirmed *Tellabs*'s directive to "review 'all the allegations holistically." *Id.* at 49. And it concluded that the allegations in that complaint, when "taken collectively," gave rise to a strong inference of scienter. *Id.*

2. Tellabs and Matrixx fully answer the first question presented. Nvidia does not ask for them to be overruled, much less identify any "special justification" to overcome statutory stare decisis. Kimble v. Marvel Ent., LLC, 576 U.S. 446, 456 (2015)quoting Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 266 (2014)). And Tellabs and Matrixx, unlike Nvidia's proposed bright-line rule, are properly grounded in the statute's text and history.

The PSLRA requires that a complaint allege "facts" giving rise to a strong inference that the defendant acted with the requisite state of mind." 15 U.S.C. § 78u- 4(b)(2). An "inference" is "a process of reasoning by which a fact or proposition sought to be established is deduced as a logistical consequence from other facts." Inference, Black's Law Dictionary (6th ed. 1990); see Tellabs, 551 U.S. at 323 (quoting Oxford English Dictionary's definition: "a conclusion drawn from known or assumed facts"). In articulating the standard in terms of "inferences" drawn from the "facts," then, the PSLRA expressly mandates a holistic consideration of all the facts and circumstances. As *Tellabs* puts it: "The strength of an inference cannot be decided in a vacuum. The inquiry is inherently comparative." Id. The "words of the Act" thus "acknowledg[e] the role of indirect and circumstantial evidence," without "prohibit[ing] the use of any particular method to establish an inference of scienter." *Greebel v. FTP Software, Inc.*, 194 F.3d 185, 195 (1st Cir. 1999).

The PSLRA also requires that the "facts" indicating scienter be "state[d] with particularity." 15 U.S.C. § 78u-4(b)(2). "Particularity," of course, "requires detail." Pet. Br. 24; see, e.g., Particularity, Black's Law Dictionary (6th ed. 1990) ("detailed statement of particulars," "the details of a claim"). But it has never required plaintiffs "to set forth all the minute facts" supporting fraud. Joseph Story, Commentaries on Equity Pleadings § 252 (1838). To the contrary, at common law, "the general statement of a precise fact [was] often sufficient," and circumstances that would "confirm or establish it" were "matters of evidence," not "matters of allegation." Id. A plaintiff needed to set out the particulars of his fraud claim in enough detail to "state the essential, ultimate facts upon which his cause of action rested," Fogg v. Blair, 139 U.S. 118, 127 (1891), but "without undue minuteness," St. Louis & S.F. Ry. Co. v. Johnston, 133 U.S. 566, 577 (1890).⁴

Particularity is thus highly case- and context-specific. It looks for details about "the who, what, when, where, and how: the first paragraph of any newspaper story." *DiLeo* v. Ernst & Young, 901 F.2d 624, 627 (7th Cir. 1990). But it

⁴ The original 1937 Federal Rules of Civil Procedure provided an authoritative illustration of a complaint that satisfied Rule 9(b)'s "particularity" requirement: It alleged simply that the defendant "on or about ______ conveyed all his property, real and personal (or specify and describe) ... for the purpose of defrauding plaintiff." Fed. R. Civ. P. 84, Form 13 (1938) (abrogated 2015); see Charles Clark, *Pleading Under the Federal Rules*, 12 Wyo. L. J. 177, 181 (1958) (describing the forms as "the most important part of the rules"). This model reproduced in the appendix to this brief at 15a—was designed to be "sufficient under the rules." *Swierkiewicz v. Sorema*, 534 U.S. 506, 513 n.4 (2002).

does not set forth a "checklist of 'must have' allegations" for every complaint. U.S. ex rel. Heath v. AT & T, Inc., 791 F.3d 112, 125 (D.C. Cir. 2015). For example, if a complaint were to allege that a CEO made a confession at a meeting, corroborated by 17 eyewitnesses, that he knew that a significant portion of the revenue from his company's flagship product was dependent on a highly volatile market but told investors the opposite, the complaint would not be dismissed for failing to plead scienter with particularity—even if it did not say "how" he knew.

Conversely, if a complaint alleged only that a CEO "must have" acted with scienter because the company's financial health turned out to be "less rosy" than she had indicated, that would not be sufficiently particularized. See DiLeo, 901 F.2d at 627. The complaint would have to "point to some facts suggesting that the difference is attributable to fraud"—that is, some "information other than the differences between the two statements of the firm's condition." Id. And the only way to know whether a complaint does that is to engage in a holistic and contextspecific inquiry into the complaint as a whole. Tellabs and Matrixx are fully consistent with this basic point.

Nvidia's proposed rule, by contrast, is not. By insisting that plaintiffs be required to plead the contents of internal documents with particularity in some unknown set of cases, Nvidia divorces the particularity requirement from the statutory text. The PSLRA requires that the "facts" supporting scienter be stated with sufficient particularity and give rise to a strong inference of scienter. It does not require that each piece of "evidence" cited in support of those facts itself be stated with particularity and "give rise to a strong inference of scienter." *Contra* Pet. Br. 3.

In arguing otherwise, Nvidia threatens to upset the careful balance reflected in the text and structure of the Act and to undermine one of its "twin goals": "preserving investors' ability to recover on meritorious claims." Tellabs, 551 U.S. at 322. Confidential company documents are the one thing that plaintiffs are least likely to have in their possession at the start of a case, and thus the one thing that they are most likely to need to plead "on information and belief"—something the statute expressly permits. 15 U.S.C. § 78u-4(b)(1)(B). Especially given the PSLRA's mandatory stay on discovery, id. § 78u-4(b)(3)(B), it is implausible that Congress would have written the statute it did had it intended to codify Nvidia's rule. Congress wanted to prevent "frivolous" suits, Tellabs, 551 U.S. at 322-not to prevent institutional investors from prosecuting meritorious enforcement actions that act as forerunners to SEC action.

Nvidia ultimately concedes (at 40) that courts must analyze the allegations "holistically" under Tellabs and Matrixx. It also recognizes, in the same paragraph, that this Court has repeatedly rejected requests for a "brightline rule" in place of the holistic inquiry. Yet Nvidia fails to confront the consequences of those concessions: They doom its proposed rule. Under *Tellabs*, a complaint satisfies the PSLRA's standard for pleading scienter if all its allegations taken together create the necessary strong inference and are stated with sufficient particularity, not if some of them do so in isolation. A complaint that includes allegations about internal documents without pleading their exact contents thus may or may not meet that standard—depending on the other allegations in the complaint (including accounts from, for example, former executives who can place the allegations in context).

Applying that approach here, a court must consider not just allegations about internal corporate documents. but also the detailed statements of former employees, market analyst reports, and circumstances surrounding Nvidia's eventual disclosures. In this complaint, particularity abounds. For example, as discussed more fully in Part I.C, the complaint here alleges that former Nvidia executives confirmed that 60%-70% of GeForce sales in China were to crypto-miners and that technical data from GeForce Experience software showed the same. The complaint also alleges that former executives confirmed that Huang was regularly briefed in detail on these trends in reports and meetings (and indeed, "obsessed" over them). Further, the complaint alleges that this information-concerning the demand for the company's flagship product line-was of central importance to both Nvidia and the markets, that Nvidia and Huang were repeatedly pressed on the issue on earnings calls and other events, and that Nvidia eventually admitted to a "crypto hangover" when cutting its earnings projections. The relevant question under the holistic inquiry, then, is whether these allegations, when taken together and added to the other allegations, meet the particularity and strong-inference standards.⁵

⁵ Thus, this is not a case where the plaintiffs seek to "use vague or general allegations" to "get by a motion to dismiss." *Tellabs*, 551 U.S. at 334 (Alito, J., concurring). As set forth in the statement of the case and in Part I.C, the plaintiffs have pleaded a plethora of highly particularized allegations to support scienter, and these allegations collectively create the necessary "strong inference." So, even under a rule that would exclude all "nonparticularized" allegations from consideration in determining whether a complaint meets the "strong inference" standard, *id.*, the outcome here would be the same.

3. Nvidia makes little effort to square its categorical rule with the statutory text or with *Tellabs*. It cites (at 28, 31) *Tellabs*'s statement that "omissions and ambiguities count against inferring scienter" given the particularity requirement. But *Tellabs* rejects the idea that "smokinggun" evidence is needed. 551 U.S. at 324. And the next sentence (which Nvidia ignores) makes clear that such omissions do not foreclose such an inference. *Id.* at 326.

Nvidia also relies on the PSLRA's requirement that the inference of scienter be "strong." That doesn't change the *nature* of the inquiry, however, which is necessarily holistic and context-specific, and which defies categorical rules. *See Tellabs*, 551 U.S. at 325-26; *Matrixx*, 563 U.S. at 48-49; *cf. Basic Inc. v. Levinson*, 485 U.S. 224, 236 (1988) (rejecting a bright-line rule for materiality in favor of a contextual inquiry into the "total mix" of information, and observing that "[a]ny approach that designates a single fact or occurrence as always determinative of an inherently fact-specific finding such as materiality, must necessarily be overinclusive or underinclusive").

Nor does Nvidia explain how *Tellabs*'s "comparative" inquiry could be conducted without taking account of all the factual allegations. In fact, it does the opposite. It has a three-page section entitled "Plaintiffs' Complaint Fails Because It Relies On Inadequate Allegations Regarding Internal NVIDIA Documents." Pet. Br. 33-35. But only half a page is about that point. The rest is about why Nvidia thinks that an innocent explanation is more likely than a culpable explanation based on *other allegations* in the complaint. So Nvidia, in attempting to apply its own rule, just ends up vindicating the wisdom of *Tellabs*: Courts cannot isolate allegations about internal company documents and ask whether, in a vacuum, they give rise to a strong inference of scienter. The inquiry is inherently comparative, and hence holistic.

B. Nvidia's proposed categorical rule serves no legitimate function and is unworkable.

The conflict with *Tellabs*, *Matrixx*, and the PSLRA's text is reason enough to reject Nvidia's proposed rule. But even assuming that the Court were free to legislate on a blank slate, it should reject Nvidia's rule. The rule serves no legitimate purpose that is not already accomplished by the holistic inquiry, and it lacks the chief virtue of any bright-line rule worth adopting: a bright line. Far from being a "workable construction" of the PSLRA, *Tellabs*, 55 U.S. at 322, Nvidia's rule would require courts to answer difficult sub-questions that appear nowhere in the statute.

1. In its petition for certiorari, Nvidia took the position that "allegations about internal reports cannot support the required 'strong inference' of scienter" unless they can satisfy every "element of the particularity standard," which Nvidia presented as a rigid checklist. Pet. 23-25. Nvidia advocates for the same rule in much of its merits brief. *See* Pet. Br. 21, 30, 31. But that rule, as just discussed, contradicts both the statutory text and the key precedent interpreting it. So Nvidia, on the only page of its brief where it actually acknowledges *Tellabs*'s holistic inquiry—page 40—casts its rule in decidedly narrower terms: Only if plaintiffs "buil[d] their entire scienter case around [] internal [company] documents" must they plead the contents of those documents with particularity.

Of course, that's not what the plaintiffs in *this case* have done. Which is why Nvidia tries to broaden its test beyond the first question presented to sweep in this complaint, claiming that the plaintiffs here built their

entire scienter case around internal documents "and data," and are therefore required to allege with particularity what the documents "and sources" said and how they "support[]" a strong inference of scienter. Pet. Br. 40 (emphasis added). These subtle verbal tweaks are not just elegant variation—two different ways of saying the same thing—but two different rules altogether.

If not even Nvidia can clearly articulate its rule, what are courts to do? How will they know when plaintiffs are seeking to plead scienter "based on" internal documents, Pet. i, or have "built their entire scienter case" on them, Pet. Br. 40? If these preconditions are met, how will courts know when the "contents of those documents" have been pleaded with sufficient particularity? Pet. i. No court has ever adopted Nvidia's rule, so there is no guidance on these questions—and Nvidia doesn't offer any.

To make matters concrete, consider a few hypothetical complaints containing the following allegations:

- A multinational corporation kept financial records for a troubled foreign subsidiary in that country's language. The CEO, who doesn't speak the language but received translated summaries in regular briefings, told investors that the subsidiary is "profitable." Former executives fluent in the language stated that they attended the briefings and that the records showed massive losses.
- Former executives stated that in every quarterly meeting for a year (at which they were present), a task force presented slides to the CEO showing that 70% of the company's "eco-friendly" products were used in ways that harm the environment and there was a serious risk that the truth would come

out and sales would plummet. The CEO hid these facts and consistently told investors that these products were "leading the green revolution."

- A CEO told investors "China sales will boom" after attending a meeting where a report detailing new Chinese import bans was presented. Former highlevel officials described the report and its bottomline conclusion but couldn't produce a copy of it. *See Cosmas v. Hassett*, 886 F.2d 8, 12 (2d Cir. 1989).
- A CEO reviewed written reports contradicting her subsequent public statements and had been orally briefed on the same reports in regular meetings. Former employees who both read the reports and attended the meeting testified to those facts.

Is Nvidia's rule implicated in any of these hypos? If so, would the rule be satisfied? And for what reasons?

The unworkability of Nvidia's rule can be seen in this very case. Nvidia spends just two pages defending its rule (at 31-33) and eight pages applying it (at 33-40). Nvidia begins by asserting (at 33) that the plaintiffs' scienter argument "hinges entirely on" allegations about internal "documents and data." It then spends the remaining eight pages trying to substantiate that claim, to persuade the Court that its "good faith" inference is "more compelling" for reasons that have nothing to do with its rule, and to dispute the adequacy of various allegations, including that (1) 60%-70% of GeForce revenue in China was cryptorelated in 2017, (2) Nvidia had 70% of the mining-related market in China according to the China study, (3) Huang reviewed Nvidia's sales database, (4) Huang reviewed GeForce usage data, and (5) Huang was aware of various "anecdotal" evidence. See Pet. Br. 36-39. There is nothing wrong with making these arguments, of course, but they should be made in the context of the holistic inquiry. They should not be made to determine the applicability of a categorical rule that is designed to short-circuit the holistic inquiry.

2. Nor is anything to be gained by adopting such an unworkable rule. If the rule applies only where plaintiffs have "built their entire scienter case" around internal documents, courts will have to engage in a holistic inquiry and examine the entire complaint to determine whether that precondition is met. What, then, is the purpose of such a rule? Nvidia offers up only one response: The rule, it says (at 32), is "critically important to the comparative analysis required by *Tellabs*" because, without it, "a court cannot meaningfully assess whether the plaintiff's preferred inference" is "at least as compelling as the opposing inference." But the only way that a court may engage in a "comparative analysis" is by examining all the allegations in the complaint-not some artificial subset thereof. And if a court cannot "meaningfully assess" whether there's a strong inference of scienter under the holistic inquiry, there's not a strong inference of scienter. No special rule is needed to see that.

So it is true that, if a complaint's scienter allegations were really based *exclusively* on the contents of internal documents, the complaint (in that highly unlikely hypothetical case) would fail to generate a strong inference of scienter if it did not include any particularized allegations about what those documents say. But Nvidia gives no example of such a complaint ever being filed. And regardless, there is no need to create a new categorical rule just to ensure that a marginal hypothetical case doesn't proceed to discovery. The holistic inquiry would make short work of it. There is thus nothing to be gained from fashioning a new bright-line rule at odds with *Tellabs*'s holistic inquiry.

C. The complaint states with particularity facts supporting a strong inference that the defendants acted with the required state of mind.

1. This Court's word limits prevent us from recounting all the numerous particularized allegations supporting scienter in this case. See JA110-23 (summarizing allegations); JA134-376 (chart allegations); Dist. Ct. Doc. 149-2 (same). The complaint sets forth in painstaking detail how Huang, Fisher (Nvidia's head of gaming), "and other senior managers personally monitored, analyzed, and exploited cryptocurrency-driven GeForce demand" using "multiple internal data sources." JA6-7. Among other things, the complaint alleges that:

- Huang regularly reviewed a "centralized sales database" containing data from Nvidia's customers about who was buying GeForce GPUs. JA40-45, 110-11. Former employees and video evidence confirmed that Huang "had access to" and "personally accessed" this data. JA111 (statements of FE-1 and FE-2). A former senior account manager described Nvidia's executive team as "obsessed" with it. JA44 (quoting FE-1).
- Huang also learned about sales to crypto-miners through the GeForce Experience software, which showed "precisely how end-users were utilizing" GeForce products. JA24. This data was compiled in monthly reports sent directly to Huang. JA53 (statement of FE-5). A former employee confirmed

that Nvidia's top management regularly analyzed this data. JA52 (statement of FE-1).

- Sales data quantifying GeForce sales to cryptominers was presented directly to Huang, Fisher, and other top executives at Nvidia's quarterly meetings. JA47. Huang "closely reviewed the GeForce data" at these meetings and questioned it in such detail that one former employee compared the meetings to "proctology exams." *Id.* (quoting FE-2). Huang also received weekly emails "at his request reporting on miners' demand for GeForce GPUs." JA110; *see* JA49 (statement of FE-2).
- Fisher was informed that crypto-mining was driving GeForce sales—a trend he called "dangerous"—and commissioned a study of crypto-related demand in China to be presented to top executives. JA115.

When these detailed and specific allegations are accepted as true and taken together, "common sense," *Ashcroft v. Iqbal*, 556 U.S. 662, 679 (2009), allows for only one reasonable inference: Huang and other Nvidia executives knew their statements were false. It is implausible that Huang could have overlooked that 60% or more of Nvidia's "flagship" GeForce product—its "most important" product line "by a large margin" and the one "on which [it] built its reputation"—was being diverted to crypto-miners as part of one of the largest economic bubbles in history. JA22-23.

The complaint alleges that it was "common knowledge" among Nvidia employees that miners were bulk purchasing GeForce GPUs by the tens of thousands. JA65-66 (quoting FE-1); JA66 (quoting FE-2); see also JA50 (quoting FE-5). As a former employee recounted,

"[e]verybody" at Nvidia was talking about it. JA85 (quoting FE-2); *see also* JA40 (statement of FE-3). And Huang was a "micromanager" who was "intimately involved" in all aspects of the company, JA121 (quoting FE-2), and (as he explained to investors) "monitor[ed] the inventory in the channel continuously, not only from the guys that buy from us, but where the parts go after that"—"literally every day." JA120.

Indeed, the complaint alleges that Huang and other company executives "not only knew about, but *encouraged* large-scale crypto-mining with GeForce GPUs." JA11. The presentation commissioned by Fisher detailed a plan "to directly target the largest miners in China." *Id.* Nvidia also modified its licensing agreement to allow GeForce use in mining farms. JA69-71 (statement of FE-2). And internally, it predicted a 60% rise in GeForce sales in 2018 based on mining demand. JA57 (statement of FE-1).

All this leads to a dilemma: Either Huang knew about the extent of the mining sales or he remained oblivious to them by keeping his head in the sand. Either way, there's scienter. *See Tellabs*, 551 U.S. at 319 n.3 ("Every Court of Appeals that has considered the issue has held that a plaintiff may meet the scienter requirement by showing that the defendant acted intentionally or recklessly."). On remand in *Tellabs*, for example, the Seventh Circuit found that it was "exceedingly unlikely" that the CEO's false statements about demand for the company's "flagship product" were "the result of merely careless mistakes at the management level based on false information fed it from below, rather than of an intent to deceive or a reckless indifference." *Makor Issues & Rights, Ltd. v. Tellabs, Inc.*, 513 F.3d 702, 709 (7th Cir. 2008). Likewise here. GeForce GPUs are Nvidia's flagship product, sales were exploding amid a volatile crypto boom, mining was driving this growth, analysts were pressing Huang on this issue, and Fisher (Huang's childhood friend and close confidant whose office was down the hall) was so alarmed that he commissioned the China study and made sure its findings were presented to the top brass. So which is more likely: that Huang was "merely repeating lies fed to him," *id.* at 711, or that he knew his statements were false or was recklessly indifferent? That question answers itself.

2. Nvidia argues (at 33) that just one kind of allegations—"allegations about internal [company] documents"-are insufficiently particularized because they don't specify "the contents of [those] documents." But although some of the complaint's allegations are drawn from internal documents, many others are not. The complaint alleges that meetings, presentations, technical data, and an internal database also informed Huang and other executives that more than a "small" amount of GeForce GPUs were being sent to crypto-miners. "All of these data streams"-not just internal documents-were enough to make Huang and other Nvidia executives "aware that crypto-miners, not gamers, were behind [Nvidia's] surging GeForce sales." JA7.

In any event, the complaint *does* allege the contents of these sources. The complaint alleges—based on former employees' testimony—that the sales database showed that 60% to 70% of GeForce sales in China were related to mining. JA111 (statement of FE-1). The same was true in the rest of the world: Former employees estimated that 50% of GeForce GPUs sold in Russia, and 60% in India, were to miners. JA67-68 (statements of FE-4 and FE-5).

Technical data from the GeForce Experience software showed almost the same thing—that over 60% of GeForce sales worldwide were being used for crypto-mining. JA114 (statement of FE-5). So did the internal presentation commissioned by Fisher, which is included verbatim in the complaint and reveals that sales to miners accounted for at least \$225 million of Nvidia's revenues. JA59-62.

These allegations precisely quantify the number of GeForce GPUs that were diverted to crypto-mining. The plaintiffs, however, were not required to do so. Consistent with this Court's holding in *Tellabs* that plaintiffs need not prove their case with evidence at the pleading stage, courts do not require that the contents of reports be precisely described and quantified. See, e.g., In re Cabletron Sys., Inc., 311 F.3d 11, 31-33 (1st Cir. 2002) (allegations that databases reported customer service problems were sufficiently particularized); Okla. Firefighters Pension & Ret. Sys. v. Six Flags Ent. Corp., 58 F.4th 195, 216 (5th Cir. 2023) (allegations that weekly presentations details lack contained about of infrastructure were sufficiently particularized). To allege "internal company reports" with particularity, plaintiffs need only "specify[] who prepared [the] reports, how frequently [they] were prepared and who reviewed them." ABC Arbitrage Plaintiffs Grp. v. Tchuruk, 291 F.3d 336, 355-56 (5th Cir. 2002). The plaintiffs did just that: The complaint's allegations set forth in detail the testimony of former Nvidia employees explaining how data on cryptorelated sales was collected, disseminated, and reviewed (including by Huang). These allegations are, if anything, far more detailed than those that lower courts have found sufficient.

II. The plaintiffs have adequately pleaded falsity.

A. The PSLRA does not preclude factual allegations drawn from expert analysis.

1. The PSLRA requires that, to plead falsity, a plaintiff must specify each allegedly misleading statement and the reasons why it is misleading. 15 U.S.C. § 78u-4(b)(1). If the "why" is based on information and belief (rather than personal knowledge), the plaintiff must "state with particularity all facts on which that belief is formed." *Id.* Nvidia's second proposed rule (at 42) is that a court must "strip the complaint of [an] expert's opinions" before asking whether the remaining facts give rise to a plausible inference of falsity. This rule is no less categorical than the first, and no more grounded in law or workable in practice.

Nvidia's rule is inconsistent with the key distinction at the pleading stage between "factual matter" and "conclusory allegation[s]." *Bell Atl. Corp. v. Twombly*, 550 U.S. 554, 555-56 (2009). "Factual matter" may come from a range of sources: newspaper and academic articles, government reports, independent analysis, or even plaintiffs' own calculations. A peer-reviewed medical journal might document the link between a chemical compound and a rare disease. Independent economists might calculate the risk-adjusted return of an investment portfolio. A hired accountant might describe standard industry practices. All of these may serve as the source of factual allegations in a complaint. And expert opinions can also provide factual matter, including when (as here) they make calculations based on public data.

Indeed, this Court in *Matrixx* held that, in a securities-fraud case governed by the PSLRA, allegations based on the opinions of "medical experts," as well as published medical "studies," "suggest[ed] a plausible

biological link between zinc and anosmia, which, in combination with the other allegations, is sufficient to survive a motion to dismiss." 563 U.S. at 46-47 & n.13. The Court emphasized that this "information provided ... by medical experts" must be properly "viewed in light of the "allegations of the complaint as a whole." *Id*.

Of course, allegations about an expert's opinion—just like any allegations—may or may not contribute to an inference of falsity. An expert's bare assertion that "the CEO lied"—unadorned by any explanation—would be too conclusory to contribute to a plausible inference. But if that same expert laid out her reasoning and showed the soundness of her assumptions and data, it would be a different story. As this Court has recognized, opinions often "contain embedded statements of fact" explaining the basis for that belief. Omnicare, Inc. v. Laborers Dist. Council Constr. Indus. Pension Fund, 575 U.S. 175, 184-85 (2015). Here, the plaintiffs' description of Prysm's work, including its sources, calculations, and ultimate conclusion that NVIDIA earned \$1.728 billion in cryptorelated revenue, are allegations of *fact*—they describe, in Nvidia's words, "[s]omething that has really occurred or is actually the case." Pet. Br. 42 (defining "fact"). As wellpleaded factual matter, they therefore must be "taken as true." Twombly, 550 U.S. at 556. Nvidia appears to recognize as much when it argues (at 48) that Prysm's assumptions and inferences render it implausible under Rule 8-a determination that requires considering "all the allegations in the complaint," not categorically excluding a subset of them. Twombly, 550 U.S. at 555.

2. As support for its rule, Nvidia and its amici look to the Federal Rules of Evidence. *See* Pet. Br. 42; Atlantic Legal Foundation Br. 6. But this collapses the distinction between the pleading and proof stages of litigation. See, e.g., Swierkiewicz, 534 U.S. at 510 (distinguishing between "an evidentiary standard" and "a "pleading requirement"). Under the common-law requirement to plead fraud with particularity, "the general statement of a precise fact [was] often sufficient," and circumstances that would "confirm or establish it" were "matters of evidence," not allegation. Story, Commentaries on Equity Pleadings § 252 (1838). And, under the PSLRA, plaintiffs are permitted to plead falsity on information and belief, provided the complaint "state[s] with particularity all facts on which that belief is formed." 15 U.S.C. § 78u-4(b)(1). The PSLRA cannot be read to require only evidentiary allegations of falsity because such allegations, by definition, are not based on "information and belief."

This Court has never required—even under the PSLRA—that plaintiffs plead evidence or prove their case at the outset. In *Tellabs*, this Court rejected efforts to "transpose to the pleading stage the test that is used at the summary-judgment and judgment-as-a-matter-of-law stages." 551 U.S. at 324 n.5. And in *Matrixx*, the Court emphasized that the complaint's allegations—based on medical expert opinion—need only support "a reasonable expectation that discovery will reveal evidence" supporting liability. 563 U.S. at 46-47 (quoting *Twombly*, 550 U.S. at 556). Nothing in the PSLRA or Rule 9(b), or in this Court's cases, requires a different rule for facts alleged to support falsity.

Nvidia's proposed rule, however, would treat identical factual allegations differently depending on whether they are attributed to an expert. Consider two hypothetical complaints to illustrate this point. In the first, the plaintiffs allege that they compiled the defendant's financial statements and various third-party data, lay out their methodology and deductions, and present their estimated breakdown of the defendant company's quarterly profits. In the second, the plaintiffs allege that they hired a leading economist to do the same analysis. It would be strange for a court to refuse to consider these allegations solely because they are attributed to an expert rather than the plaintiffs' own assessment. Such a rule would penalize plaintiffs who expend additional effort to ensure their claims are meritorious.

3. Nvidia's rule is not just wrong as a matter of law; it is also unworkable in practice and hopelessly unclear. Under Nvidia's rule, courts would need to examine each factual allegation in the complaint to determine which claims are attributable to an expert. Then, they would have to "strip the complaint of the expert's *opinions*" and consider only the "remaining allegations of fact." Pet. Br. 42. But not all opinions, according to Nvidia, need be rejected: The company notes that "[a]n opinion satisfies the PSLRA [] if it was based on particularized facts sufficient to state a claim for fraud." Pet. Br. 44; see id. at 48. So courts would have to perform a third step, setting aside opinions that are too "divorced from the factual allegations that they are based upon." Pet. Br. 43. Only then could they perform the holistic inquiry required by Twombly and Tellabs.

The difficulty of applying this test can be seen by reading Nvidia's own brief. Nvidia defines an expert opinion (at 42) as "the expert's ultimate conclusion." But the definitions of "fact" and "opinion" it points to in the sentences that follow revolve around the speaker's degree of "certainty about a thing." Pet. Br. 42. And later, Nvidia argues (at 45-47) that Prysm's mathematical calculations, not just its conclusions, are "opinion" too. Nvidia's rule is also unclear about the sources of information on which a plaintiff can rely. Does it apply only to "[a] hired expert" or to "expert opinion" generally? Pet. Br. 43. If plaintiffs can't use expert reports that make inferences based on detailed market information, can they use third-party reports that do the same? *See, e.g., In re Bofl Holding, Inc. Sec. Litig.*, 977 F.3d 781, 797 (9th Cir. 2020). Nvidia gives no answers.

B. The complaint alleges falsity with particularity.

1. The plaintiffs "state[d] with particularity" the facts supporting falsity. 15 U.S.C. § 78u-4(b)(1). As with scienter, the complaint relies on Nvidia's sales database, GeForce Experience data, internal study, and former employee reports, each of which independently shows that most of the GeForce sales during the relevant period were to crypto-miners, contrary to Nvidia's public claims. JA41-45, 110-11. Backing up that conclusion, the complaint cites RBC's independent report finding that Nvidia earned \$1.95 billion from crypto-mining—\$1.35 billion more than it disclosed. JA71. Those numbers are further confirmed by the "very similar" conclusions of Prysm, an economic consulting firm with expertise in crypto markets, which likewise concluded that Nvidia "grossly understated" more than \$1 billion in crypto-related sales. JA81-82.

These allegations easily clear the PSLRA's bar for pleading falsity. The Act doesn't require plaintiffs to quantify the gap between a defendant's statements and the alleged truth, but only to allege that the defendant's misrepresentation was "material." 15 U.S.C. § 78u-4(b)(1). The plaintiffs went above and beyond here, producing an estimate of how much Huang understated sales to cryptominers. For instance, they explained that Huang's claim that Nvidia served almost all crypto-driven demand through "OEM" sales was materially false because \$199 million of crypto-related revenue, or 57%, was from GeForce sales. JA142-143 (citing JA82-83). You can't get more particularized than that.

The only common-sense conclusion is that Nvidia substantially understated its reliance on crypto sales. That was the conclusion that Nvidia itself reached when the crypto bubble burst. Huang conceded that "a great deal" of miners had purchased GeForce GPUs, and Nvidia slashed its quarterly earnings projections by half a billion dollars because of the "sharp falloff in crypto demand." JA12, 83-84. It was also the conclusion that investors drew, sending Nvidia's stock price falling 28.5% the next day. JA13, 92.

2. Nvidia tries to isolate Prysm's conclusions from the mix, devoting much of its argument to quibbles about the authors' analytic choices. Lower courts may consider these choices when assessing whether an expert report helps plaintiffs "state a claim to relief that is plausible on its face." *Twombly*, 550 U.S. at 570. But that doesn't mean that the plaintiffs' detailed description of a report's sources and methodology isn't particularized.

Nvidia's extensive criticism of the minutiae of the experts' methodology shows just how meticulously the complaint describes it. As the court of appeals explained: "The complaint provided detailed information about Prysm's methodology as well as a particularized recitation of facts upon which Prysm relied." Pet App. 20-21a. That included a thorough description of Prysm's data sources both public market data and Nvidia's own internal documents—as well as Prysm's methodology for measuring the computing power appearing on blockchain networks, estimating the number of chips needed to drive that computing power, and estimating Nvidia's market share and profits. JA74-82.

Nvidia complains (at 41) that Prysm's conclusions rest "on generic market research." But particularity is about the level of detail, not the source of the allegations. Socalled "generic market research," like calculating the amount of processing power added to blockchain networks, is factual matter that may properly be alleged in a complaint.

Regardless, the falsity allegations don't depend on Prysm. As the court of appeals recognized, RBC's "rigorous" independent analysis reached a "nearly identical" conclusion. Pet. App. 46a. And Prysm's conclusions are further supported by numerous other allegations—including "detailed accounts" of former employees that miners were snapping up large quantities of GeForce GPUs, and "[t]he sudden and substantial reduction of NVIDIA's earnings projection that followed collapse of crypto prices." *Id.* at 23a, 25a, 44a-48a. So even if this Court adopted a new rule excluding the Prysm analysis, the "totality of detailed allegations" would still "easily satisf[y] the PSLRA pleading standard for falsity." Pet. App. 46a.

CONCLUSION

The judgment of the Ninth Circuit should be affirmed.

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Respectfully submitted,

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September 25, 2024

APPENDIX

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APPENDIX A

PRESS RELEASE

SEC CHARGES NVIDIA CORPORATION WITH INADEQUATE DISCLOSURES ABOUT IMPACT OF CRYPTOMINING

For Immediate Release | 2022-79

Washington D.C., May 6, 2022 — The Securities and Exchange Commission today announced settled charges against technology company NVIDIA Corporation for inadequate disclosures concerning the impact of cryptomining on the company's gaming business.

The SEC's order finds that, during consecutive quarters in NVIDIA's fiscal year 2018, the company failed to disclose that cryptomining was a significant element of its material revenue growth from the sale of its graphics processing units (GPUs) designed and marketed for gaming. Cryptomining is the process of obtaining crypto rewards in exchange for verifying crypto transactions on distributed ledgers. As demand for and interest in crypto rose in 2017, NVIDIA customers increasingly used its gaming GPUs for cryptomining.

In two of its Forms 10-Q for its fiscal year 2018, NVIDIA reported material growth in revenue within its gaming business. NVIDIA had information, however, that this increase in gaming sales was driven in significant part

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by cryptomining. Despite this, NVIDIA did not disclose in its Forms 10-Q, as it was required to do, these significant earnings and cash flow fluctuations related to a volatile business for investors to ascertain the likelihood that past performance was indicative of future performance. The SEC's order also finds that NVIDIA's omissions of material information about the growth of its gaming business were misleading given that NVIDIA did make statements about how other parts of the company's business were driven by demand for crypto, creating the impression that the company's gaming business was not significantly affected by cryptomining.

"NVIDIA's disclosure failures deprived investors of critical information to evaluate the company's business in a key market," said Kristina Littman, Chief of the SEC Enforcement Division's Crypto Assets and Cyber Unit. "All issuers, including those that pursue opportunities involving emerging technology, must ensure that their disclosures are timely, complete, and accurate."

The SEC's order finds that NVIDIA violated Section 17(a)(2) and (3) of the Securities Act of 1933 and the disclosure provisions of the Securities Exchange Act of 1934. The order also finds that NVIDIA failed to maintain adequate disclosure controls and procedures. Without admitting or denying the SEC's findings, NVIDIA agreed to a cease-and-desist order and to pay a \$5.5 million penalty.

The SEC's investigation was conducted by Brent Wilner of the Crypto Assets and Cyber Unit, and supervised by Diana Tani and Ms. Littman of the Crypto Assets and Cyber Unit.

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APPENDIX B

UNITED STATES OF AMERICA Before the SECURITIES AND EXCHANGE COMMISSION

SECURITIES ACT OF 1933 Release No. 11060 / May 6, 2022

SECURITIES EXCHANGE ACT OF 1934 Release No. 94859 / May 6, 2022

ADMINISTRATIVE PROCEEDING File No. 3-20844

In the Matter of

NVIDIA CORPORATION,

Respondent.

ORDER INSTITUTING CEASE-AND DESIST PROCEEDINGS PURSUANT TO SECTION 8A OF THE SECURITIES ACT OF 1933 AND SECTION 21C OF THE SECURITIES EXCHANGE ACT OF 1934, MAKING FINDINGS, AND IMPOSING A CEASE AND-DESIST ORDER The Securities and Exchange Commission ("Commission") deems it appropriate that cease-anddesist proceedings be, and hereby are, instituted pursuant to Section 8A of the Securities Act of 1933 ("Securities Act") and Section 21C of the Securities Exchange Act of 1934 ("Exchange Act"), against NVIDIA Corporation ("NVIDIA" or "Respondent" or the "company").

II.

In anticipation of the institution of these proceedings, Respondent has submitted an Offer of Settlement (the "Offer") which the Commission has determined to accept. Solely for the purpose of these proceedings and any other proceedings brought by or on behalf of the Commission, or to which the Commission is a party, and without admitting or denying the findings herein, except as to the Commission's jurisdiction over it and the subject matter of these proceedings, which are admitted, Respondent consents to the entry of this Order Instituting Cease and-Desist Proceedings Pursuant to Section 8A of the Securities Act of 1933 and Section 21C of the Securities Exchange Act of 1934, Making Findings, and Imposing a Cease-and-Desist Order ("Order"), as set forth below.

III.

On the basis of this Order and Respondent's Offer, the Commission finds that:

<u>Summary</u>

1. This matter concerns NVIDIA's disclosures during two consecutive quarters in its fiscal year 2018 related to the impact of cryptomining on the growth of

I.

revenue from the sale of graphics processing units ("GPUs") NVIDIA designed and marketed for gaming. During the second and third fiscal quarters of 2018 (the "relevant period"), as certain crypto asset prices rose, users of NVIDIA's GPUs were increasingly performing cryptomining. NVIDIA had information indicating that cryptomining was a significant factor in the year-overyear growth in revenue from the sale of GPUs that NVIDIA designed and marketed for gaming. The company, however, did not disclose this in the company's Forms 10-Q for these quarters as required by former Regulation S-K, Item 303(b)(2) (currently Item 303(c)(2)), part of the company's Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") disclosure requirements. NVIDIA also failed to maintain adequate disclosure controls and procedures as required by Exchange Act Rule 13a-15(a) related to its MD&A requirements.

Respondent

2. <u>NVIDIA Corporation</u>, a Delaware corporation headquartered in Santa Clara, California, designs and markets GPUs for various computing applications, including video games. NVIDIA's common stock is registered pursuant to Section 12(b) of the Exchange Act. NVIDIA's common stock trades on the NASDAQ.

<u>Facts</u>

Impact of Cryptomining on NVIDIA's Gaming Business

3. During fiscal year 2018 (ending January 28, 2018), NVIDIA reported its results in two reportable segments: GPUs and Tegra processors. GPUs designed for desktops, notebooks, or cryptomining were all

reported in the GPU business segment. The company also reported its revenue by its specialized market platforms, including gaming and original equipment manufacturer ("OEM"), where products are categorized by how they are designed and marketed. The gaming specialized market ("Gaming") was historically and during this time frame the company's largest specialized market. During fiscal year 2018, over half of the company's total \$9.714 billion in reported revenue was attributed to Gaming, inclusive of GPUs for desktops and notebooks and system-on-a-chip modules for consoles.

4. Beginning in fiscal year 2018, GPUs became popular for cryptomining Ether ("ETH") and other crypto assets. Prior to fiscal year 2018, cryptomining did not meaningfully impact demand for the company's GPUs, and crypto assets were not referenced in NVIDIA's Form 10-K for fiscal year 2017.

5. The rise in demand for GPUs for performing cryptomining corresponded with the rise in certain crypto asset prices. ETH prices rose from under \$10 on January 1, 2017, to nearly \$800 on January 1, 2018. During the relevant period, some of NVIDIA's sales personnel expressed their belief that much of the increased demand for the company's Gaming products, primarily in China, was being driven by cryptomining.

6. NVIDIA's senior management internally expressed a desire to capture the cryptomining demand, and at the same time shelter its Gaming business from cryptominers and protect supply of GPUs for gamers. As a result, NVIDIA launched a product line of cryptomining processors, known as "CMP," which the company marketed to large cryptomining operations. NVIDIA's Forms 10-Q for the second and third fiscal quarters 2018 reported the CMP sales in the GPU reportable segment within PC OEM revenue. Based on known CMP sales, the company identified cryptomining as a significant element of the OEM GPU sales within the GPU reportable segment revenue in the company's quarterly reports.

7. During the relevant period, NVIDIA also received information indicating that cryptomining was a significant factor in year-over-year growth in NVIDIA's Gaming GPUs revenue. Some of the company's sales personnel, in particular in China, reported what they believed to be significant increases in demand for Gaming GPUs as a result of cryptomining. In addition, while the company could not track when and which specific Gaming GPUs were purchased for the purpose of cryptomining, company personnel estimated using various assumptions that the impact of cryptomining was at levels that would indicate cryptomining was a significant factor in the yearover-year growth in Gaming revenue during the relevant period.

8. During the relevant period, NVIDIA experienced material changes to its total and Gaming revenue as compared to the corresponding period of the prior fiscal year. The company's Gaming revenue increased by 52%, year over year for the second fiscal quarter 2018, and by 25%, year over year for the third fiscal quarter 2018.

9. During the relevant period, NVIDIA had information indicating that cryptomining was a significant factor in the material year-over-year growth in NVIDIA's Gaming and total revenue.

<u>NVIDIA's Misleading Disclosures Regarding</u> <u>Cryptomining</u> 10. NVIDIA filed its quarterly reports for the second and third fiscal quarters of 2018 on Forms 10-Q on August 23, 2017 and November 21, 2017, respectively. Analysts and investors were interested in understanding whether the company's Gaming revenue was impacted by cryptomining. However, NVIDIA failed to disclose in these filings that cryptomining was a significant factor in year-over-year growth in the company's Gaming revenue.

11. Section 13(a) of the Exchange Act and Rule 13a-13 therunder require companies such as NVIDIA to file Forms 10-Q containing Item 303 of Regulation S-K disclosures. As operative during the relevant period, Item 303(b)(2) required issuers to disclose in quarterly reports "any material changes in the registrant's results of operations . . . with respect to that fiscal guarter and the corresponding fiscal quarter in the preceding fiscal year." Former 17 C.F.R. § 229.303(b)(2) (subsequently amended, 17 C.F.R. § 229.303(c)(2)). Regulation S-K also required that the discussion of material changes in results of operations during the quarter "shall identify any significant elements of the registrant's income or loss from continuing operations which do not arise from or are not necessarily representative of the registrant's ongoing business." Former 17 C.F.R. § 229.303(b), Instruction 4 (subsequently amended, 17 C.F.R. § 229.303(c). Instruction 2). As the Commission stated in a 2003 MD&A interpretive release, "if events and transactions reported in the financial statements reflect material unusual or nonrecurring items, aberrations, or other significant fluctuations, companies should consider the extent of variability in earnings and cash flow, and provide disclosure where necessary for investors to ascertain the likelihood that past performance is indicative of future performance." Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operation (Dec. 19, 2003), *available at* <u>www.sec.gov/rules/interp/33-8350.htm</u>.

12. In the MD&A section of its Forms 10-Q for the second and third fiscal quarters 2018, NVIDIA failed to disclose that cryptomining was a significant factor in the material year-over-year growth in NVIDIA's Gaming revenue. As a result, the Forms 10-Q omitted significant information relating to NVIDIA's GPU segment revenue and its component GPUs for gaming, and any related risks, during these quarters.

13. At the same time, the company's Forms 10-Q for the relevant period did disclose that cryptomining was a significant element of OEM GPU sales during the relevant period based on known sales of CMPs. The company's omissions in the Forms 10-Q concerning the impact of cryptomining on GPUs for Gaming coupled with these disclosures about the impact on NVIDIA's OEM revenue gave the misimpression in the Forms 10-Q during the relevant period that the year-over-year growth in the company's Gaming revenue was not meaningfully impacted by cryptomining.

14. Throughout the relevant period, NVIDIA's analysts and investors were interested in understanding the extent to which the company's Gaming revenue was impacted by cryptomining, and routinely asked senior management about the extent to which increases in Gaming revenue during this time frame were driven by cryptomining. In light of the volatility of certain crypto asset prices during this time frame, investors and analysts probed the significance of cryptomining to NVIDIA's Gaming business to determine how sustainable the contributions to the company's largest specialized market would be going forward.

15. The company's periodic reports did not identify cryptomining as a significant factor in year-overyear growth in Gaming revenue until the end of fiscal year 2018, disclosing this in the company's Form 10-K for fiscal year 2018 (filed on February 28, 2018). In that Form 10-K, the company also identified fluctuations in crypto asset prices as a risk to the company's results of operations.

16. During the relevant period, NVIDIA offered and sold securities, including issuing shares as compensation to certain employees under the company's employee incentive plans, and selling shares under its employee stock purchase plan.

NVIDIA's Disclosure Control and Procedures Failures

17. Exchange Act Rule 13a-15(a) requires issuers such as NVIDIA to "maintain disclosure controls and procedures ... as defined in paragraph (e) of this section." Paragraph (e) defines disclosure controls and procedures to include, among other things, "procedures designed to ensure that information required to be disclosed by the issuer in the reports that it files or submits under the [Exchange] Act ... is recorded, processed, summarized, and reported[] within the time periods specified in the Commission's rules and forms."

18. Even though NVIDIA had information indicating that cryptomining was a significant factor in the year-over-year growth in revenue for the company's GPUs for Gaming in its GPU business segment during the relevant period, NVIDIA failed to maintain disclosure controls or procedures designed to ensure that information required to be disclosed in NVIDIA's results of operations was reported as required by the MD&A provisions of Regulation S-K, Item 303.

Violations

19. As a result of the conduct described above, NVIDIA violated Sections 17(a)(2) and (3) of the Securities Act, which prohibit any person from directly or indirectly obtaining money or property by means of any untrue statement of a material fact or any omission to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading, or engaging in any transaction, practice, or course of business which operates or would operate as a fraud or deceit upon the purchaser, in the offer or sales of securities. A violation of these provisions does not require scienter and may rest on a finding of negligence. See *Aaron v. SEC*, 446 U.S. 680, 685, 701-02 (1980).

20. In addition, NVIDIA violated Section 13(a) of the Exchange Act and Rule 13a-13 thereunder, which require reporting companies to file with the Commission complete and accurate quarterly reports. NVIDIA also violated Rule 12b-20 of the Exchange Act, which requires an issuer to include in a statement or report filed with the Commission any information necessary to make the required statements in the filing not materially misleading.

21. In addition, NVIDIA violated Exchange Act Rule 13a-15(a), which requires every issuer of a security registered pursuant to Section 12 of the Exchange Act to maintain disclosure controls and procedures designed to ensure that information required to be disclosed by an issuer in reports it files or submits under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the Commission's rules and forms.

IV.

In view of the foregoing, the Commission deems it appropriate and in the public interest to impose the sanctions agreed to in Respondent NVIDIA's Offer.

Accordingly, it is hereby ORDERED that:

A. Pursuant to Section 8A of the Securities Act and Section 21C of the Exchange Act, Respondent cease and desist from committing or causing any violations and any future violations of Sections 17(a)(2) and (3) of the Securities Act and Section 13(a) of the Exchange Act and Rules 12b-20, 13a-13, and 13a-15 thereunder.

B. Respondent shall, within 14 days of the entry of this Order, pay a civil money penalty in the amount of \$5,500,000 to the Securities and Exchange Commission for transfer to the general fund of the United States Treasury, subject to Exchange Act Section 21F(g)(3). If timely payment is not made, additional interest shall accrue pursuant to 31 U.S.C. §3717.

Payment must be made in one of the following ways:

(1) Respondent may transmit payment electronically to the Commission, which will provide detailed ACH transfer/Fedwire instructions upon request;

- (2) Respondent may make direct payment from a bank account via Pay.gov through the SEC website at http://www.sec.gov/about/offices/ofm.h tm; or
- (3) Respondent may pay by certified check, bank cashier's check, or United States postal money order, made payable to the Securities and Exchange Commission and hand-delivered or mailed to:

Enterprise Services Center Accounts Receivable Branch HQ Bldg., Room 181, AMZ-341 6500 South MacArthur Boulevard Oklahoma City, OK 73169

Payments by check or money order must be accompanied by a cover letter identifying NVIDIA as a Respondent in these proceedings, and the file number of these proceedings; a copy of the cover letter and check or money order must be sent to Kristina Littman, Division of Enforcement, Securities and Exchange Commission, 100 F Street, N.E., Washington, District of Columbia 20549.

C. Amounts ordered to be paid as civil money penalties pursuant to this Order shall be treated as penalties paid to the government for all purposes, including all tax purposes. To preserve the deterrent effect of the civil penalty, Respondent agrees that in any Related Investor Action, it shall not argue that it is entitled to, nor shall it benefit by, offset or reduction of any award of compensatory damages by the amount of any part of Respondent's payment of a civil penalty in this action ("Penalty Offset"). If the court in any Related Investor Action grants such a Penalty Offset, Respondent agrees that it shall, within 30 days after entry of a final Penalty Offset, order granting the notify the Commission's counsel in this action and pay the amount of the Penalty Offset to the Securities and Exchange Commission. Such a payment shall not be deemed an additional civil penalty and shall not be deemed to change the amount of the civil penalty imposed in this proceeding. For purposes of this paragraph, a "Related Investor Action" means a private damages action brought against Respondent by or on behalf of one or more investors based on substantially the same facts as alleged in the Order instituted by the Commission in this proceeding.

By the Commission.

Vanessa A. Countryman Secretary

APPENDIX C

FEDERAL RULES OF CIVIL PROCEDURE 84 FORM 13 (1938)

FORM COMPLAINT FOR RULE 18(B) (PREDECESSOR TO CURRENT RULE 9(B))

Form 13.—Complaint on claim for debt and to set aside fraudulent conveyance under Rule 18 (b).

A. B., Plaintiff

Complaint

C. D. and E. F., Defendants

v.

1. Allegation of jurisdiction.

2. Defendant C. D. on or about _____ executed and delivered to plaintiff a promissory note (in the following "ords and figures: (here set out the note verbatim)); [a copy of which is hereto annexed as Exhibit A]; [whereby defendant C. D. promised to pay to plaintiff or order on _____ the sum of five thousand dollars with interest thereon at the rate of _____ percent. per annum].

3. Defendant C. D. owes to plaintiff the amount of said note and interest.

4. Defendant C. D. on or about _____ conveyed all his property, real and personal (or specify and describe) to defendant E. F. for the purpose of defrauding plaintiff and hindering and delaying the collection of the indebtedness evidenced by the note above referred to.

Wherefore plaintiff demands:

(1) That plaintiff have judgment against defendant C. D. for ten thousand dollars and interest; (2) that the aforesaid conveyance to defendant E. F. be declared void and the judgment herein be declared a lien on said property; (3) that plaintiff have judgment against the defendants for costs.

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