

Securities Class Action

# SCA Rule 10b-5 Exposure Report

April 10, 2024



## Our Mission

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To deliver **independent and high quality public company risk management data analytics solutions** to protect Directors & Officers by enhancing transparency in the securities class action arena.

## GLOBAL SCA RULE 10b-5 EXPOSURE

### Global SCA Rule 10b-5 Exposure Amounted to \$113 Billion in the First Quarter of 2024

Global exposure to Rule 10b-5 private securities-fraud litigation of U.S.-listed companies amounted to \$105 billion and \$8 billion for U.S. and Non-U.S. Issuers, respectively.<sup>i</sup> Fraud-on-the-market litigation exposure would have decreased during the first quarter of 2024 without the remarkable increase against Non-U.S. Issuers trading on U.S. stock exchanges.

SAR analyzed 42 securities class actions (“SCAs”) against U.S. public corporations that were sued for alleged violations of the federal securities laws under Section 10(b) and 20(a) of the Securities Exchange Act of 1934 and SEC Rule 10b-5, promulgated thereunder (the “Exchange Act”) during 1Q’24.<sup>ii</sup> SAR’s SCA data presented in this quarterly report excludes six SCAs filed this past quarter (see Appendix-1).

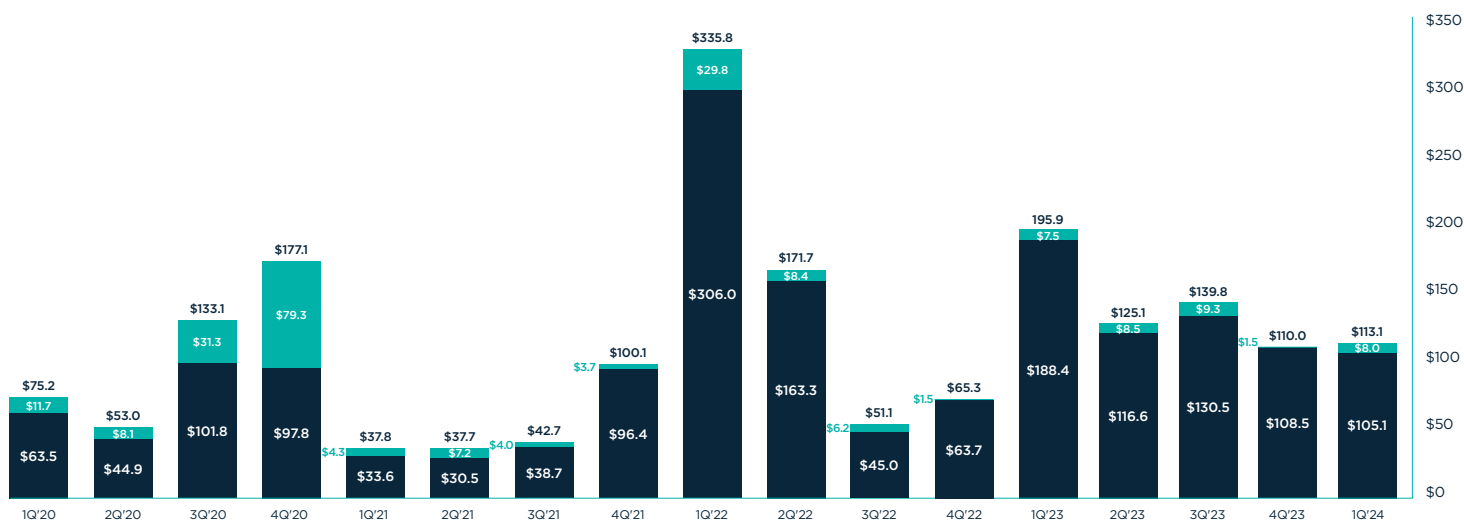
Alleged market capitalization losses based on statistically significant residual stock price returns of U.S.-listed corporations amounted to \$113.1 billion in 1Q’24, an increase of 2.8% from the last quarter’s global exposure of \$110.0 billion. Approx. \$17.5 billion, or 13.4% of investor plaintiffs’ alleged shareholder losses, do not surpass statistical thresholds of stock price reaction to warrant inclusion in a certified SCA. As a result, \$17.5 billion in alleged shareholder losses claimed during the first quarter of 2024 may not translate into potential aggregate damages to provide settlement recoveries for allegedly defrauded investors in the Defendant issuers’ common stock.

**Global SCA Rule 10b-5 Litigation Exposure:** Independent data and analysis demonstrate continued stabilization of Rule 10b-5 private securities-fraud litigation exposure quarter-over-quarter during the preceding year. Since the second quarter of 2023, litigation exposure to fraud-on-the-market lawsuits against global companies listed on U.S. exchanges has exhibited notable stabilization. High severity litigation exposure of U.S. and Non-U.S. Issuers has hovered between \$110 billion and \$140 billion during the preceding year; in contrast to the volatility exhibited prior to the first half of 2023. Stabilization of securities litigation exposure may reverse course during the second or third quarter of 2024 if a profit-taking correction impacts the U.S. equity markets sufficiently to trigger an increase in the population of Adverse Corporate Events.



### Global Securities Class Action Rule 10b-5 Exposure

■ U.S SCA Rule 10b-5 Exposure (\$B) ■ ADR SCA Rule 10b-5 Exposure (\$B)



Rule 10b-5 Exchange Act claims analyzed between 1Q 2020 and 1Q 2024 that allege Rule 10b-5 class-wide damages against publicly traded companies listed on U.S. Exchanges.

## U.S. SCA RULE 10b-5 EXPOSURE

### U.S. SCA Rule 10b-5 Exposure Amounted to \$105 Billion in the First Quarter of 2024

U.S. exposure to Rule 10b-5 private securities-fraud litigation of U.S. Issuers decreased by 3.2% during the first quarter of 2024.<sup>iii</sup> Robust performance of the U.S. equity markets during the first quarter of 2024 limited the population and magnitude of **Adverse Corporate Events** that trigger securities litigation against U.S. public companies. There is a higher likelihood of increased fraud-on-the-market litigation exposure of U.S. Issuers during the second half of 2024 pending a potential market correction.

SAR analyzed 39 securities claims against U.S. issuers that were sued for alleged violations of the Exchange Act in 1Q'24.<sup>iv</sup> U.S. SCA Rule 10b-5 Exposure (alleged market capitalization losses based on statistically significant residual stock price returns) of U.S. issuers to claims that allege violations of the Exchange Act amounts to \$105.1 billion.<sup>v</sup>

**U.S. SCA Rule 10b-5 Litigation Exposure:** Quarter-over-quarter stabilization of fraud-on-the-market litigation exposure against U.S. issuers is evidenced by a narrowing range of alleged market capitalization losses on stock drops that exhibited single-day statistically significant returns at the 95% confidence standard. During the preceding year, market capitalization losses claimed by shareholders have ranged within a window of \$25 billion; between \$105 billion to \$130 billion. Conversely, between the second quarter of 2022 and the first quarter of 2023, the range differential amounted to \$143 billion.

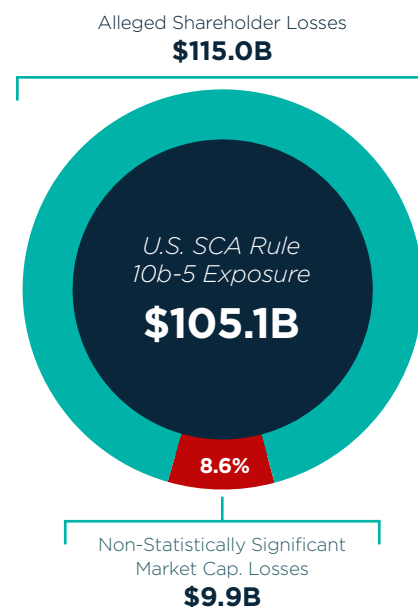


Table 1: U.S. SCA Rule 10b-5 Exposure of U.S. Issuers

Quarter	Rule 10b-5 Exchange Act Filings [1]	U.S. SCA Rule 10b-5 Exposure (000s) [2]	Aggregate Market Cap. of U.S. Issuers (000s) [3]	U.S. SCA Rule 10b-5 Exposure Rate [4]	U.S. SCA Rule 10b-5 Litigation Rate [5]
2Q'23	38	\$116,612,814	\$45,185,415,961	<b>0.26%</b>	<b>0.93%</b>
3Q'23	44	\$130,528,521	\$46,141,853,890	<b>0.28%</b>	<b>1.09%</b>
4Q'23	41	\$108,529,848	\$47,614,149,025	<b>0.23%</b>	<b>1.03%</b>
1Q'24	39	\$105,091,640	\$52,357,216,174	<b>0.20%</b>	<b>1.00%</b>

[1] Identified and analyzed first-filed SCA complaints that allege violations of Rule 10b-5. Excludes non-U.S. issuers that trade on U.S. exchanges through ADRs.

[2] U.S. SCA Rule 10b-5 Exposure is equal to investor plaintiffs alleged market cap. losses that may surpass back-end price impact thresholds based on exhibited residual stock price declines at the 95% confidence standard.

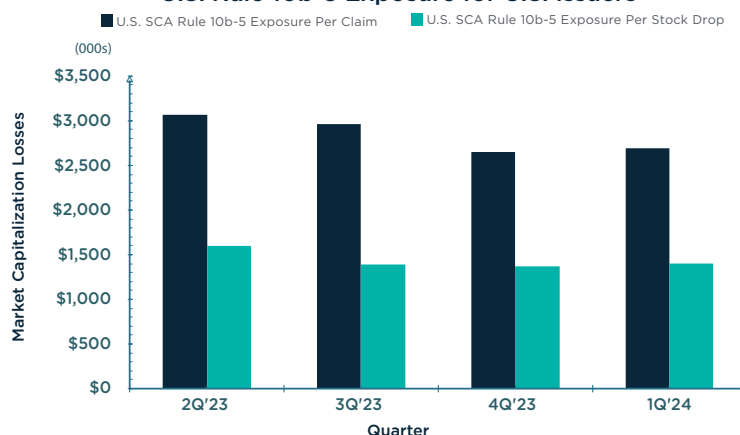
[3] The average aggregate market cap. of U.S. issuers for the corresponding quarter.

[4] The ratio of U.S. SCA Rule 10b-5 Exposure to the aggregate market cap of U.S. issuers ([4] = [2] / [3]).

[5] Number of defendant U.S. issuers divided by the aggregate number of U.S. issuers.

U.S. SCA Rule 10b-5 Litigation Exposure is stabilizing and trending lower as percentage of the aggregate market capitalization of all U.S. Issuers – which eclipsed at \$52.4 trillion during the first quarter of 2024. Over the preceding twelve months, the U.S. capital markets have added approximately \$7.2 trillion in aggregate market capitalization which explains the decrease in the U.S. SCA Rule 10b-5 Exposure Rate from .26% in 2Q'23, to .20% in 1Q'24. A potentially impending profit-taking correction in the U.S. equity markets may likely lead to an increase in the U.S. SCA Rule 10b-5 Exposure Rate of U.S. Issuers.

## U.S. Rule 10b-5 Exposure for U.S. Issuers



**Rule 10b-5 Claim Deficiencies Against U.S. Issuers:** Approximately \$9.9 billion, or 8.6%, of alleged shareholder losses against U.S. Issuers do not surpass statistical thresholds of stock price reaction at the 95% confidence standard to warrant inclusion in a certified SCA. As a result, approximately \$9.9 billion in alleged shareholder losses claimed during the first quarter of 2024 in first-filed SCAs against U.S. Issuers and certain directors and officers, may not translate into potential aggregate damages to result in potential settlement recoveries.

**Table 2: Econometric Summary of Residual Stock Price Reaction of Plaintiffs' Alleged Corrective Disclosures Against U.S. Issuers**

Quarter	Rule 10b-5 Exchange Act Filings [1]	Alleged Corrective Disclosures [2]	U.S. SCA Rule 10b-5 Exposure (\$B) Per Alleged Corrective Disclosure [3]	Deficient Alleged Corrective Disclosures [4]	% of Corrective Disclosures with Price Impact Deficiencies [5]
2Q'23	38	73	\$1.6	23	32%
3Q'23	44	94	\$1.4	16	17%
4Q'23	41	79	\$1.4	19	24%
1Q'24	39	75	\$1.4	14	19%

[1] Identified and analyzed first-filed SCA complaints that allege violations of Rule 10b-5. Excludes non-U.S. issuers that trade through ADRs.

[2] The number of alleged corrective disclosures identified in the sample of first-filed SCA complaints.

[3] Total U.S. SCA Rule 10b-5 Exposure for the identified sample of claims divided by the number of identified alleged corrective disclosures [2].

[4] The number of alleged corrective disclosures that do not exhibit a statistically significant one-day residual stock price return at the 95% confidence standard.

[5] The ratio of the number of alleged corrective disclosures that do not exhibit a statistically significant one-day residual stock price return at the 95% confidence standard to the total number of alleged corrective disclosures. ([5] = [4] / [2])

During 1Q'24, SAR analyzed 48 first-filed "stock-drop" SCAs filed against U.S. Issuers that allege violations of Rule 10b-5 via 102 claimed corrective events or truth-revealing disclosures.<sup>vi</sup> After analyzing and consolidating cases with seemingly related allegations against individual U.S. issuers, SAR accounted for and analyzed 39 filed SCAs. A total of 75 alleged corrective disclosures have been claimed in the 39 first-filed SCAs.<sup>vii</sup>

The number of alleged stock drops decreased from 79 in 4Q'23 to 75 in 1Q'24, a decrease of 5.1%. During 1Q'24, investor Plaintiffs alleged, on average, 1.9 corrective disclosures per first-filed SCA complaint. Of the 75 corrective disclosures alleged during 1Q'24, the allegedly related residual stock price decline of 14 (19%) of them did not surpass statistical thresholds of stock price reaction at the 95% confidence standard; which is highly unfavorable for

plaintiffs to successfully establish back-end price impact.<sup>viii</sup>

19% of investor Plaintiffs' alleged stock drops in the sample of first-filed class action complaints run afoul of the heightened pleading standards of loss causation because they lack statistical significance at the 95% confidence standard to merit potential aggregate shareholder damages after excluding non-company and non-fraud related factors.<sup>ix</sup>

Although the percentage of alleged corrective disclosures with no price reaction at the 95% confidence standard has fluctuated between 19% and 32% over the preceding twelve months, alleged market capitalization losses per alleged stock drops that do exhibit statistical significance, remains steady at approximately \$1.4 billion.

# SCA RULE 10b-5 EXPOSURE BY INDUSTRY SECTOR FOR U.S. ISSUERS

## Industry Sector Impact From Rule 10b-5 Litigation Exposure During the First Quarter of 2024

The industries impacted most based on alleged market capitalization losses that exhibited statistically significant alleged stock drop declines are Software (44%), Manufacturing, Farm & Industrial (38%), and F.I.R.E. (3.48%), which collectively accounted for 86.2% of *U.S. SCA Rule 10b-5 Exposure* in 1Q'24.

SAR analyzed 39 first-filed SCAs in 1Q'24, of which, nine (or 23%) were filed against Pharma/Biotech companies, five (or 13%) against Manufacturing, Farm & Industrial, and another five against Retail & Consumer Products companies.

**Rule 10b-5 Litigation Exposure Industry Trends:** During the preceding twelve months, the industries with the greatest *U.S. SCA Rule 10b-5 Exposure* have been Media, Software, and the Manufacturing, Farm, and Industrial sectors. The Media industry sector has exhibited the greatest litigation exposure volatility quarter-over-quarter during the salient period.

**Table 3: U.S. SCA Rule 10b-5 Exposure by Industry Sector in 1Q'24**

Industry Sector [1]	Rule 10b-5 Exchange Act Filings [2]	U.S. SCA Rule 10b-5 Exposure (000s) [3]	U.S. SCA Rule 10b-5 Exposure Per Claim (000s) [4]	Alleged Corrective Disclosures [5]	U.S. SCA Rule 10b-5 Exposure Per Alleged Stock Drop (000s) [6]
Auto	1	\$993,631	\$993,631	1	\$993,631
Electronics, Hardware and Semiconductor	4	2,283,413	570,853	13	175,647
F.I.R.E.	4	3,654,670	913,667	6	609,112
Health Care	2	685,660	342,830	6	114,277
Industrial	1	107,230	107,230	1	107,230
Manufacturing, Farm, and Industrial	5	40,435,055	8,087,011	13	3,110,389
Materials	2	3,105,340	1,552,670	5	621,068
Media	1	918,102	918,102	1	918,102
Other Services	1	57,833	57,833	2	28,916
Pharma/Biotech	9	2,457,997	273,111	12	204,833
Retail and Consumer Products	5	3,625,202	725,040	11	329,564
Software	3	46,522,673	15,507,558	3	15,507,558
Utilities	1	244,833	244,833	1	244,833
	<b>39</b>	<b>\$105,091,640</b>		<b>75</b>	

[1] Industry sector is based on the defendant corporation's SIC code.

[2] First filed SCA complaints that allege violations of Rule 10b-5. Excludes non-U.S. based corporations (ADRs).

[3] The U.S. exposure presented here is adjusted to discount for market capitalization losses related to claimed stock price declines

[4] = [3] / [2]

[5] The number of alleged corrective disclosures identified in the sample of first-filed SCA complaints.

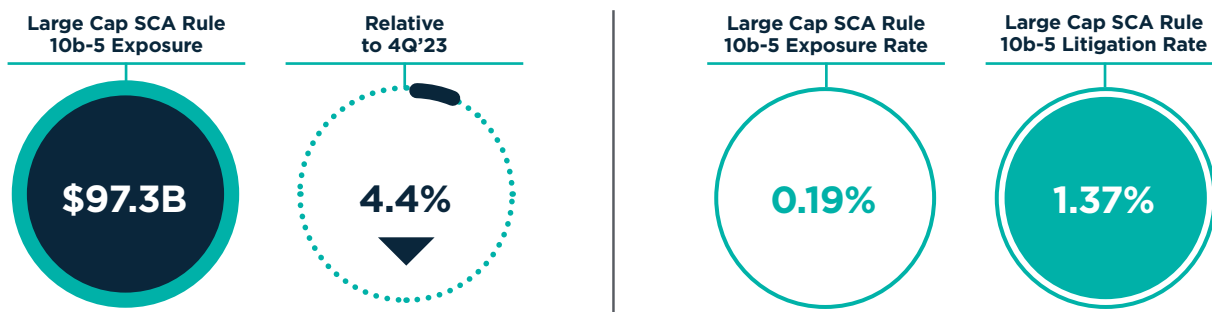
[6] = [3] / [5]



## SCA RULE 10b-5 EXPOSURE OF U.S. LARGE CAP CORPORATIONS<sup>x</sup>

### Large Cap SCA Rule 10b-5 Exposure Amounted to \$97.3 Billion During First Quarter of 2024

The average aggregate market capitalization of U.S. Large Cap corporations, based on the market capitalization range of the S&P 500 Index during 1Q'24, was approximately \$50.3 trillion.<sup>xi</sup> This is a meaningful increase of approximately 10.4% relative to 4Q'23. The return of the S&P 500 Index between December 30, 2023, and March 31, 2024 was 10.56%.



**U.S. Large Cap Rule 10b-5 Litigation Exposure:** U.S. Large Cap litigation exposure accounts for 92.61% of the aggregate market capitalization losses alleged against U.S. Issuers, and 86.09% of the global quantum. The sustained litigation exposure against U.S. Large Caps during the preceding twelve months has stabilized within a range of \$21 billion; between \$97 and \$118 billion.

Table 4: Large Cap SCA Rule 10b-5 Exposure of U.S. Issuers

Quarter	Rule 10b-5 SCAs filed against Large Cap Defendants	Large Cap SCA Rule 10b-5 Exposure (000s)	Aggregate Market Cap. of Large Caps (000s)	Large Cap SCA Rule 10b-5 Exposure Rate	Large Cap SCA Rule 10b-5 Litigation Rate
2Q'23	15	\$110,357,544	\$43,066,692,153	0.26%	1.52%
3Q'23	25	\$118,525,522	\$44,065,408,313	0.27%	2.49%
4Q'23	16	\$101,790,104	\$45,570,524,663	0.22%	1.65%
1Q'24	14	\$97,329,871	\$50,306,526,436	0.19%	1.37%

- U.S. Large Caps exhibited \$6.9 billion in statistically significant market capitalization losses per Exchange Act claim. This is an increase of 9.3% relative to the preceding quarter. During the preceding twelve months, the mean market capitalization losses per Exchange Act SCA amount to \$6.1 billion.
- U.S. Large Caps exhibited \$2.9 billion in statistically significant market capitalization losses per alleged stock drop. This is a modest decline of 10.2% relative to the preceding quarter. During the preceding twelve months, the mean market capitalization losses per alleged stock drop amount to \$2.8 billion.

# SCA RULE 10b-5 EXPOSURE OF U.S. MID CAP CORPORATIONS<sup>xii</sup>

## Mid Cap SCA Rule 10b-5 Exposure Amounted to \$2.8 Billion During the First Quarter of 2024

The average aggregate market capitalization of U.S. Mid Cap corporations, based on the market capitalization range of the S&P MidCap 400 Market Index during 1Q'24, was approximately \$1.41 trillion, a slight increase from the prior quarter.<sup>xiii</sup> The return of the S&P MidCap 400 between December 30, 2023, and March 31, 2024, was 9.95%.



**U.S. Mid Cap Rule 10b-5 Litigation Exposure:** U.S. Mid Cap litigation exposure exhibits the greatest volatility among the three cohorts of U.S. Issuers during the preceding twelve months. Private Rule 10b-5 litigation exposure of U.S. Mid Caps accounts for 2.7% of the aggregate market capitalization losses alleged against U.S. Issuers, and 2.51% of the global quantum. Such quarter-over-quarter litigation exposure volatility against Mid Caps is evidenced by the nearly 60% increase in statistically significant market capitalization losses exhibited during the first quarter of 2024; an amount that is still 71% lower than the exposure exhibited during the third quarter of 2023.

**Table 5: Mid Cap SCA Rule 10b-5 Exposure of U.S. Issuers**

Quarter	Rule 10b-5 SCAs filed against Mid Cap Defendants	Mid Cap SCA Rule 10b-5 Exposure (000s)	Aggregate Market Cap. of Mid Caps (000s)	Mid Cap SCA Rule 10b-5 Exposure Rate	Mid Cap SCA Rule 10b-5 Litigation Rate
2Q'23	9	\$4,002,534	\$1,398,334,150	0.29%	1.47%
3Q'23	7	9,636,594	1,381,191,154	0.70%	1.12%
4Q'23	6	1,775,075	1,367,279,509	0.13%	1.02%
1Q'24	7	2,836,975	1,407,255,077	0.20%	1.16%

- U.S. Mid Caps exhibited \$405 million in statistically significant market capitalization losses per Exchange Act claim. This is a material increase of 37% relative to the preceding quarter. During the preceding twelve months, the mean market capitalization losses per Exchange Act SCA amount to \$629 million.
- U.S. Mid Caps exhibited \$218 million in statistically significant market capitalization losses per Exchange Act claim. This is a material increase of 60% relative to the preceding quarter. During the preceding twelve months, the mean market capitalization losses per alleged stock drop amount to \$344 million.



# SCA RULE 10b-5 EXPOSURE OF U.S. SMALL CAP CORPORATIONS<sup>xiv</sup>

## Small Cap SCA Rule 10b-5 Exposure Amounted to \$4.9 Billion During the First Quarter of 2024

The average aggregate market capitalization of U.S. Small Cap corporations, based on the market capitalization range of the S&P SmallCap 600 Market Index during 1Q'24, was \$861 billion, an increase of about 0.5% relative to 4Q'23.<sup>xv</sup> The return of the S&P SmallCap 600 Index between December 30, 2023, and March 31, 2024, was 2.46%.



**SAR U.S. Small Cap Rule 10b-5 Litigation Exposure:** Alleged market capitalization losses that exhibited statistical significance against U.S. Small Caps exhibited the greatest stability among the three cohorts of U.S. Issuers during the preceding two quarters. However, prior to the fourth quarter of 2023, private Rule 10b-5 litigation exposure against Small Caps was nearly half of such amount(s).

Table 6: Small Cap SCA Rule 10b-5 Exposure of U.S. Issuers

Quarter	Rule 10b-5 SCAs filed against Small Cap Defendants	Small Cap SCA Rule 10b-5 Exposure (000s)	Aggregate Market Cap. of Small Caps (000s)	Small Cap SCA Rule 10b-5 Exposure Rate	Small Cap SCA Rule 10b-5 Litigation Rate
2Q'23	14	\$2,252,737	\$720,389,658	0.31%	0.56%
3Q'23	12	\$2,366,406	\$854,834,163	0.28%	0.50%
4Q'23	19	\$4,964,669	\$856,386,277	0.58%	0.79%
1Q'23	18	\$4,924,794	\$860,591,283	0.57%	0.80%

- U.S. Small Caps exhibited \$273 million in statistically significant market capitalization losses per Exchange Act claim. This is a slight increase of 4.7% relative to the preceding quarter. During the preceding twelve months, the mean market capitalization losses per Exchange Act SCA amount to \$230 million.
- U.S. Small Caps exhibited \$170 million in statistically significant market capitalization losses per alleged stock drop. This is an increase of 20% relative to the preceding quarter. During the preceding twelve months, the mean market capitalization losses per alleged stock drop amount to \$126 million.

## ADR SCA RULE 10B-5 EXPOSURE

### ADR SCA Rule 10b-5 Exposure Amounted to \$8.0 Billion During First Quarter of 2024.

U.S. exposure to Rule 10b-5 private securities-fraud litigation of Non-U.S. Issuers increased by 433% during the first quarter of 2024 relative to

the preceding quarter. During the preceding twelve months, the aggregate market capitalization of Non-U.S. Issuers peaked during the first quarter of 2024 at \$28.7 trillion.<sup>xvi</sup> Data indicate potential stabilization of Rule 10b-5 private securities-fraud litigation exposure of Non-U.S. Issuers at 0.03% of their aggregate market capitalization, as seen during the second and third quarters of 2023 and the first quarter of 2024.

SAR analyzed three securities claims against Non-U.S. issuers that were sued for alleged violations of the Exchange Act in 1Q'24.<sup>xvii</sup> ADR SCA Rule 10b-5 Exposure (alleged market capitalization losses based on statistically significant residual stock price returns ) of non-U.S. issuers to claims that allege violations of the Exchange Act amounted to \$8.0 billion.<sup>xviii</sup>

**Non-U.S. Issuer Rule 10b-5 Litigation Exposure:** Quarter-over-quarter litigation exposure volatility against Non-U.S. Issuers is remarkable given the overall lower filing frequency relative to U.S. Issuers. The quarter-over-quarter range of statistically significant market capitalization losses claimed against Non-U.S. Issuers hovered between \$1.5 billion and \$9.3 billion during the preceding twelve months.

Alleged ADR Shareholder Losses

**\$15.6B**

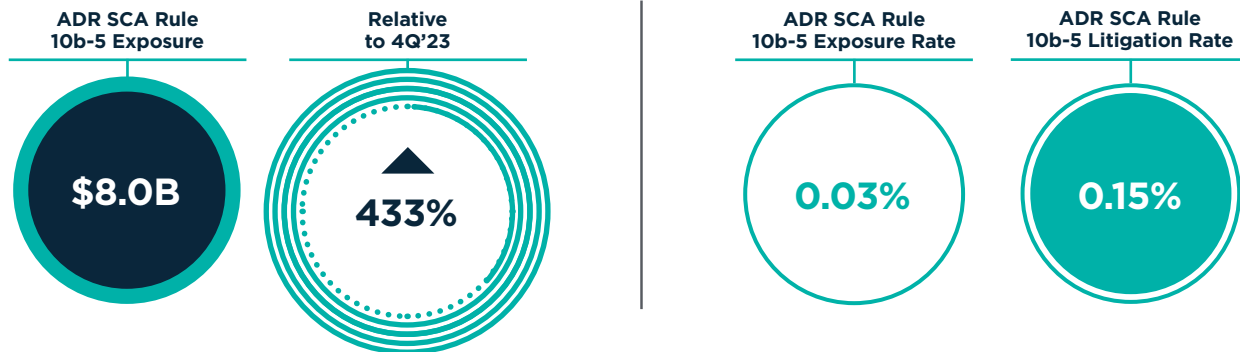
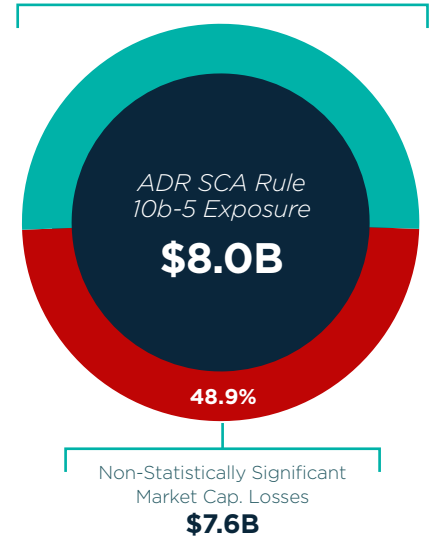


Table 7: ADR SCA Rule 10b-5 Exposure of Non-U.S. Issuers

Quarter	No. of Defendant Non-U.S. Issuers [1]	ADR SCA Rule 10b-5 Exposure (000s) [2]	Aggregate Market Cap. Of Non-U.S. Issuers (000s) [3]	ADR SCA Rule 10b-5 Exposure Rate [4]	ADR SCA Rule 10b-5 Litigation Rate [5]
2Q'23	6	\$8,469,833	\$27,569,804,884	<b>0.03%</b>	<b>0.30%</b>
3Q'23	2	\$9,281,722	\$26,915,950,032	<b>0.03%</b>	<b>0.10%</b>
4Q'23	3	\$1,495,089	\$27,253,301,270	<b>0.01%</b>	<b>0.15%</b>
1Q'24	3	\$7,962,872	\$28,671,238,746	<b>0.03%</b>	<b>0.15%</b>

[1] Identified and analyzed first-filed SCA complaints that allege violations of Rule 10b-5 against non-U.S. Issuers.

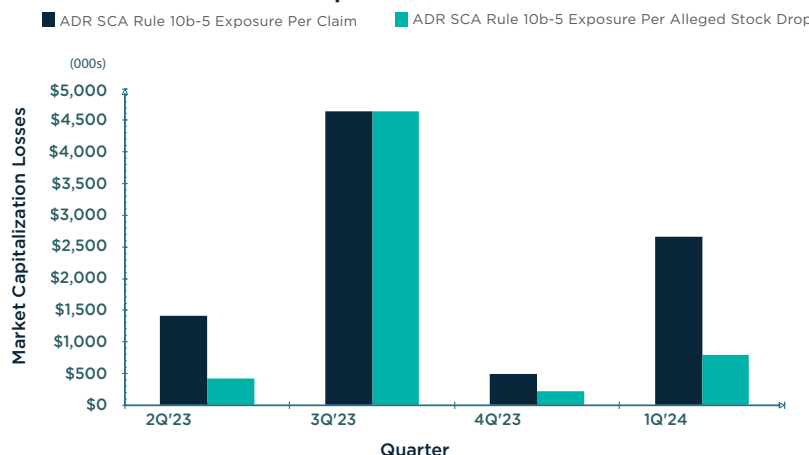
[2] ADR SCA Rule 10b-5 Exposure is equal to investor plaintiffs alleged market cap. losses that may surpass back-end price impact thresholds based on exhibited residual stock price declines at the 95% confidence standard.

[3] The average aggregate market cap. of non-U.S. issuers for the corresponding quarter.

[4] The ratio of ADR SCA Rule 10b-5 Exposure to the aggregate market cap of non-U.S. issuers. ([4] = [2] / [3]).

[5] Number of defendant non-U.S. issuers divided by the aggregate number of non-U.S. issuers.

## ADR Rule 10b-5 Exposure for Non-U.S. Issuers



**Rule 10b-5 Claim Deficiencies Against Non-U.S. Issuers:** Approximately \$7.6 billion, or 48.9% of alleged shareholder losses against Non-U.S. issuers, do not surpass statistical thresholds of stock price reaction to warrant inclusion in a certified SCA. As a result, approximately \$7.6 billion of alleged shareholder losses claimed in first-filed securities claims against Non-U.S. Issuers and certain directors and officers, may not translate into potential aggregate damages that may result in settlement recoveries.

**Table 8: Econometric Summary of Residual Stock Price Reaction to Plaintiffs' Alleged Corrective Disclosures of Non-U.S. Issuers**

Quarter	ADR Rule 10b-5 Exchange Act Filings [1]	Alleged Corrective Disclosures [2]	ADR Rule 10b-5 Exposure (\$B) Per Alleged Corrective Disclosures [3]	Deficient Alleged Corrective Disclosures [4]	% of Corrective Disclosures with Price Impact Deficiencies [5]
2Q'23	6	20	\$0.4	14	70.0%
3Q'23	2	2	\$4.6	0	0.0%
4Q'23	3	7	\$0.2	6	85.7%
1Q'24	3	10	\$0.8	5	50.0%

[1] First-filed and analyzed SCA complaints that allege violations of Rule 10b-5 against non-U.S. issuers that trade on U.S. exchanges through ADRs. Excludes U.S. issuers.

[2] The total number of alleged corrective disclosures identified in the sample of SCA complaints.

[3] The total number of alleged corrective disclosures that do not exhibit a statistically significant one-day residual stock price return at the 95% confidence standard.

[4] The ratio of the number of alleged corrective disclosures that do not meet statistical thresholds of back-end price impact to the total number of alleged corrective disclosures. ( [4] = [3] / [2] ).

SAR identified three Rule 10b-5 securities claims against Non-U.S. issuers in the previous quarter. Although the filing frequency analyzed remained the same during the first quarter of 2024 relative to the preceding quarter, shareholders claimed a remarkable increase of 433% in statistically significant market capitalization losses. Each of the three filed securities claims presented a total of ten alleged corrective disclosures. Half of the alleged stock drops exhibited sufficient stock price reaction at the 95% confidence standard to potentially validate scrutiny of back-end price impact.

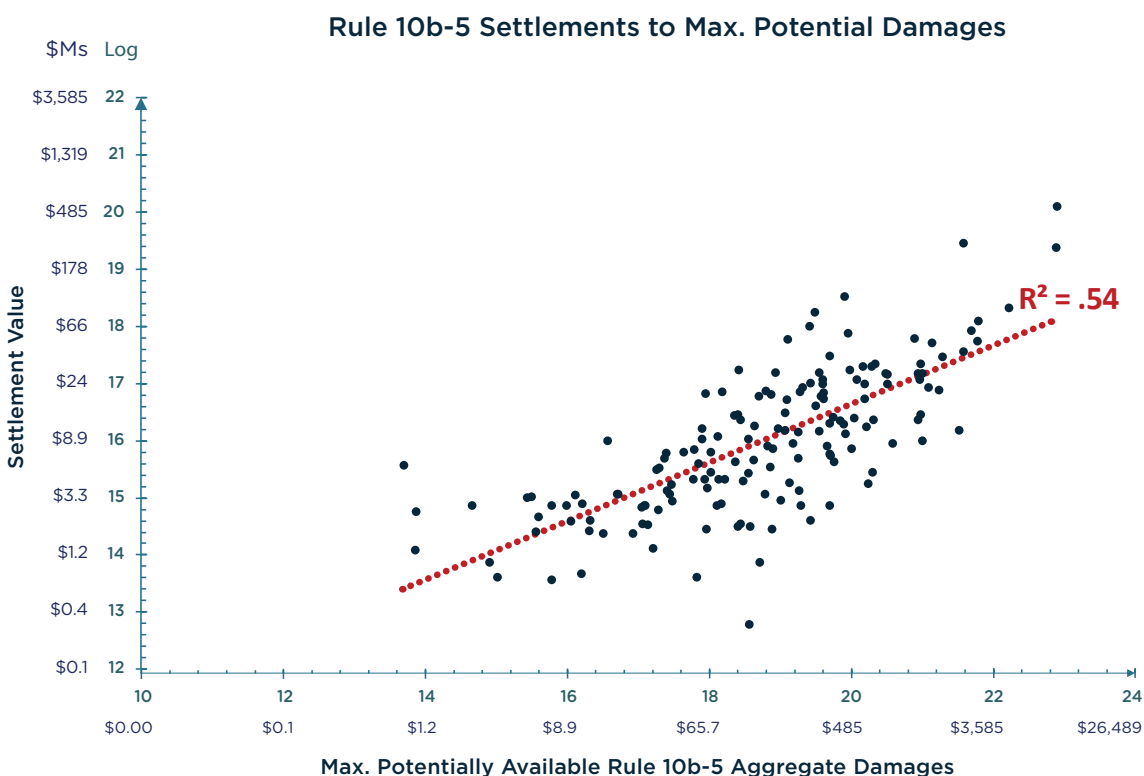
# EMPIRICAL RESULTS OF RULE 10b-5 SETTLEMENT ESTIMATES

## Empirical Results of Estimates of Maximum Potentially Available Rule 10b-5 Aggregate Damages

The results of our on-going independent, empirical analyses on SCA Rule 10b-5 settlements indicate that SAR's Estimates of Maximum Potentially Available Rule 10b-5 Aggregate Damages continue to be statistically robust determinants of potential settlement values using a single explanatory variable.

Our empirical results demonstrate that our Estimates of Maximum Potentially Available Rule 10b-5 Aggregate Damages (calculated around the time when the corresponding securities class action complaints are filed) alone explains approximately 54% of the variation in settlement amounts in simple univariate regressions. Our results exhibit highly significant coefficient estimates indicating that an approximately 10% increase in potential aggregate damages predicts an approximate 5.7% increase in the settlement amount. These results are robust and significantly more accurate than proxy-style damages estimates.<sup>xix</sup>

A proxy for damages claimed by investor plaintiffs may not be an accurate determinant in predicting Rule 10b-5 settlement outcomes because it does not apply the court-accepted event study methodology to effectively compute potential damages per share on a claim-specific basis.



When we add additional controls for the U.S. exchange, circuit court, and the plaintiff firm that represents the lead plaintiff, our Estimates of Maximum Potentially Available Rule 10b-5 Aggregate Damages can explain approximately 81% of Rule 10b-5 settlement variation as reported by the R-squared measure, and approximately 69% by the adjusted R-squared measure, with the damage's coefficient indicating that a 10% increase in estimated damages predicts an approximate 4.4% increase in the settlement amount.

**Data Science Key Takeaway:** Since 2023, SAR's proprietary Estimate(s) of Maximum Potentially Available Rule 10b-5 Aggregate Damages have alone explained more than half the variation in Rule 10b-5 settlements. This is a remarkably robust and powerful predictor of potential settlement outcomes to model active securities class action loss severity more accurately to limit unfavorable loss reserve developments.

## Rule 10b-5 Private Securities-Fraud Litigation Settlement Rates

Based on our robust empirical results on 171 settled Rule 10b-5 SCAs filed since June 2018, we computed the median settlement rates by taking the median quotient of claim-specific settlement amounts (as reported by Institutional Shareholder Services Securities Class Action Services) and our proprietary estimates of Maximum Potentially Available Rule 10b-5 Aggregate Damages.

SAR estimates and tracks quarterly Rule 10b-5 Exchange Act median settlement rates to estimate more accurate potential settlement losses on a claim-specific basis. Estimates of Maximum Potentially Available Rule 10b-5 Aggregate Damages are categorized into severity bands based on the magnitudes of claim-specific loss severity.

**Table 9: SCA Rule 10b-5 Settlement Rates**

Rule 10b-5 Severity Band Rank	No. of Rule 10b-5 Settlements within Severity Bank Rank	Est. Max. Potentially Available Rule 10b-5 Aggregate Damages	Median Settlement to Est. Max. Potentially Available Rule 10b-5 Aggregate Damages
1	27	\$10,000,000	100.0%
2	26	50,000,000	12.1%
3	24	100,000,000	10.8%
4	38	300,000,000	6.4%
5	21	500,000,000	4.3%
6	35	Max	3.3%

SAR estimates and tracks quarterly Rule 10b-5 Exchange Act median settlement rates to estimate more accurate potential settlement losses on a claim-specific basis. Estimates of Maximum Potentially Available Rule 10b-5 Aggregate Damages are categorized into severity bands based on the magnitudes of claim-specific severity.

The six severity band ranges are based on SAR's clustering analyses of our aggregate severity data and the relative frequency of complaints according to magnitude of estimated damages severity. The median settlement ranges of the bands are statistically distinct. We expect to further refine and add severity band ranges as our ratio population of settlement dollars to our Rule 10b-5 damages estimates expands and our statistical clustering analysis indicates meaningful distinction.

**Data Science Key Takeaway:** Robust empirical evidence indicates that observed settlement rates consistently decline as the Estimate of Maximum Potentially Available Rule 10b-5 Aggregate Damages increases, as expected. Statistical clustering analysis supports categorization of Rule 10b-5 Settlement rates according to six severity bands based on observed magnitudes of potential aggregate damages.

# PLAINTIFF SECURITIES CLASS ACTION LAW FIRM PERFORMANCE

## Frequency of Lead Plaintiff Appointments and Magnitude of Settlements Drive Securities Class Action Performance

SAR introduces data and analysis to identify the leading cohort of top performing plaintiff securities class action law firms. To objectively evaluate plaintiffs' counsel performance in a dynamic legal landscape, SAR utilized two sets of performance criteria to achieve a simple, yet robust, data-driven evaluation.

The first performance selection criteria is the frequency of attaining lead or co-lead counsel. The second is the aggregate settlement value on all settled cases in which a firm participated as lead, co-lead, liaison counsel, or additional counsel. This data is value-relevant to supplement a holistic evaluation of the magnitude of potential loss severity on active SCAs that allege violations of the Exchange Act according to the plaintiff law firms involved.

### Primary Performance Factor: Frequency of Attaining Lead or Co-Lead

The Federal Judiciary has the power to assign lead or co-lead counsel privileges according to well-defined case precedent in the private enforcement regime of federal securities laws. To appoint the lead and/or co-lead law firms, the Courts place significant emphasis on the magnitude of trading losses allegedly caused by plaintiffs' alleged securities fraud against issuers. Achieving lead or co-lead status on any federal securities class action assures the law firm(s) control over leadership, strategy, management, and most importantly – the percentage of the settlement fee award.

Most courts consider: "(1) the total number of shares purchased during the class period; (2) the net shares purchases during the class period (in other words, the difference between the number of shares purchased and the number of shares sold during the class period); (3) the net funds expended during the class period (in other words, the difference between the amount spent to purchase shares and the amount received for the sale of shares during the class period); and (4) the approximate losses suffered." ... While courts differ on the precise weight to apply to each factor, most courts agree that the fourth factor—the approximate losses suffered—is the most salient factor in selecting the lead plaintiff.

*Timber Hill LLC v. The Kraft Heinz Co. et al.* in the U.S. District Court for the Northern District of Illinois

The magnitude of trading losses of the proposed lead plaintiff is a significant driver in the court's selection criteria to decide which law firm(s) will ultimately lead the consolidated action. As a result, SAR's primary performance selection criteria is the frequency of attaining lead or co-lead as determined by the Federal Judiciary.

Table 10 to the right presents the top ten plaintiff securities class action law firms that exhibited the highest frequency of attaining lead or co-lead counsel in securities class actions that alleged violations of Rule 10b-5 during the preceding five and a half years.

#### Lead and Co-Lead Frequency Rankings:

Seven different plaintiff securities class action law firms tied for tenth place according to the Exchange Act SCAs analyzed by SAR during the preceding five and a half years. These firms have each been appointed lead or co-lead on four Rule 10b-5 private securities-fraud class action lawsuits.

**Table 10: Plaintiff Law Firm Lead and Co-Lead Rankings**

Rank	Plaintiff Law Firm	Number of Times Lead/Co-Lead
1	POMERANTZ LLP	30
2	THE ROSEN LAW FIRM, P.A.	27
3	ROBBINS GELLER RUDMAN & DOWD LLP	25
4	GLANCY PRONGAY & MURRAY LLP	18
5	BERNSTEIN LITOWITZ BERGER & GROSSMANN LLP	17
6	LEVI & KORSINSKY, LLP	13
7	LABATON KELLER SUCHAROW	11
8	SAXENA WHITE P.A.	10
9	BERNSTEIN LIEBHARD LLP	6
10	BLOCK & LEVITON LLP	4
10	FARUQI & FARUQI, LLP	4
10	HAGENS BERMAN SOBOL SHAPIRO LLP	4
10	HOLZER & HOLZER, LLC	4
10	KAHN SWICK & FOTI, LLC	4
10	KAPLAN FOX & KILSHEIMER LLP	4
10	KESSLER TOPAZ MELTZER & CHECK, LLP	4



## Secondary Performance Factor: Aggregate Settlement Amount on Participating Actions

The effectiveness of economic redress for allegedly defrauded investors in U.S. public companies is regularly evaluated based on the magnitude of aggregate settlements achieved by the participating law firms. As a result, SAR's secondary performance selection criteria is the magnitude of aggregate settlements achieved by the participating law firms; whether or not they secured lead or co-lead status in the corresponding lawsuits.

Table 11 below presents the results of the top ten plaintiff securities class action law firms that exhibited the greatest aggregate settlements in SCAs that alleged violations of Rule 10b-5 during the preceding five and a half years.

**Table 11: Plaintiff Law Firm Aggregate Settlement Rankings**

Rank	Plaintiff Law Firm	Aggregate Settlements (M)
1	BERNSTEIN LITOWITZ BERGER & GROSSMANN LLP	\$2,074.10
2	ROBBINS GELLER RUDMAN & DOWD LLP	2,068.87
3	COHEN MILSTEIN SELLERS & TOLL PLLC	1,256.50
4	KLAUSNER KAUFMAN JENSEN & LEVINSON	1,179.80
5	LABATON KELLER SUCHAROW	869.80
6	KESSLER TOPAZ MELTZER & CHECK, LLP	577.50
7	POMERANTZ LLP	342.53
8	SAXENA WHITE P.A.	271.15
9	GLANCY PRONGAY & MURRAY LLP	182.00
10	LEVI & KORSINSKY, LLP	165.20

**Aggregate Settlement Rankings:** Two plaintiff law firms made the top five rankings based on aggregate settlements but did not break the top ten when evaluated on attaining lead or co-lead counsel appointments.

## Selection of the Top Performing Plaintiff Securities Class Action Law Firms

Selection of the top performing plaintiff securities class action law firms involved identifying those with both the highest frequency of attaining lead and co-lead counsel and achieved the greatest aggregate settlement amounts on the sample of cases analyzed.

Table 12 below presents the top plaintiff securities class action law firms identified according to SAR's two sets of performance criteria. These law firms had the highest frequency of securing lead or co-lead status and achieved the greatest monetary recompense due to allegedly defrauded investors. This table ranks the law firms according to average settlement among 171 settled SCAs.

**Table 12: Top Performing Securities Class Action Plaintiff Law Firms**

Rank	Plaintiff Law Firm	Aggregate Settlements (M)	Average Settlement (M)
1	KESSLER TOPAZ MELTZER & CHECK, LLP	\$577.50	\$115.50
2	BERNSTEIN LITOWITZ BERGER & GROSSMANN LLP	2,074.10	109.16
3	ROBBINS GELLER RUDMAN & DOWD LLP	2,068.86	76.62
4	LABATON KELLER SUCHAROW	869.80	57.99
5	SAXENA WHITE P.A.	271.15	24.65
6	LEVI & KORSINSKY, LLP	165.20	12.71
7	POMERANTZ LLP	342.52	10.07
8	GLANCY PRONGAY & MURRAY LLP	182.00	9.58

**Top Performing Plaintiff Securities Class Action Law Firms:** The top-tier plaintiff securities class action law firms vary greatly in both aggregate and average settlement attainment. The 1st ranked plaintiff law firm within each category is more than 1000% greater than the last. With settlement outcomes exhibiting such variability by participating plaintiff law firm, it is critical that industry stakeholders rely on sound data-driven analysis to manage SCA risk.

**Sources:** ISS SCAS, FINRA, S&P Global Market Intelligence, S&P Dow Jones Indices, Thomson Reuters, SAR Platform as of March 31, 2024.

Any reprint of the information or figures presented in this quarterly report should reference SAR. Please direct any technical inquiries to Stephen Sigrist, SVP of Data Science, at 202.891.3652 or [stephen@sarlit.com](mailto:stephen@sarlit.com).

SAR is a pioneer in public company risk management data analytics solutions. The company relies on specialized data science and court-approved methodologies to quantify the securities litigation risk of U.S. and non-U.S. issuers listed on the NYSE and NASDAQ.

<sup>i</sup>Global SCA Rule 10b-5 Exposure amounts to the sum of U.S. Rule 10b-5 Exposure and ADR Rule 10b-5 Exposure estimates.

<sup>ii</sup>This tally accounts for U.S. issuers of common stock and non-U.S. issuers that trade on U.S. exchanges through ADRs that are listed as defendants in first-filed SCA complaints filed during the first quarter of 2024 and allege shareholder damages. It also accounts for claims against such issuers in which Rule 10b-5 allegations were first made in amended filings during 1Q'24. A corporation that was sued a second or third time during the current quarter in non-amended filings is not accounted for in the current quarter's tally. The tally excludes SCA complaints that were identified but not analyzed per Appendix-I.

<sup>iii</sup>Figures of Securities Class Action (SCA) Rule 10b-5 litigation exposure are based on identified and analyzed first-filed complaints for each claim filed during the corresponding quarter. They also include claims in which Rule 10b-5 allegations were first made in amended filings during the corresponding quarter. All federal SCA complaints are read by full-time human employees of SAR and screened for allegations that specifically allege violations of Rule 10b-5, define a specific Class Period, identify specific alleged misrepresentations, and allegedly related corrective disclosures. Proprietary non-ML and non-AI cloud-based technology is utilized and relied upon to capture, categorize, and database select constituent data components from each individual SCA complaint. Only the claimed stock price declines presented in the first-filed complaint against each defendant company are accounted for to estimate U.S. SCA Rule 10b-5 Exposure in this report. Measures of SCA exposure for each claim may increase or decrease as the case progresses through the class action life cycle. For purposes of this quarterly informative report, SCA Rule 10b-5 Exposure is not amended retroactively for cases that have been dismissed by the Court or voluntarily dismissed by plaintiffs.

<sup>iv</sup>This tally accounts for U.S. issuers of common stock that are listed as defendants in first-filed SCA complaints filed during the first quarter of 2024 and allege aggregate shareholder damages. It also includes claims in which Rule 10b-5 allegations were first made in amended filings during 1Q'24. A U.S. issuer of common stock that was sued a second or third time during the current quarter in non-amended filings is not accounted for in the current quarter's tally. The tally excludes SCA complaints against U.S. issuers of common stock that were sued for alleged violations of the federal securities laws in a previous quarters. The tally also excludes cases that have been filed against international corporations that are listed on U.S. exchanges through American Depositary Receipts (ADRs). The tally excludes SCA complaints that were identified but not analyzed per Appendix-I.

<sup>v</sup>A public corporation's exposure to alleged violations of Rule 10b-5 is estimated by tracking the cumulative decline in market capitalization during a single market trading session (close-to-close event windows) that correspond with the timing of the claimed alleged corrective disclosures that surpass statistical thresholds of indirect price impact at the 95% confidence standard and are presented in a first-filed SCA complaint. See, *Halliburton III* 309 F.R.D. 251 (N.D. Tex. July 25, 2015) and *Exxon* 2023 WL 5415315 (N.D. Tex. Aug. 21, 2023). This figure excludes market capitalization declines of non-U.S. issuers that have been sued for alleged violations of the U.S. federal securities laws and trade on U.S. exchanges through American Depositary Receipts (ADRs).

<sup>vi</sup>SAR relies on Docket Alerts and Court Wire notifications attained from Thomson Reuters Westlaw. SAR professionals actively monitor and track case dockets to attain newly filed and amended SCA complaints.

<sup>vii</sup>This tally of alleged corrective disclosures includes those from SCA complaints first-filed in 1Q'24 and amended filings in which Rule 10b-5 allegations were first made in 1Q'24 against U.S. issuers of common stock. The tally excludes SCA complaints against companies for which there are relevant first-filed complaints in prior quarters.

<sup>viii</sup>See, *Halliburton Co. v. Erica P. John Fund, Inc.*, 134 S. Ct. 2398 (2014); *Erica P. John Fund, Inc. v. Halliburton Co.*, 309 F.R.D. 251 (N.D. Tex. 2015); *Goldman Sachs Group Inc. v. Arkansas Teacher Retirement System*, 141 S. Ct. 1951 (2021); *Arkansas Teacher Retirement System v. Goldman Sachs Group, Inc.*, 77 F.4th 74 (2d Cir. 2023).

<sup>ix</sup>See, *Dura Pharmaceuticals, Inc. v. Broudo*, No. 03-932, 2005 WL 885109 (2005).

<sup>x</sup>Large cap corporations are the sub-set of defendant corporations that have market capitalizations within the range of the greatest and least market capitalization value of the constituent members of the S&P 500 Market Index at the time of the start of the Class Period alleged in the first-filed complaint.

<sup>xi</sup>This is the average total market capitalization of U.S. issuers of common stock that are listed on the NYSE or Nasdaq exchanges with market capitalizations greater than \$3.7 billion between December 30, 2023, and March 31, 2024.

<sup>xii</sup>Mid cap corporations are the sub-set of defendant corporations that have market capitalizations within the range of the greatest and least market capitalization value of the constituent members of the S&P MidCap 400 Market Index at the time of the start of the Class Period alleged in the first-filed complaint.

<sup>xiii</sup>This is the average total market capitalization of U.S. issuers of common stock that are listed on the NYSE or Nasdaq exchanges with market capitalizations between \$1.26 and \$3.7 billion between December 30, 2023, and March 31, 2024.

<sup>xiv</sup>Small cap corporations are the sub-set of defendant corporations that have market capitalizations within the range of the greatest and least market capitalization value of the constituent members of the S&P SmallCap 600 Market Index at the time of the start of the Class Period alleged in the first-filed complaint.

<sup>xv</sup>This is the average total market capitalization of U.S. issuers of common stock that are listed on the NYSE or Nasdaq exchanges with market capitalizations less than \$1.26 billion between December 30, 2023, and March 31, 2024.

<sup>xvi</sup>Figures of ADR Securities Class Action (SCA) Rule 10b-5 Exposure are based on both first-filed and analyzed complaints for each claim filed during the corresponding quarter and claims in which 10b-5 allegations were first made in amended filings during the corresponding quarter.

<sup>xvii</sup>This tally includes both SCA complaints against non-U.S. issuers that trade on U.S. exchanges first-filed in the current quarter and claims in which Rule 10b-5 allegations were first made in amended filings during the current quarter. A non-U.S. issuer of ADRs that was sued a second or third time during the current quarter is not accounted for in the current quarter's tally. The tally excludes SCA complaints that were identified but not analyzed per Appendix-I.

<sup>xviii</sup>A non-U.S. issuer's exposure to alleged violations of Rule 10b-5 is estimated by tracking the cumulative decline in market capitalization during open market trading sessions that correspond with the timing of the claimed alleged corrective disclosures that surpass statistical thresholds of indirect price impact and are presented in a first-filed SCA complaint. These results are based on a sample of 171 recently settled SCAs, and exclude settled SCAs that allege violations of both the Exchange Act and Securities Act. These specific performance metrics are based on log-log regressions that exclude the few settled cases for which Estimates of Maximum Potentially Available Rule 10b-5 Aggregate Damages are zero, due to all of the alleged stock drops exhibiting a non-statistically significant residual stock price decline at the 95% confidence standard and greatly prohibiting the determination of back-end stock price impact, in accordance with the Supreme Court ruling, in *Arkansas Teachers Retirement System v. Goldman Sachs*, made effective June 21, 2021. Non log-log regressions that include these fully deficient securities claims that settled for a monetary sum perform similarly in terms of their explanatory power.

<sup>xix</sup>The applied methodology for accumulating maximum potential alleged artificial inflation that investors claim is embedded in the defendant's price of common stock, is the industry-accepted constant dollar method. Aggregate market data supplied by S&P Global Market Intelligence is used to compute an appropriate level of daily effective float by taking into consideration and accounting for the effects of insider holdings and short interest on a daily basis throughout the corresponding class period based on the allegations of the corresponding class action complaint. For purposes of this informative quarterly report, no reduction to issue-specific float is made to account for institutional investor trading volume that may not be affected by and during investor plaintiffs alleged class period. A refined estimate of effective float may be computed in a litigation-specific context to control for institutional holdings that may not warrant inclusion in the estimation of the defendant's effective float for a more accurate estimation of Maximum Potentially Available Rule 10b-5 Aggregate Damages. An adjustment to exchange-reported trading volume is made to account for common stock traded by designated market-makers or broker dealers who are acting as market-makers. Other specific refinements to exchange-reported volume may be made in a litigation-specific context based on data attained through discovery, for example when tracing issues may be present. The estimation of allegedly damaged shares during the operative class periods are made by applying a pre-calibrated, and industry-accepted two-trader model with static model inputs for each of the respective investor cohorts. The use of an industry-accepted quantitative model is a widely accepted technique used in securities class action litigation by established Plaintiff and Defense experts to estimate the number of alleged and potentially damaged shares because class counsel may not have the ability to attain the entire universe of trading records of all participants in the market that bought and sold publicly traded common stock of the corresponding share class in the U.S.-listed company during investor plaintiffs alleged inflationary period. The Estimate of Maximum Potentially Available Rule 10b-5 Aggregate Damages is based on the attribution of 100% of the residual stock price decline for each alleged corrective disclosure that exhibited a statistically significant residual stock price decline at the 95% confidence standard and using a close-to-close, single trading session event window. The limitation to maximum potentially attributable artificial stock price inflation that investor plaintiffs allege to be embedded in the price of common stock may be refined in litigation-specific circumstances based on the results of news discovery analyses to determine the magnitude of potential confounding information disclosed to participants in the market on the affected day. The Estimate of Maximum Potentially Available Rule 10b-5 Aggregate Damages applies Section 21D(e) of the Private Securities and Litigation Reform Act of 1995 (PSLRA) 90-day look-back limitation on damages on the final alleged corrective disclosure that exhibited a statistically significant residual stock price decline at the 95% confidence standard and using a close-to-close, single trading session event window. In a litigation-specific circumstance, the 90-day look-back limitation to aggregate damages may be applied and extended on all surviving alleged corrective disclosures that may exhibit back-end price impact which may further reduce the Estimates of Maximum Potentially Available Rule 10b-5 Aggregate Damages.

#### Appendix-1: Rule 10b-5 Exchange Act SCAs Identified But Not Analyzed in 1Q'24

The following list comprises Rule 10b-5 Exchange Act SCAs filed during 1Q'24 against U.S. issuers of common stock or ADRs but not analyzed by SAR due to two primary factors. Either there is insufficient pricing data to conduct a multivariate regression in accordance with SAR's data analytics standards of quality control, and/or the securities claims allege potentially novel theories of Rule 10b-5 liability.

Defendant Name	Filing Date	Docket ID	Market Cap. Category
Brooge Energy Limited	2/5/24	24-cv-00959	N/A
Hut 8 Corp.	2/7/24	24-cv-00904	N/A
Maplebear Inc.	1/25/24	24-cv-00465	Large
Nextdoor Holdings, Inc.	2/28/24	24-cv-01213	Small
Lyft, Inc.	3/5/24	24-cv-01330	Large
British American Tobacco p.l.c.	1/24/24	24-cv-00517	Large