

CORNERSTONE RESEARCH

Economic and Financial Consulting and Expert Testimony

Securities Class Action Filings

2022 Year in Review

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Executive Summary

Overall filing volume declined slightly in 2022, falling to 208 filings from 218 in 2021. However, the number of "core" filings—those excluding M&A filings—increased slightly, and the size of core filings increased sharply as total Maximum Dollar Loss (MDL) and Disclosure Dollar Loss (DDL) rose 138% and 100%, respectively.¹

Core filings with allegations related to special purpose acquisition companies (SPACs) decreased by 27% from 2021 to 2022, following the slowdown in SPAC IPOs in 2022. Combined federal Section 11 and state 1933 Act filings increased to their highest total since 2019; federal-only Section 11 filings alone were the highest since 2008.

Number and Size of Filings

- Plaintiffs filed 208 new class action securities filings (filings) in federal and state courts in 2022, down 5% relative to 2021 and below the 1997–2021 average of 228. Core filings increased by one to 201.
- Disclosure Dollar Loss (DDL) was the highest on record, doubling to \$593 billion in 2022. Maximum Dollar Loss (MDL) increased by 138% to \$2,433 billion. These large increases were due to an increase in both the number and the size of mega MDL and mega DDL filings. (pages 14, 16, and 17)
- The number of IPOs fell steeply in 2022, but filings with federal Section 11 claims and state claims under the Securities Act of 1933 (1933 Act) rose 43%, likely in response to the surge of IPOs in the previous year and subsequent stock market declines. (pages 4 and 27)

Measures of filing size hit historic highs in 2022. Total and average DDL were the highest on record, while all measures of MDL were the highest since the tech crash in 2002.

Figure 1: Federal and State Class Action Filings Summary (Dollars in 2022 billions)

	1	Annual (1997–2021)	2021	2022	
	Average	Maximum	Minimum	2021	2022
Class Action Filings	228	427	120	218	208
Core Filings	192	267	120	200	201
Disclosure Dollar Loss (DDL)	\$202	\$409	\$69	\$297	\$593
Maximum Dollar Loss (MDL)	\$989	\$3,342	\$267	\$1,022	\$2,433

Note: This figure presents data on a combined federal and state filings basis. Filings in federal courts may have parallel cases filed in state courts. All federal filings are counted only once—at the time of the earliest filing. When parallel cases are filed in different years, only the earlier filing is reflected in the figure above. Filings against the same company brought in different states without a filing brought in federal court are counted as unique state filings. As a result, this figure's filing counts may not match those in Figures 4–12, 17, 19–25, 28–34, or Appendices 2–9.

¹ Reported MDL, DDL, and Dollar Loss on Offered Shares (DLOS) numbers are inflation-adjusted to 2022 dollars and will not match prior reports.

Key Trends in Filings

In 2022, DDL was the highest on record and MDL was the highest in the last 20 years. Core federal SPAC filings decreased by over a quarter relative to 2021, while cryptocurrency-related filings reached the highest on record. Filings related to SPACs, cryptocurrency, or COVID-19 represented more than a third of all core federal filings in 2022.

Mega Filings

- Total DDL from mega filings in 2022 surpassed the previous total DDL record for all filings, set in 2018.
 Total DDL from mega filings in 2022 was over four times the historical average annual mega DDL, while the number of mega DDL filings was just over double the historical average. (page 17)
- Total MDL from mega filings increased 200% from 2021. (page 17)

Core Federal SPAC Filings

- Core filings related to SPACs in 2022 decreased by 27% relative to 2021 but were still fourfold the 2019–2020 total. (page 5)
- Core federal SPAC filings were on pace for a record high in 2022 H1 with 18 filings before declining to only six filings in 2022 H2. (page 5)
- The **resolution rate** of core federal SPAC cases between 2019 and 2021 was less than a quarter of the resolution rate for other core federal filings. (page 7)

Federal Cryptocurrency-Related Cases

- In 2022, **core filings related to cryptocurrency** more than doubled to a record 23 filings. (page 9)
- Cryptocurrency-related cases in 2022 were filed against a diverse pool of defendants; 35% of such filings were against multiple defendant types. (page 9)
- Cryptocurrency-related cases filed in 2020 and 2021 combined were dismissed at a much higher rate than other core federal filings. (page 6)

M&A Filings

 Federal filings of M&A class actions—those involving Section 14 claims but no Rule 10b-5, Section 11, or Section 12(a) claims—decreased by 61% to equal the lowest level since tracking began in 2009. (page 4)

By Industry

 DDL and MDL from core federal filings in the Communications sector alone (19 filings) in 2022 surpassed both the total DDL and MDL from all core filings (200 filings) in 2021. (page 30)

By Circuit

 The Ninth Circuit accounted for 60% of total core federal MDL but only 31% of all core federal filings. (page 31)

Trend Cases

- COVID-19-related filings reached a new annual high (20). (page 5)
- On average, COVID-19-related filings had higher rates of dismissal and lower rates of settlement than all other core federal filings. (page 8)

U.S. Issuers

- The percentage of U.S. exchange-listed companies subject to core filings decreased for the third year in a row, falling to 3.0%, its lowest point since 2012. (page 19)
- In 2022, 8.4% of **S&P 500** market capitalization was subject to a filing while only 3.8% of S&P 500 firms were subject to a filing. (pages 20–21)

Filings by Plaintiff Law Firm

The increase in core federal filings from 2014 to 2019
was driven in part by a surge in first identified complaints
filed by three plaintiff law firms. The subsequent decline
in filing activity between 2019 and 2022 has been driven
in part by these three firms. (page 32)

New Developments

- The U.S. Supreme Court agreed to hear the appeal in Slack Technologies Inc. v. Pirani. (page 36)
- The Second Circuit decision in Goldman Sachs Group v. Arkansas Teacher Retirement System is expected early this year. (page 36)

Featured: Annual Rank of Filing Intensity

- In 2022, total DDL doubled and total MDL more than doubled their 2021 values.
- Despite the overall increase in DDL, median DDL fell by 39%. Conversely, median MDL increased by 40% relative to 2021.

Although there was only one more core filing in 2022 than in 2021, the aggregate size of filings rose steeply.

- M&A filings decreased 61% to their lowest level since 2009, while M&A activity fell only 15%.¹
- The number of 1933 Act filings in state court and federal courts increased in 2022 for the first time since 2019, rising 43% relative to 2021.
- The rate of filings against U.S. exchange-listed companies fell by a quarter, partly driven by a steep increase in U.S. exchange-listed companies due to the recent SPAC boom.
- Roughly one in 26 S&P 500 companies was subject to a core filing in 2022, below the historical average.

Figure 2: Annual Rank of Measurements of Federal and State Filing Intensity

	2020	2021	2022
Number of Total Filings	4th	10th	14th
Core Filings	4th	13th	12th
M&A Filings	4th	9th	13th
Size of Core Filings			
Disclosure Dollar Loss	7th	9th	1st
Maximum Dollar Loss	4th	11th	3rd
Percentage of U.S. Exchange-Listed Companies Sued			
Total Filings	4th	7th	14th
Core Filings	3rd	6th	15th
Percentage of S&P 500 Companies Subject to Core Federal Filings	13th	20th	15th

Note: This figure presents combined federal and state data in the rankings in all categories beginning in 2010, except the Percentage of S&P 500 Companies Subject to Core Federal Filings, which excludes state data. Filings in federal courts may have parallel cases filed in state courts. All federal filings are counted only once—at the time of the earliest filing. When parallel cases are filed in different years, only the earlier filing is reflected in the figure above. Filings against the same company brought in different states without a filing brought in federal court are counted as unique state filings. As a result, the filing counts determining the rankings in this figure may not match those in Figures 4–12, 17, 19–25, 28–34, or Appendices 2–9. Rankings cover 1997 through 2022 with the exceptions of M&A filings, which have been tracked as a separate category since 2009, and analysis of the litigation likelihood of S&P 500 companies, which began in 2001. M&A filings are securities class actions filed in federal courts that have Section 14 claims, but no Rule 10b-5, Section 11, or Section 12(a) claims, and involve merger and acquisition transactions. Core filings are all state 1933 Act class actions and all federal securities class actions excluding those defined as M&A filings.

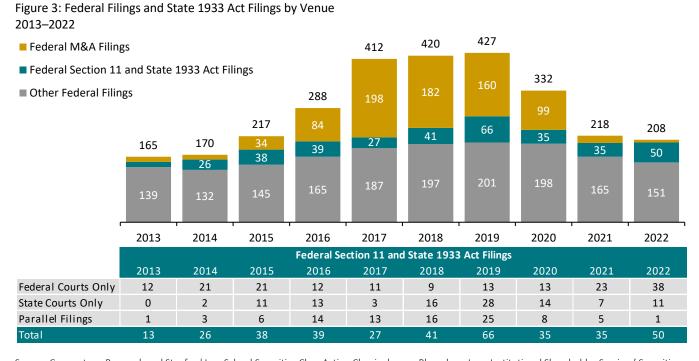
¹ According to FactSet MergerMetrics, the number of non-withdrawn mergers with a transaction value greater than \$100 million and with a public company target traded on the NYSE or Nasdaq fell from 208 with announcement dates in 2021 to 177 with announcement dates in 2022.

Combined Federal and State Filing Activity

- Plaintiffs filed 208 new securities class actions in federal and state courts in 2022, a 5% decline from 2021 and 43% lower than the previous five-year average of 362.
- Both federal M&A and core federal Rule 10b-5 filings without Section 11 allegations continued to decline, decreasing by 61% and 8%, respectively.

The number of class action filings dropped largely due to a continued decline in M&A filings and a slight decline in core federal Rule 10b-5 filings without Section 11 allegations.

- In 2022, federal Section 11 and state 1933 Act filings increased 43% to 50 from 35 in 2021.
- Of these 50 filings, only 11 were filed exclusively in state courts, four more than the seven such cases in 2021.
- Of all federal Section 11 and state 1933 Act filings in 2022, 76% were federal-only filings, the highest share since 2014, demonstrating a continued increase in the federal-only share of Section 11 and state 1933 Act filings from 66% in 2021 and 37% in 2020.
- Parallel filings in state and federal courts fell from five filings in 2021 to one filing in 2022, the lowest number of parallel filings since 2013.



Source: Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse; Bloomberg Law; Institutional Shareholder Services' Securities Class Action Services (ISS' SCAS)

Note: This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. All federal filings are counted only once—at the time of the earliest filing. When parallel cases are filed in different years, only the earlier filing is reflected in the figure above. Filings against the same company brought in different states without a filing brought in federal court are counted as unique state filings. As a result, this figure's filing counts may not match those in Figures 4–12, 17, 19–25, 28–34, or Appendices 2–9. See Additional Notes to Figures for more detailed information.

Summary of Trend Cases

This figure highlights recent trends that have appeared in core filing activity.

- SPAC filings continued to be the most dominant trend in 2022 (24 filings), closely followed by cryptocurrency-related filings (23 filings) and COVID-19-related filings (20 filings). Collectively, these trends accounted for more than a third of core federal filings in 2022.
- Core federal SPAC filings (24) fell by 27% from their peak of 33 in 2021, but were still almost fivefold higher than the five filings in 2020.
- Cryptocurrency-related filings reached a new high in 2022, surpassing the previous high of 14 filings in 2018.
- COVID-19-related filings remained elevated for the third straight year. About 60% of the filings were against companies in the Healthcare-Services, Healthcare-Products, or Biotechnology subsectors.

SPAC, COVID-19, and cryptocurrencyrelated filings together accounted for 34% of all core federal filings.

- There were four cybersecurity filings in 2022, down from seven in 2021. However, three of the four cybersecurity filings were mega MDL filings.
- There was only one cannabis-related filing in 2022, continuing the decline from its peak in 2019.
- In 2022, there were two filings against SPACs that also contained cryptocurrency-related allegations. One SPAC was a cryptocurrency mining company; the other was a cryptocurrency exchange.
- Core federal SPAC filings were on pace for a record high in 2022 H1 with 18 filings before declining to only six filings in 2022 H2.

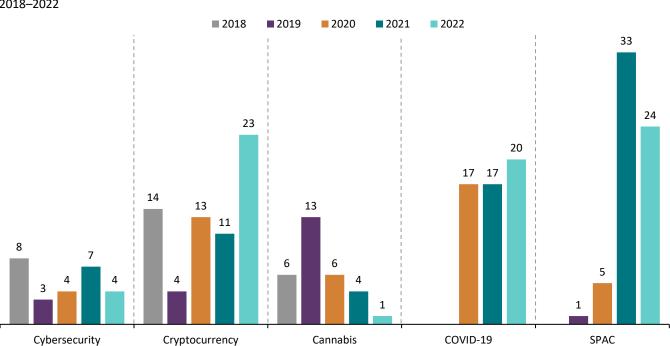


Figure 4: Summary of Trend Cases—Core Federal Filings 2018–2022

Note: M&A SPAC filings are excluded from this figure. As a result, this figure's filing counts may not match Figure 11. There were five, two, one, and one of such filings in 2019, 2020, 2021, and 2022, respectively. See Additional Notes to Figures for trend definitions and more detailed information.

NEW: Core Federal Case Status by Trend

This analysis compares filing groups to determine whether filing outcomes of core federal cryptocurrency-related, SPAC, and COVID-19-related trend filings differ from outcomes for other types of core federal filings.

The figure below compares the outcomes of cryptocurrency-related filings in 2018–2021 to the outcomes of all other core federal filings in the same period. As each cohort ages, a larger percentage of filings are resolved—whether through dismissal, settlement, remand, or by trial.

- The settlement and dismissal rates for other core federal and cryptocurrency-related filings were similar in 2018–2019.
- In April 2020, two law firms filed 11 similar cryptocurrency-related securities class actions. Of these 11 filings, nine were dismissed, one was settled, and one is ongoing.

Cryptocurrency-related cases filed in 2020 and 2021 combined were dismissed at a much higher rate than other core federal filings.

- Filings related to cryptocurrency in 2020 and 2021 combined have had a much higher dismissal rate than other core federal filings.
- Nearly half (45%) of cryptocurrency-related filings in 2021 have been resolved, as compared to just over a quarter of other core federal filings.
- Cryptocurrency-related filings in 2021 have settled at a higher rate than other core federal filings to date.

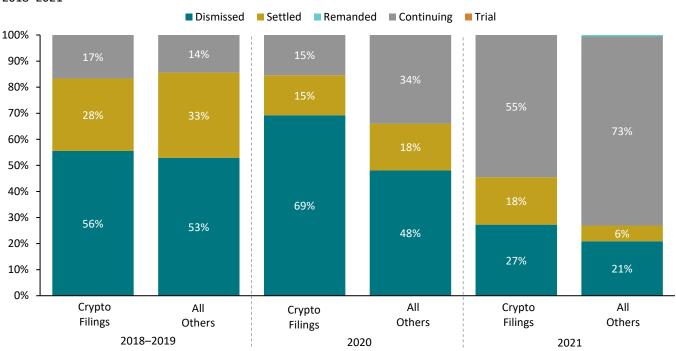


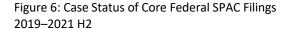
Figure 5: Case Status of Core Federal Cryptocurrency-Related Filings 2018–2021

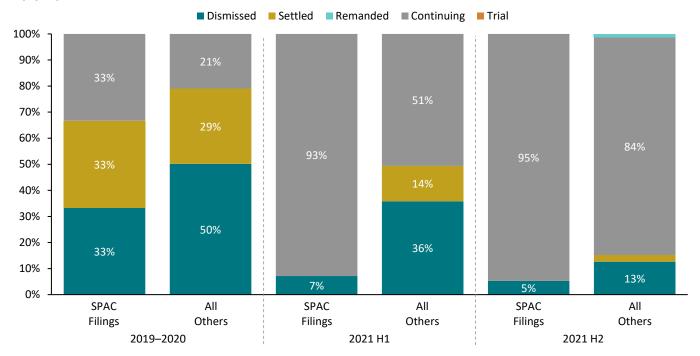
Note: Percentages may not sum to 100% due to rounding. Because a high percentage of cases in 2022 are ongoing, the 2022 cohort is excluded from this figure.

This figure compares the outcomes of core federal SPAC filings to the outcomes of all other core federal filings for the period 2019–2021.

- SPAC filings in 2019–2020 (six filings) were settled, dismissed, or ongoing at the same rate (33%).
- In 2019–2020, other core federal filings were dismissed at a higher rate than SPAC filings.
- In 2021, two SPAC filings were dismissed and none settled (6% and 0%, respectively), as compared to higher dismissal and settlement rates for other core federal filings (24% and 8%, respectively).

Between 2019 and 2021, 15% of SPAC cases were resolved, less than a quarter of the resolution rate for all other core federal filings.





Note: Percentages may not sum to 100% due to rounding. M&A SPAC cases are excluded from this figure. There were five, two, one, and one of such filings in 2019, 2020, 2021, and 2022, respectively. Because of the low volume of cases in 2019 and 2020 (six total), these two years have been combined. Because a high percentage of cases in 2022 are ongoing, the 2022 cohort is excluded from this figure.

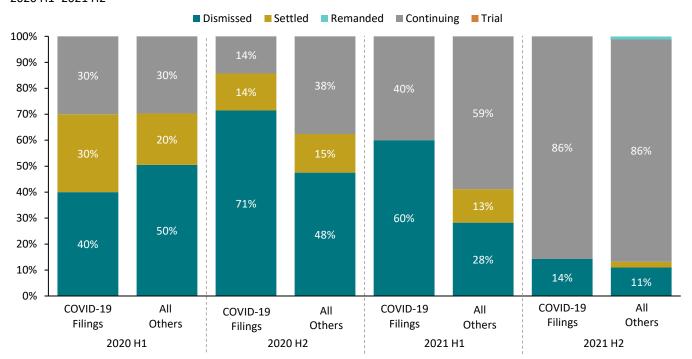
This figure compares the outcomes of core federal COVID-19-related filings to the outcomes of all other core federal filings for the period 2020–2021.

- In 2020–2021, 59% of all COVID-19-related core federal filings were resolved, compared to 48% of all other core federal filings.
- The dismissal rate of COVID-19-related lawsuits filed in 2021 (41%) was more than double the dismissal rate for all other filings (19%).
- Resolution rates in 2020 H1 and 2021 H2 were nearly the same for COVID-19-related filings and all other filings. This differs from 2020 H2 and 2021 H1, where COVID-19-related filings were resolved at a higher rate than all other filings.

No COVID-19-related cases filed in 2021 have settled as
of the end of 2022, compared to 7% of all other filings.

On average, COVID-19-related filings had higher rates of dismissal and lower rates of settlement than all other core federal filings.

Figure 7: Case Status of Core Federal COVID-19-Related Filings 2020 H1–2021 H2



Note: Percentages may not sum to 100% due to rounding. Because a high percentage of cases in 2022 are ongoing, the 2022 cohort is excluded from this figure.

Summary of Federal Cryptocurrency-Related Filings

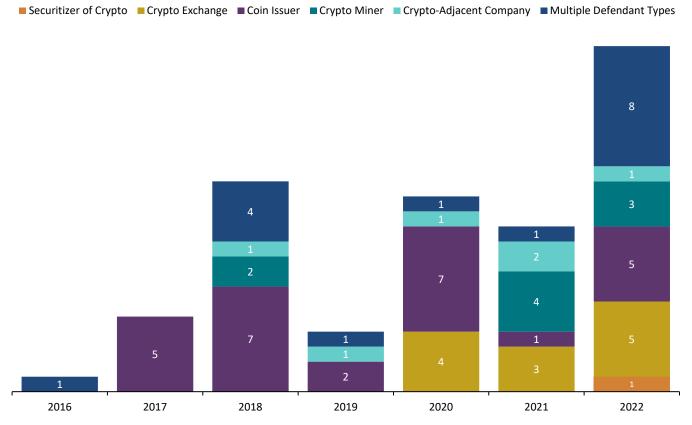
This figure categorizes cryptocurrency-related filings since 2016 by defendant type.

- Cryptocurrency-related filings in 2022 greatly exceeded 2021 totals as regulatory oversight increased and the cryptocurrency market weakened.
 See New Developments for additional discussion on legal and regulatory oversight of cryptocurrency. (page 36).
- Filings against multiple defendant types increased to eight in 2022 from one in 2021, surpassing the previous high of four in 2018.
- From 2016 to 2020, 73% of cryptocurrency-related filings included allegations concerning cryptocurrency issuances. Since 2020, this figure has dropped sharply to 32% of cryptocurrency-related filings.

There were eight filings in 2022 with allegations related to cryptocurrency securitization, seven of which are included in the "Multiple Defendant Types" category. Prior to 2022, there had been no such filings since 2016.

- From 2016 to 2019, only 8% of cryptocurrency-related cases included allegations concerning cryptocurrency exchanges. From 2020 to 2022, 40% of cryptocurrencyrelated cases had these allegations.
- See Appendix 9 for a detailed breakdown of filings by defendant type.

Figure 8: Summary of Cryptocurrency-Related Filings—Core Federal Filings 2016–2022



Note: "Multiple Defendant Types" refers to primary defendants operating in two or more of the categories. See Additional Notes to Figures for more information.

Industry Comparison of Core Federal SPAC Filings

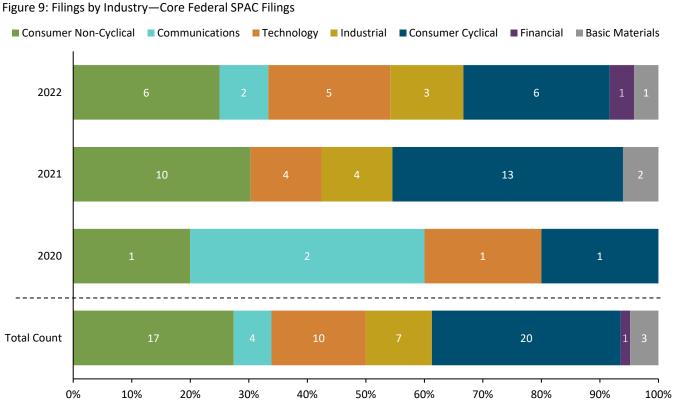
This analysis examines the industry composition associated with the substantial increase in core federal filings against current and former SPACs observed over the last three years.

- SPAC filings in the Consumer Cyclical sector fell by over half in 2022.
- Half of Consumer Cyclical SPAC filings in 2022 had a subsector classification of Auto Manufacturers or Auto Parts & Equipment. Three subsectors—Airlines, Entertainment, and Retail—made up the remaining filings.
- Technology, Communications, and Financial were the only sectors with more SPAC filings in 2022 than in 2021.
 The Financial sector had its first SPAC filing in 2022.
- Both SPAC filings in the Communications sector were mega MDL filings.

detailed information.

Filings in the Technology sector made up 21% of all SPAC filings in 2022.

- One SPAC filing in the Communications sector was also a mega DDL filing.
- Technology SPAC filings in 2022 continued to increase.
 Of the 10 Technology filings in the past three years, five
 were filed in 2022. Four of these were in the Software
 & Programming subsector, while the other filing was in
 the Computer Hardware subsector.
- Consumer Non-Cyclical SPAC filings have been the second most or tied for the most filings in the past three years. Subsectors with filings in 2022 include Commercial Services, Healthcare Products, and Healthcare Services.



Note: M&A SPAC cases are excluded from this figure. Filings with missing sector information or infrequently used sectors are excluded; as a result, yearly counts may not match Figure 11. SPAC filings concern companies that went public for the express purpose of acquiring an existing company in the future. SPAC filings include current and former SPACs. Sectors are based on the Bloomberg Industry Classification System. See Additional Notes to Figures for more

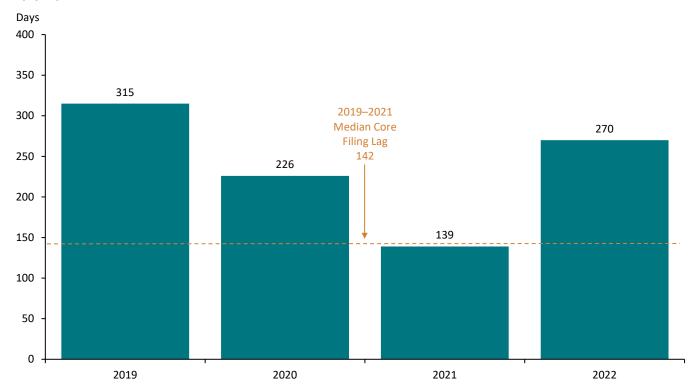
Lag between De-SPAC Transaction and Core Federal Filings

This analysis reviews the median number of days between the closing date of the SPAC merger transaction (De-SPAC Transaction) and the filing date of a core federal securities class action.

- The 2022 median filing lag after a De-SPAC Transaction (270 days) reached its highest point since 2019, nearly twice the lag in 2021 (139 days).
- The 2022 median filing lag after a De-SPAC Transaction (270 days) is over four months longer than the 2019– 2021 median SPAC filing lag (142 days, or roughly four and a half months).
- From 2019 through 2021, the median filing lag for a SPAC subject to a core federal filing was 142 days, just over half the median filing lag for IPOs subject to a federal Section 11 filing (273 days).

In 2022, core SPAC filings had about the same filing lag as the historical median lag for IPO filings.

Figure 10: Median Lag between De-SPAC Transaction and Core Federal SPAC Filings 2019–2022



Source: Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse; SPAC Insider

Note: Federal SPAC filings concern companies that went public for the express purpose of acquiring an existing company in the future. These include current and former SPACs. M&A SPAC filings are excluded from this analysis, as they typically occur before the closing date of the De-SPAC Transaction. Additionally, filings against SPACs that did not complete the merger transactions referenced in the filing are excluded from the filing lag comparison. Years in the figure refer to the year in which the complaint was filed.

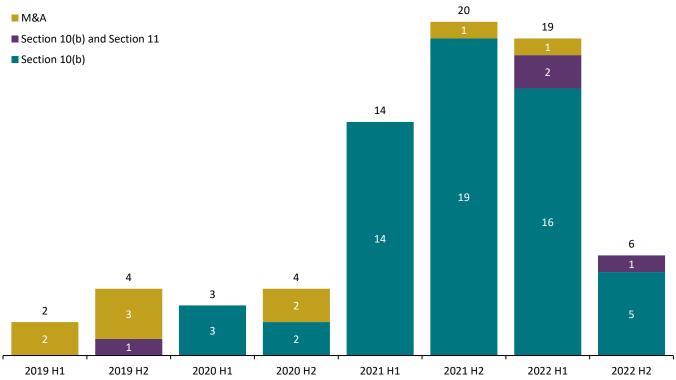
Federal SPAC Filing Allegations

The figure below illustrates how the types of allegations in filings against current and former SPACs have changed over time. Allegations are based on first identified complaints.

The three-year cumulative core litigation rate for SPACs is 16%—about the same as the three-year cumulative core litigation rate for IPOs.

- In 2022, three federal SPAC filings included Section 11 allegations, as compared to the previous three years which only had one such filing (in 2019).
- Since 2019, the cumulative core litigation rate for SPACs within three years of the De-SPAC transaction is just above 16%, nearly level with the cumulative core litigation rate that issuers have faced in the first three years after IPOs. See Appendix 5 for SPAC and IPO litigation exposure rates.
- Since 2020, The Rosen Law Firm, P.A., Pomerantz LLP, and Glancy Prongay & Murray LLP accounted for 77% of first identified core federal SPAC filings, compared to 59% for all first identified core federal non-SPAC filings.
- In 25% of all 2022 core federal SPAC filings, one or more stock-price drops was alleged to have resulted from a short-seller report.

Figure 11: Federal SPAC Filing Allegations 2019–2022



Source: Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse; SPAC Insider

Note: This figure includes both core and M&A SPAC filings. As a result filing counts may not match Figures 4, 9–10, or 12. SPAC filings concern companies that went public for the express purpose of acquiring an existing company in the future. These include current and former SPACs. One filing in 2021 included both Section 10(b) and M&A allegations. This filing is characterized as Section 10(b) rather than M&A.

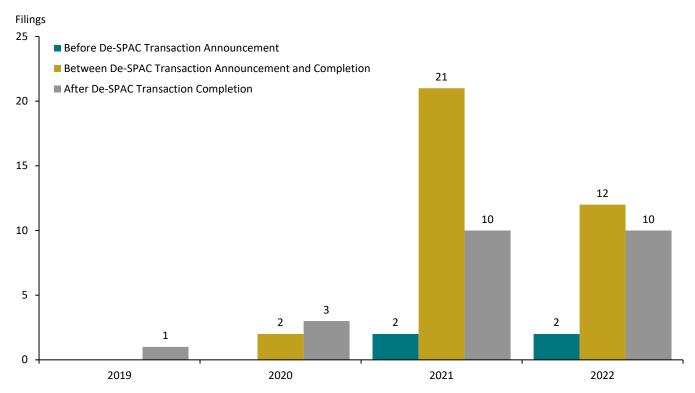
Core Federal SPAC Filing Class Period Start Dates

The figure below shows the relationship among all core federal SPAC filings between their alleged class period start dates and their respective De-SPAC Transaction announcement and completion dates.

Since 2019, 56% of all core federal SPAC filings alleged a class period start date between the De-SPAC Transaction announcement date and the completion of the transaction.

- The number of core federal SPAC filings fell from 33 in 2021 to 24 in 2022, including a 43% decline in filings with alleged class start dates between the De-SPAC Transaction announcement date and completion date. Similar to 2021, only a small number of filings have class periods that start before De-SPAC Transaction announcement dates.
- Half of core federal SPAC filings in 2022 alleged class start dates between the announcement date and the completion date of their respective De-SPAC Transactions.

Figure 12: Core Federal SPAC Filing Class Period Start Date Analysis 2019–2022



Source: Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse; SPAC Insider

Note: M&A SPAC filings are excluded from this figure. As a result, this figure's counts may not match Figure 11. SPAC filings concern companies that went public for the express purpose of acquiring an existing company in the future. These include current and former SPACs.

Market Capitalization Losses for Federal and State Filings

Disclosure Dollar Loss Index® (DDL Index®)

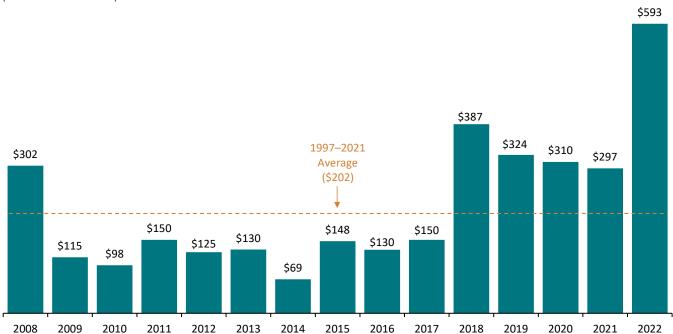
This index measures the aggregate annual DDL for all federal and state filings. DDL is the dollar-value change in the defendant firm's market capitalization between the trading day immediately preceding the end of the class period and the trading day immediately following the end of the class period. See the Glossary for additional discussion on market capitalization losses and DDL.

The DDL Index doubled from the previous year's level, reaching the highest level on record of \$593 billion.

- The DDL Index of \$593 billion doubled from the previous year, reaching the highest on record. The 2022 DDL Index was 45% higher than the previous high of \$409 billion in 2000 and 53% higher than the recent high of \$387 billion in 2018.
- The DDL Index increased despite the typical case getting smaller. As shown in Figure 14, the 2022 median DDL per filing decreased by 39% from the 2021 median. See Appendix 1 for DDL totals, averages, and medians from 1997 to 2022.
- The increase in the DDL Index is driven by mega filings.
 There were 18 mega DDL filings in state and federal courts in 2022, accounting for 86% of total DDL, or \$508 billion. See Figure 16 for a summary of core mega filing activity.

Figure 13: Disclosure Dollar Loss Index® (DDL Index®) 2008–2022

(Dollars in 2022 billions)



Note: This figure begins including DDL associated with state 1933 Act filings in 2010. As a result, this figure's DDL Index will not match those in Appendices 6–8, which summarize federal filings. DDL associated with parallel class actions is only counted once in this figure—at the time of the earliest filing. The numbers shown in this figure have been inflation-adjusted to 2022 dollars and will not match prior reports.

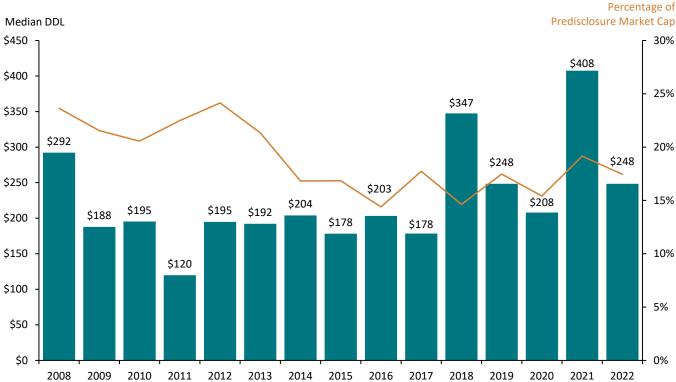
- As shown by the gold line in the figure below, since 2014, the typical (i.e., median) percentage stock price drop at the end of the class period has oscillated between about 15% and 20% of the predisclosure market capitalization. That measure was 17% in 2022, slightly lower than in 2019 and 2021, but higher than in 2020.
- Median DDL in 2022 fell from its recent record high in 2021 but is still tied for the fourth-highest median DDL in the past 15 years.

Median DDL in 2022 dropped by 39% from its 2021 measure but is still tied for the fourth-highest median DDL in the past 15 years.

Median DDL as a

Figure 14: Median Disclosure Dollar Loss 2008–2022

(Dollars in 2022 millions)



Note: This figure begins including DDL associated with state 1933 Act filings in 2010. As a result, this figure's DDL Index will not match those in Appendices 6–8, which summarize federal filings. DDL associated with parallel class actions is only counted once in this figure—at the time of the earliest filing. The numbers shown in this figure have been inflation-adjusted to 2022 dollars and will not match prior reports.

Maximum Dollar Loss Index® (MDL Index®)

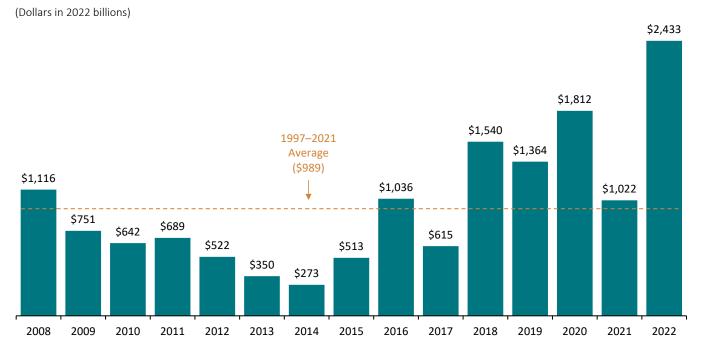
This index measures the aggregate annual MDL for all federal and state core filings. MDL is the dollar-value change in the defendant firm's market capitalization from the trading day with the highest market capitalization during the class period to the trading day immediately following the end of the class period. See the Glossary for additional discussion on market capitalization losses and MDL.

- The MDL Index more than doubled to \$2.433 trillion from \$1.022 trillion in 2021. See Appendix 1 for MDL totals, averages, and medians from 1997 to 2022.
- The MDL Index of \$2.433 trillion is the third time the MDL Index has surpassed \$2 trillion (after adjusting for inflation) and is the fifth consecutive year this metric has exceeded \$1 trillion. See Appendix 1.

- There were 38 mega MDL filings in 2022, the most since the tech crash in 2002 and twice as many as the 1997– 2021 average. See Figure 16.
- The 38 mega MDL filings accounted for \$2,146 billion, or 88% of total MDL.

The MDL Index more than doubled to \$2.4 trillion, the third-highest amount on record.

Figure 15: Maximum Dollar Loss Index® (MDL Index®) 2008–2022



Note: This figure begins including MDL associated with state 1933 Act filings in 2010. As a result, this figure's MDL Index will not match those in Appendices 6–8, which summarize federal filings. MDL associated with parallel class actions is only counted once in this figure—at the time of the earliest filing. The numbers shown in this figure have been inflation-adjusted to 2022 dollars and will not match prior reports.

Mega Core Filings

Mega DDL filings have a DDL of at least \$5 billion. Mega MDL filings have an MDL of at least \$10 billion. MDL and DDL are inflation-adjusted to 2022 dollars.

- The count of mega DDL filings in 2022 (18) was the highest on record. Total DDL from mega filings increased 182% to \$508 billion, also a record high.
- There were 38 mega MDL filings in 2022. Total MDL for mega filings increased 200% from \$716 billion to \$2,146 billion and was 184% above the historical average. The number and total index value of mega MDL filings are second only to 2002, following the tech crash.
- The 2022 percentages of total DDL and MDL represented by mega filings were significantly above their historical averages and were among the highest on record.
- Communications companies (Telecommunications, Internet, and Media) made up 33% of mega DDL filings (six) and 29% of mega MDL filings (11), and 70% and 49% of total index value, respectively.

- Just over half of the core filings in the Communications sector (19 federal and two state) in 2022 were mega filings (10 federal and one state).
- Mega DDL Communications filings were, on average, four times greater than Consumer Non-Cyclical mega DDL filings.
- In 2022, Consumer Non-Cyclical mega filings (Food, Pharmaceuticals, and Healthcare Products) tended to be smaller than mega filings in other sectors. These mega filings made up 39% of mega DDL filings (seven), but only 19% of total DDL.

The count and total index value of mega DDL and MDL filings were the highest, or among the highest, on record.

Figure 16: Mega Core Filings

	Average 1997–2021	2020	2021	2022
Mega Disclosure Dollar Loss (DDL) Filings				
Mega DDL Filings	8	14	13	18
DDL (\$ Billions)	\$123	\$202	\$180	\$508
Percentage of Total DDL	61%	65%	61%	86%
Mega Maximum Dollar Loss (MDL) Filings				
Mega MDL Filings	19	33	24	38
MDL (\$ Billions)	\$756	\$1,538	\$716	\$2,146
Percentage of Total MDL	76%	85%	70%	88%

Note: This figure begins including DDL and MDL associated with state 1933 Act filings in 2010. As a result, this figure's DDL and MDL Index will not match those in Appendices 6–8, which summarize federal filings. DDL associated with parallel class actions is only counted once in this figure—at the time of the earliest filing. Counts by industry discussed above this figure are also based on combined federal and state data and will not match counts in Figure 29. There are filings for which data are not available to estimate MDL and DDL accurately; these filings are excluded from MDL and DDL analysis and counts. Mega DDL filings have a disclosure dollar loss of at least \$5 billion. Mega MDL filings have a maximum dollar loss of at least \$10 billion. The numbers shown in this figure have been inflation-adjusted to 2022 dollars and will not match prior reports.

Classification of Federal Complaints

- For the first time in over a decade, more than a fifth of all core filings included Section 11 allegations.
- The share of Section 12(a) claims more than doubled from 6% of core federal filings in 2021 to 14% in 2022, driven by the record number of cryptocurrency-related filings with Section 12(a) claims.
- Core federal filings with allegations of internal control weaknesses increased from 9% in 2021 to 13% in 2022. Similarly, allegations related to announced restatements tripled to the highest level in the last five years.

Federal Section 11 and Section 12(a) claims in 2022 represented the highest share of core federal filings in over a decade.

- Of core federal filings in 2022, 83% contained a Rule 10b-5 claim (down from 91% in 2021).
- Core federal filings with allegations of trading by company insiders in 2022 (2%) decreased to the lowest level in the last five years.

Figure 17: Allegations Box Score—Core Federal Filings

		Percentage of Filings						
	2018	2019	2020	2021	2022			
Allegations in Core Federal Filing								
Rule 10b-5 Claims	86%	87%	85%	91%	83%			
Section 11 Claims	10%	16%	10%	14%	21%			
Section 12(a) Claims	10%	7%	11%	6%	14%			
Misrepresentations in Financial Documents	95%	98%	90%	90%	89%			
False Forward-Looking Statements	48%	47%	43%	43%	39%			
Trading by Company Insiders	5%	5%	4%	6%	2%			
Accounting Violations	23%	23%	27%	22%	24%			
Announced Restatements	5%	8%	5%	3%	9%			
Internal Control Weaknesses	18%	18%	18%	9%	13%			
Announced Internal Control Weaknesses	7%	10%	7%	4%	8%			
Underwriter Defendant	8%	11%	9%	10%	13%			
Auditor Defendant	0%	0%	0%	0%	1%			

Note: Core federal filings are all federal securities class actions excluding those defined as M&A filings. Allegations reflect those made in the first identified complaint (FIC). The percentages do not sum to 100% because complaints may include multiple allegations. In each of 2018, 2019, and 2020, there was one filing with allegations against an auditor defendant. This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts may not match Figures 1–3, 13–16, 18, 26, or Appendix 1. See Additional Notes to Figures for more detailed information.

U.S. Exchange-Listed Companies

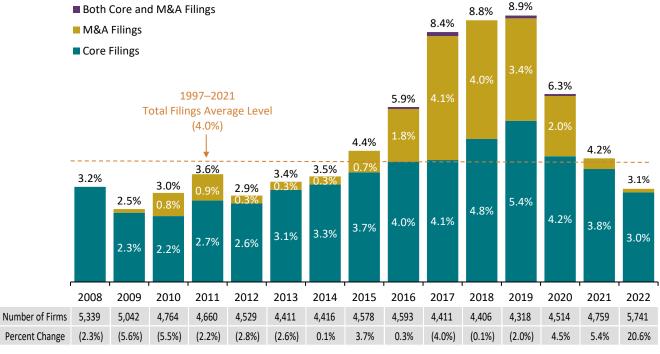
The percentage of companies subject to filings is calculated as the unique number of companies listed on the NYSE or Nasdaq subject to federal or state securities fraud class actions in a given year divided by the unique number of companies listed on the NYSE or Nasdaq at the start of the same year.

- The percentage of U.S. exchange-listed companies subject to filings decreased for the third straight year, falling to 3.1%, its lowest point since 2012 and below the 1997–2021 average of 4.0%. Similarly, the percentage of companies subject to core filings in 2022 decreased to its lowest point since 2012 (3.0%).
- As shown in Appendix 8, in 2022, federal filing volume against firms listed on the Nasdaq was down 23%, but total DDL for filings against Nasdaq firms increased by 152%. By contrast, federal filing volume against NYSE firms increased by 7%, but DDL increased by only 19%.

The likelihood of stock drop filings targeting U.S. exchange-listed companies is now lower than it was at the top of the credit crisis for the first time since 2014.

- The decrease in the percentage of U.S. exchange-listed companies subject to filings in 2022, relative to 2021, is partly driven by a 21% increase in the number of U.S. exchange-listed companies as of the start of 2022 relative to the start of 2021. Many of these new issuers are SPACs that have not yet announced a De-SPAC Transaction.
- The percentage of U.S. exchange-listed companies subject to M&A filings fell to 0.1%, indicating that federal M&A class action filings have all but stopped.

Figure 18: Percentage of U.S. Exchange-Listed Companies Subject to Federal or State Filings 2008–2022



Source: Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse; Center for Research in Security Prices (CRSP)

Note: This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. All federal filings are counted only once—at the time of the earliest filing. When parallel cases are filed in different years, only the earlier filing is reflected in the figure above. Filings against the same company brought in different states without a filing brought in federal court are counted as unique state filings. The figure begins including issuers facing suits in state 1933 Act filings in 2010. See Additional Notes to Figures for more detailed information.

Heat Maps: S&P 500 Securities Litigation[™] for Federal Core Filings

The Heat Maps analysis illustrates federal court securities class action activity by industry sector for companies in the S&P 500 index. Starting with the composition of the S&P 500 at the beginning of each year, the Heat Maps examine each sector by:

- (1) The percentage of these companies subject to new securities class actions in federal court during each calendar year.
- (2) The percentage of the total market capitalization of these companies subject to new securities class actions in federal court during each calendar year.
- Of the companies in the S&P 500 at the beginning of 2022, approximately one in 26 (3.8%) was subject to a core federal filing. This percentage—while higher than that in 2021—is below average. See Appendix 2A for the percentage of filings by sector from 2001 to 2022.

The likelihood of an S&P 500 company being sued increased for the first time since 2018 to 3.8%.

- The Consumer Staples and Energy/Materials sectors had no federal filings, which has not occurred for those sectors since 2014 and 2015, respectively.
- Percentages for federal core filings in all other sectors increased in 2022.
- Filings against Health Care S&P 500 companies in 2022 resumed the previous general trend of representing a large share of filings against S&P 500 companies, after a lack of filing activity in 2021.

Figure 19: Heat Maps of S&P 500 Securities Litigation™ Percentage of Companies Subject to Core Federal Filings

	Average	2012	2014	2015	2016	2017	2010	2010	2020	2024	2022
	2001–2021	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Consumer Discretionary	5.1%	8.4%	1.2%	0.0%	3.6%	8.5%	10.0%	3.1%	8.1%	0.0%	3.3%
Consumer Staples	3.8%	0.0%	0.0%	5.0%	2.6%	2.7%	11.8%	12.1%	3.1%	6.3%	0.0%
Energy/Materials	1.8%	0.0%	1.3%	0.0%	4.5%	3.3%	1.8%	3.7%	1.9%	5.7%	0.0%
Financials/Real Estate	7.1%	0.0%	1.2%	1.2%	6.9%	3.3%	7.0%	2.0%	5.3%	0.0%	2.1%
Health Care	8.4%	5.7%	0.0%	1.9%	17.9%	8.3%	16.1%	12.9%	6.3%	0.0%	7.8%
Industrials	3.9%	0.0%	4.7%	0.0%	6.1%	8.7%	8.8%	10.1%	2.7%	1.4%	4.2%
Communication Services/ Telecommunications/ Information Technology	6.2%	9.1%	0.0%	4.2%	6.8%	8.5%	12.7%	10.0%	2.0%	5.1%	6.0%
Utilities	5.1%	0.0%	0.0%	3.4%	3.4%	7.1%	7.1%	6.9%	7.1%	0.0%	3.6%
All S&P 500 Companies	5.3%	3.4%	1.2%	1.6%	6.6%	6.4%	9.4%	7.2%	4.4%	2.2%	3.8%
		0%	0–5%	5–15%	15_25%	25%+					

Note

^{1.} The figure is based on the composition of the S&P 500 as of the last trading day of the previous year. Sectors are based on the Global Industry Classification Standard (GICS), which differ from those in the Bloomberg Industry Classification System used in Figure 9 and Figure 29.

^{2.} Percentage of Companies Subject to Core Federal Filings equals the number of companies subject to new securities class action filings in federal courts in each sector divided by the total number of companies in that sector.

^{3.} In August 2016, GICS added a new industry sector, Real Estate. This analysis begins using the Real Estate industry sector in 2017. In 2018, the Telecommunication Services sector was incorporated into a new sector, Communication Services. With this name change, all companies previously classified as Telecommunication Services and some companies classified as Consumer Discretionary (such as Netflix, Comcast, and CBS) and Information Technology (such as Alphabet and Meta) were reclassified into the Communication Services sector.

^{4.} This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts may not match Figures 1–3, 13–16, 18, 26, or Appendix 1.

- The percentage of total market capitalization of S&P 500 companies subject to core federal filings rose from 5.1% in 2021 to 8.4% in 2022, slightly above the historical average. See Appendix 2B for market capitalization percentage by sector from 2001 to 2022.
- The percentage of market capitalization exposure for the Consumer Discretionary sector increased dramatically, from 0.0% in 2021 to 30.3% in 2022, almost entirely due to a single technology-related filing.
- The percentage of market capitalization exposure for the Health Care sector also increased from an abnormally low level of 0.0% in 2021 to 12.3% in 2022.

- The percentage of market capitalization exposure in the Industrials sector increased from 0.5% in 2021 to 6.1% in 2022.
- The percentage of market capitalization exposure in the Consumer Staples and Energy/Materials sectors dropped to 0.0% in 2022 from 17.7% and 12.0% in 2021, respectively.

No company in the three sectors with the highest percentage of market capitalization exposure in 2022— Consumer Discretionary, Health Care, and Utilities—was the subject of a filing in 2021.

Figure 20: Heat Maps of S&P 500 Securities Litigation™ Percentage of Market Capitalization Subject to Core Federal Filings

	Average 2001–2021	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Consumer Discretionary	4.0%	4.4%	2.5%	0.0%	2.8%	8.2%	4.7%	0.5%	2.2%	0.0%	30.3%
Consumer Staples	5.2%	0.0%	0.0%	1.9%	1.0%	6.7%	15.2%	9.1%	1.8%	17.7%	0.0%
Energy/Materials	3.1%	0.0%	0.2%	0.0%	19.8%	2.3%	1.4%	1.2%	0.4%	12.0%	0.0%
Financials/Real Estate	13.4%	0.0%	0.3%	3.0%	11.9%	1.5%	12.5%	2.2%	16.9%	0.0%	4.7%
Health Care	10.4%	4.4%	0.0%	3.1%	13.2%	2.7%	26.3%	6.6%	4.7%	0.0%	12.3%
Industrials	8.2%	0.0%	1.7%	0.0%	8.7%	22.3%	19.4%	21.6%	4.9%	0.5%	6.1%
Communication Services/ Telecommunications/ Information Technology	8.7%	16.6%	0.0%	7.0%	12.3%	4.4%	19.4%	18.0%	1.6%	8.2%	4.0%
Utilities	5.6%	0.0%	0.0%	3.7%	4.4%	9.6%	6.5%	7.9%	6.6%	0.0%	7.2%
All S&P 500 Companies	8.1%	4.7%	0.6%	2.8%	10.0%	6.1%	14.9%	10.0%	4.3%	5.1%	8.4%
		0%	0_5%	5_15%	15_25%	25%⊥					

Note

- 1. The figure is based on the composition of the S&P 500 as of the last trading day of the previous year. Sectors are based on the Global Industry Classification Standard (GICS), which differ from those in the Bloomberg Industry Classification System used in Figure 9 and Figure 29.
- 3. Percentage of Market Capitalization Subject to Core Federal Filings equals the market capitalization of companies subject to new securities class action filings in federal courts in each sector divided by the total market capitalization of companies in that sector.
- 4. In August 2016, GICS added a new industry sector, Real Estate. This analysis begins using the Real Estate industry sector in 2017. In 2018, the Telecommunication Services sector was incorporated into a new sector, Communication Services. With this name change, all companies previously classified as Telecommunication Services and some companies classified as Consumer Discretionary (such as Netflix, Comcast, and CBS) and Information Technology (such as Alphabet and Meta) were reclassified into the Communication Services sector.
- 5. This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts may not match Figures 1–3, 13–16, 18, 26, or Appendix 1.

Status of Core Federal Securities Class Action Filings

This analysis compares filing groups to determine whether filing outcomes have changed over time. As each cohort ages, a larger percentage of filings are resolved—whether through dismissal, settlement, remand, or by trial. In the first few years after filing, a larger proportion of core federal cases are dismissed rather than settled, but in later years more are resolved through settlement than dismissal.

So far, the 2021 cohort has experienced an above-average resolution rate.

0%

2013

- From 1997 to 2022, 46% of core federal filings were settled, 43% were dismissed, 0.5% were remanded, and 10% are continuing. During this time, only 0.4% of core federal filings (or 19 cases) reached trial.
- Of all ongoing core filings since 1997, 81% were filed between 2020 and 2022; 19% were filed between 2013 and 2019; and less than 1% (two cases) were filed between 1997 and 2012.
- As shown in Appendix 3, contrary to trends in core federal filings, M&A filings were largely resolved through dismissal from 2012 to 2021, with 93% of filings dismissed and 6% settled.

2020

2021

7%

2022

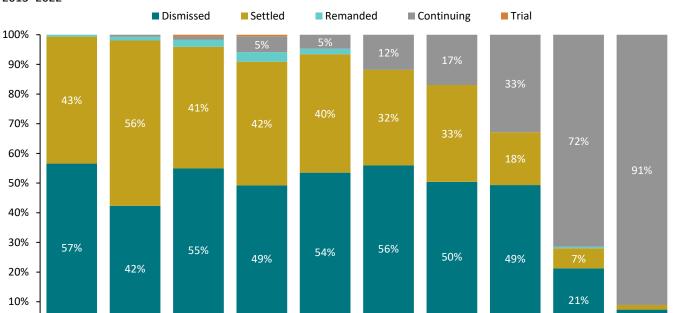


Figure 21: Status of Filings by Year—Core Federal Filings 2013–2022

2014

2015

2016

Note: Percentages may not sum to 100% due to rounding. This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from Figures 1–3, 13–16, 18, 26, and Appendix 1, which account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis.

2017

2018

2019

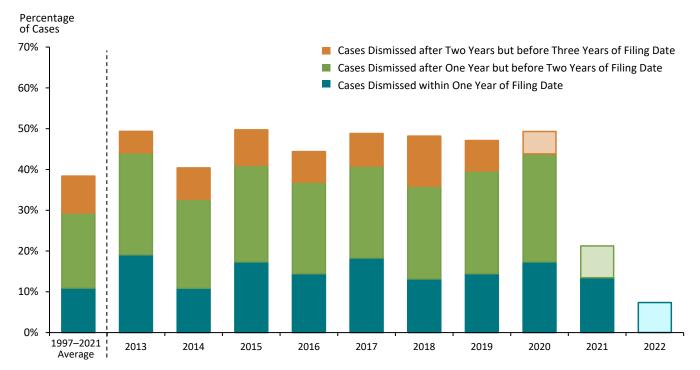
Timing of Dismissals of Federal Filings

This analysis looks at dismissal trends within the first several years of the filing of a federal class action to gain insight on dismissal rates across cohorts.

The percentage of core federal cases dismissed within the first three years for the 2020 cohort is on track to be among the highest on record.

- Among 2020 cohort filings, 49% of have been dismissed within three years of filing, the third-highest rate on record even with incomplete data.
- For 2020 cohort filings, three full years of observational history are not yet complete. Dismissal rates will therefore increase for the 2020 cohort and later years as more core federal filings are resolved. See Appendix 4 for case status by year from 1997 to 2022.
- Dismissal rates were roughly similar year over year from 2017 to 2019.
- Early indications of the first-year dismissal rate for the 2022 cohort (represented in light blue below) are inconclusive and do not reveal any obvious trends.

Figure 22: Percentage of Cases Dismissed within Three Years of Filing Date—Core Federal Filings 2013–2022



Note: Percentage of cases in each category is calculated as the number of cases that were dismissed within one, two, or three years of the filing date divided by the total number of cases filed each year. The outlined portions of the stacked bars for years 2020 through 2022 indicate the percentage of cases dismissed through the end of 2022. The light-colored outlined portions of these stacked bars therefore present only partial-year observed resolution activity, whereas their counterparts in earlier years show an entire year. This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from Figures 1–3, 13–16, 18, 26, and Appendix 1, which account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis.

1933 Act Cases Filed in State Courts

The following data include 1933 Act filings in California, New York, and other state courts. Filings from prior years are added retrospectively when identified. These filings may include Section 11, Section 12, and Section 15 claims, but do not include Rule 10b-5 claims.

- There were 12 state 1933 Act filings in 2022, the same amount as in 2021.
- Of these filings, five were in California, five were in New York, and two were in other state courts.

State 1933 Act filing activity was unchanged from 2021, remaining at nearly a quarter of the 2019 high.

- The number of 1933 Act filings in California increased from the prior year despite the *Sciabacucchi* decision in 2020, which enforced forum selection clauses that require 1933 Act claims to be brought in federal courts. New York state courts had the fewest 1933 Act filings since 2017 and half as many as 2021.
- State 1933 Act filings in states other than New York and California increased from one to two, but were still substantially lower than the high of 18 in 2019.
- The period between the Cyan and Sciabacucchi decisions (March 2018-March 2019) changed the availability of state courts as a forum for 1933 Act claims. In Cyan, the U.S. Supreme Court confirmed that state and federal courts have concurrent jurisdiction over 1933 Act claims. In Sciabacucchi, the Delaware Supreme Court upheld forum-selection provisions in corporate charters mandating that 1933 Act claims only be brought in federal court. Since then many state courts have followed Sciabacucchi.

52 California ■ New York ■ All Others 35 27 23 17 13 12 12 13 13 6 10 1 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

Figure 23: State 1933 Act Filings by State 2013-2022

Source: Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse; Bloomberg Law; ISS' SCAS

Note: This analysis counts all filings in state courts. It does not present data on a combined federal and state basis, nor does it identify or account for cases that have parallel filings in both state and federal courts. As a result, totals in this analysis may not match Figures 2, 3, or 26-27. See Additional Notes to Figures for more detailed information.

Dollar Loss on Offered Shares™ (DLOS Index™) in Federal Section 11–Only and State 1933 Act Filings

This analysis calculates the loss of market value of class members' shares offered in securities issuances that are subject to 1933 Act claims. It is calculated as the shares offered at issuance (e.g., in an IPO, a seasoned equity offering (SEO), or a corporate merger or spinoff) acquired by class members multiplied by the difference between the offering price of the shares and their price on the filing date of the first identified complaint.

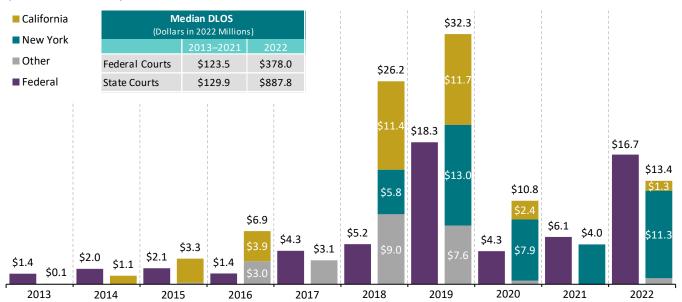
This alternative measure of losses has been calculated for federal filings involving only Section 11 claims (i.e., no Section 10(b) claims) and 1933 Act filings in state courts. This measure, Dollar Loss on Offered Shares (DLOS), aims to capture, more precisely than MDL, the dollar loss associated with the specific shares at issue as alleged in a complaint.

- From 2021 to 2022, total DLOS for state 1933 Act filings tripled and total DLOS for federal filings more than doubled.
- The 2022 federal median DLOS was three times its 2013–2021 median, and 2022 state median DLOS was nearly seven times its 2013–2021 median.
- Total DLOS attributable to 1933 Act filings remained well below 2019 levels, partially due to DLOS declines and fewer filings in California and other states.

In 2022, the median Dollar Loss on Offered Shares for filings in state courts was more than twice as large as the median in federal courts.

Figure 24: Dollar Loss on Offered Shares™ (DLOS Index™) for Federal Section 11–Only and State 1933 Act Filings 2013–2022

(Dollars in 2022 billions)



Source: Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse; Bloomberg Law; ISS' SCAS; CRSP; SEC EDGAR

Note: This analysis compares all Section 11 filings in federal courts with all 1933 Act filings in state courts. It does not present data on a combined federal and state basis, nor does it identify or account for cases that have parallel filings in both state and federal courts. The numbers shown in this figure have been inflation-adjusted to 2022 dollars and will not match prior reports. See Additional Notes to Figures for more detailed information.

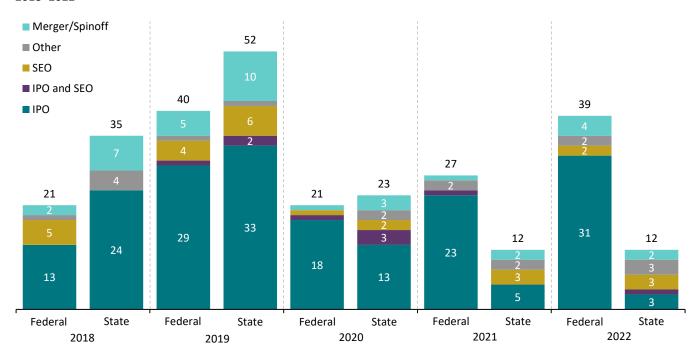
Type of Security Issuance Underlying Federal Section 11 and State 1933 Act Filings

The figure below illustrates Section 11 claims in federal courts and 1933 Act claims in state courts based on the type of security issuance underlying the lawsuit.

State court filings related to IPOs continued to fall in 2022, down 91% from 2019.

- IPOs accounted for 79% of Section 11 filings in federal courts, while 1933 Act filings in state courts were more evenly dispersed across all issuance types.
- Following declines in 2020 and 2021, federal Section 11 filings have reverted to nearly the same levels as in 2019.
- Federal Section 11 filings related to mergers or spinoffs increased to four in 2022, up from one in both 2020 and 2021.

Figure 25: Federal Section 11 and State 1933 Act Class Action Filings by Type of Security Issuance 2018–2022



Source: Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse; Bloomberg Law; ISS' SCAS

Note: This analysis compares all Section 11 filings in federal courts with all 1933 Act filings in state courts. It does not present data on a combined federal and state basis, nor does it identify or account for cases that have parallel filings in both state and federal courts. As a result, this figure's filing counts may not match Figures 1–3, 13–16, 18, 26, or Appendix 1. See Additional Notes to Figures for more detailed information.

IPO Activity and Federal Section 11 and State 1933 Act Filings

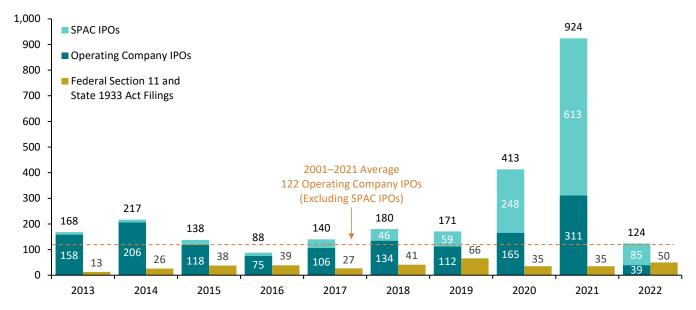
This figure compares IPO activity (operating company IPOs and SPAC IPOs) with counts of federal Section 11 and state 1933 Act filings.

 Although historically SPACs have represented only a small portion of IPOs, in the past three years, SPACs have become an increasingly large share of IPO activity. In 2022, however, the number of SPAC IPOs declined sharply, dropping 86% relative to 2021.

Although the number of IPOs fell sharply in 2022, 1933 Act filings rose 43%, possibly due to the surge of IPOs in 2021 and subsequent stock price declines.

- Operating company IPOs also dropped sharply in 2022, falling 87% relative to 2021. The 39 operating company IPOs in 2022 represent less than a third of the average annual number of operating company IPOs from 2001 to 2021.
- SPAC IPOs were more than twice as common as operating company IPOs in 2022. Despite overall declines, this ratio is similar to the ratio of SPAC IPOs to operating company IPOs in 2021 and 2020.
- Generally, heavier IPO activity appears to be correlated with increased levels of federal Section 11 and state 1933 Act filings in the ensuing year. This may at least partially explain the increase in the number of federal Section 11 and state 1933 Act filings from 35 in 2021 to 50 in 2022.

Figure 26: Number of IPOs on Major U.S. Exchanges and Number of Filings of Federal Section 11 and State 1933 Act Claims 2013–2022



Source: Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse; Jay R. Ritter, "Special Purpose Acquisition Company (SPAC) IPOs, 1990–2022," University of Florida, December 31, 2022

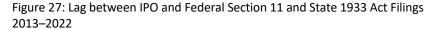
Note: Operating company IPOs exclude the following offerings: those with an offer price of below \$5.00, ADRs, unit offers, closed-end funds, REITs, natural resource limited partnerships, small best-efforts offers, banks and S&Ls, and stocks not included in the CRSP database (CRSP includes Amex, NYSE, and Nasdaq stocks). SPAC IPOs include unit and non-unit SPAC IPOs, as defined by Professor Ritter. This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. All federal filings are counted only once—at the time of the earliest filing. When parallel cases are filed in different years, only the earlier filing is reflected in the figure above. Filings against the same company brought in different states without a filing brought in federal court are counted as unique state filings. As a result, this figure's filing counts may not match those in Figures 4–12, 17, 19–25, 28–34, or Appendices 2–9. The federal Section 11 cases displayed may include Rule 10b-5 claims, but state 1933 Act filings do not.

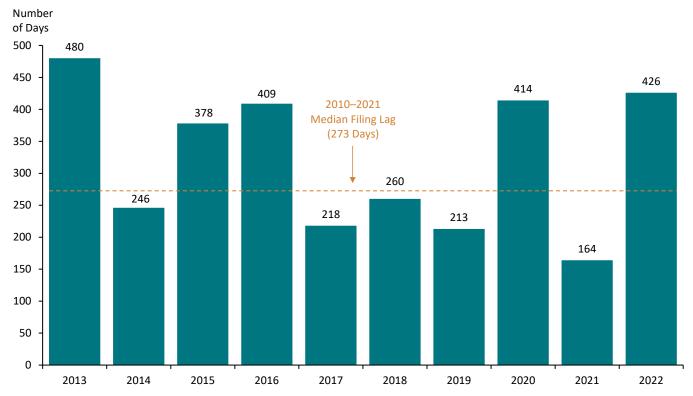
Lag between IPO and Federal Section 11 and State 1933 Act Filings

This analysis reviews the number of days between the IPO of a company and the filing date of a federal Section 11 or state 1933 Act securities class action.

- The IPO filing lag has varied substantially since 2010, but is fairly centered around the median filing lag of 273 days.
- The IPO filing lag rose to 426 days in 2022 from 164 days in 2021, a 160% increase.
- The 2022 IPO filing lag was at its highest level since 2013, coming in just above the lag observed in 2020.

Between 2010 and 2021, the median filing lag for an IPO subject to a federal Section 11 or state 1933 Act claim was roughly nine months.





Note: These data only consider IPOs with a subsequent federal Section 11 or state 1933 Act class action complaint. Only complaints that exclusively were in reference to an IPO were considered. Federal filings that also include Rule 10b-5 allegations are not considered. Years in the figure refer to the year in which the complaint was filed. This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. All federal filings are counted only once—at the time of the earliest filing. When parallel cases are filed in different years, only the earlier filing is reflected in the figure above. Filings against the same company brought in different states without a filing brought in federal court are counted as unique state filings.

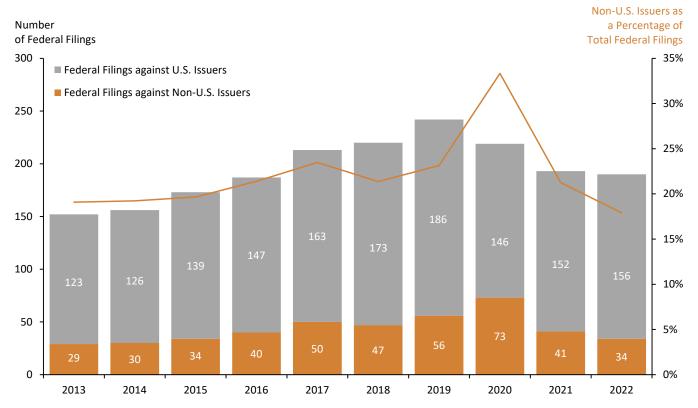
Non-U.S. Core Federal Filings

This index tracks the number of core federal filings against companies headquartered outside the United States relative to total core federal filings.

- The number of filings against non-U.S. issuers as a
 percentage of total filings has continued to decline
 since its record high in 2020. Although the number of
 non-U.S. core filings is less than half of 2020, it is
 consistent with the 2013–2019 average of 41.
- As a percentage of total core federal filings, the number of core federal filings against non-U.S. issuers has further declined to 18% after dropping from 33% to 21% between 2020 and 2021. This represents a reversion back to 2013–2019 levels, when the average was 21%.

The number of core federal filings against non-U.S. issuers as a percentage of total core federal filings has continued to decline since its record high in 2020.

Figure 28: Annual Number of Class Action Filings by Location of Headquarters—Core Federal Filings 2013–2022



Note: This analysis only considers federal filings. It does not present M&A cases or combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts may not match Figures 1–3, 13–16, 18, 26, or Appendix 1.

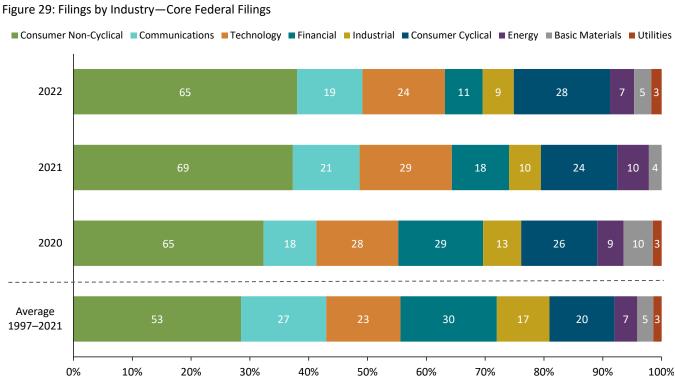
Industry Comparison of Federal Filings

This analysis of core federal filings encompasses both smaller companies and large capitalization companies, such as those included in the S&P 500.

- The number of filings in the Consumer Non-Cyclical, Communications, Energy, Financial, Industrial, and Technology sectors all dropped. However, due to large DDL filings in the Communications sector, total DDL increased relative to 2021. DDL in the Communications sector alone in 2022 surpassed the total DDL from all sectors in 2021. See Appendix 6.
- On average, from 1997 to 2021, Communications filings made up 14% of total filings, 18% of total DDL, and 23% of total MDL. In 2022, Communications filings made up only 10% of core federal filings but accounted for a much higher percentage of total DDL and total MDL at 63% and 45%, respectively.

- There were 11 Financial sector filings in 2022, a decrease of 39% from 2021 and significantly below the 1997-2021 average of 30.
- Industrial sector filings fell for the third consecutive year to nine, as compared to the average of 17 filings per annum from 1997 to 2021.
- MDL from Consumer Non-Cyclical filings in 2022 was the largest on record, and the sector's DDL was the second largest on record, behind only 2000.

Communications filings made up 63% of total federal DDL and 45% of total federal MDL in 2022.



Note: Filings with missing sector information or infrequently used sectors may be excluded. As a result, numbers in this chart may not match other total counts listed in this report. This analysis only considers federal filings. It does not present M&A cases or combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts may not match Figures 1-3, 13-16, 18, 26, or Appendix 1. Similarly, MDL and DDL figures discussed on this page will not match Figures 1-3, 13-16, or Appendix 1. Sectors are based on the Bloomberg Industry Classification System.

Federal Filings by Circuit

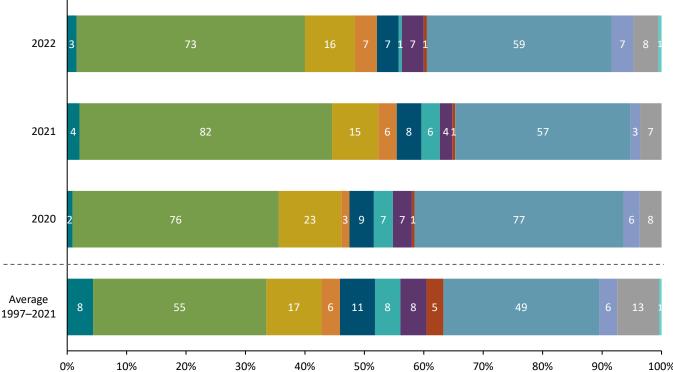
- The Second and Ninth Circuits made up 69% of all core federal filings in 2022, a decrease of three percentage points from 2021. This value was still significantly higher than the 1997–2021 average of 55%.
- Core federal filings in the Sixth Circuit fell to one from six in 2021, well below the 1997–2021 historical average of eight.

Figure 30: Filings by Circuit—Core Federal Filings

Total MDL in the Ninth Circuit rose to \$1,415 billion, more than five times the 1997–2021 historical average. Communications sector filings accounted for 70% of total MDL in this circuit.

The Second and Ninth Circuits made up 69% of all core federal filings in 2022, while the Ninth Circuit accounted for 60% of total core federal MDL.





Note: This analysis only considers federal filings. It does not present M&A cases or combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts may not match Figures 1–3, 13–16, 18, 26, or Appendix 1. Similarly, MDL and DDL figures discussed on this page will not match Figures 1–3, 13–16, or Appendix 1.

NEW: Core Federal Filings by Plaintiff Law Firm

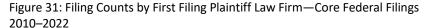
This analysis compares two groups of plaintiff law firms:

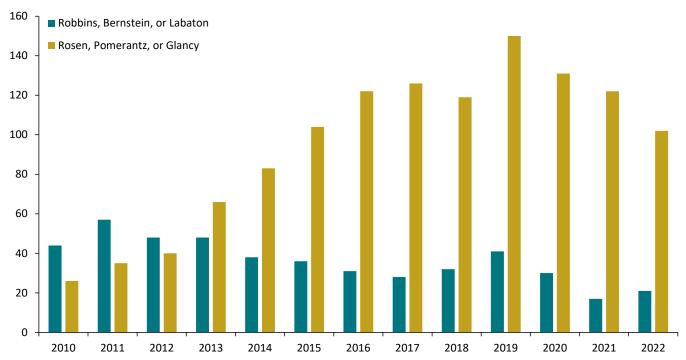
- (1) Robbins Geller Rudman & Dowd LLP, Bernstein Litowitz Berger & Grossmann LLP, and Labaton Sucharow LLP ("Robbins, Bernstein, and Labaton")
- (2) The Rosen Law Firm, P.A., Pomerantz LLP, and Glancy Prongay & Murray LLP ("Rosen, Pomerantz, and Glancy")

The analysis below compares how frequently these two groups have been listed as plaintiff counsel of record on first identified complaints.

 The increase in total core filings from 2014 to 2019 (158 to 267) appears to have been driven at least in part by a surge in core federal first identified complaints filed by Rosen, Pomerantz, and Glancy, which rose from 83 filings in 2014 to 150 filings in 2019. The increase in core federal filings from 2014 to 2019 was driven in part by a surge in first identified complaints filed by Rosen, Pomerantz, and Glancy.

- Over the same period, first identified complaints filed by Robbins, Bernstein, and Labaton decreased slightly but then reverted to their 2014 total.
- The decline in filing activity since 2019 appears to have been driven by fewer first identified complaint filings by Rosen, Pomeranz, and Glancy, but such filings by Robbins, Bernstein, and Labaton declined overall as well.





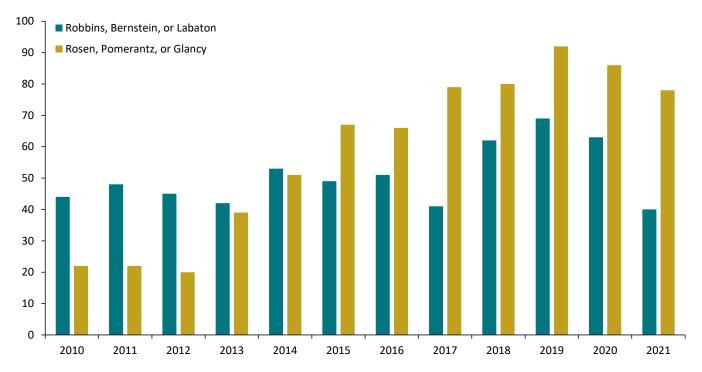
Note: This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts may not match Figures 1–3, 13–16, 18, 26, or Appendix 1.

The analysis below compares how frequently the two groups of plaintiff law firms discussed in Figure 31 have been appointed lead plaintiff counsel. Some filings are dismissed or settled before lead plaintiff counsel is appointed by the court. These filings are not considered in the lead plaintiff counsel counts or shares of filings discussed below. From 2010 to 2021, 10% of all filings have not had lead plaintiff counsel assigned.

 Since 2015, Rosen, Pomerantz, and Glancy have outpaced Robbins, Bernstein, and Labaton in both first identified core federal filings and in the count of filings for which they were appointed lead counsel. From 2012 to 2021, Rosen, Pomerantz, and Glancy were responsible for 56% of first identified core federal filings, but have been lead plaintiff counsel in only 35% of core federal filings.

 Conversely, from 2012 to 2021, Robbins, Bernstein, and Labaton were responsible for only 18% of first identified core federal filings, but were appointed lead plaintiff counsel in 27% of core federal filings.

Figure 32: Filing Counts by Lead Plaintiff Counsel—Core Federal Filings 2010–2021



Note: This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts may not match Figures 1–3, 13–16, 18, 26, or Appendix 1.

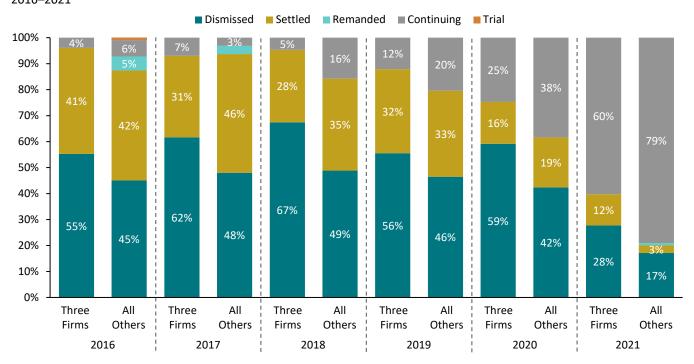
Federal Case Status by Plaintiff Counsel

Three law firms—Rosen, Pomerantz, and Glancy—have been responsible for 60% of first identified core securities class action complaints in federal courts from 2016 to 2021. The figure below examines case outcomes for core federal filings for which these three firms were listed as counsel of record. These case outcomes are compared with filings for which other plaintiff law firms are the counsel of record.

Complaints filed by these three plaintiff law firms have been dismissed more frequently than other law firms for all years analyzed.

- From 2016 through 2021, these three firms have had 55% of their core federal operative complaint class actions dismissed, compared to 42% for all other plaintiff firms. A larger set of filings and more careful consideration of other factors such as circuit, court, industry, type of allegation, and other factors would be necessary to determine if differences between these two groups are statistically significant.
- Prior analysis of these three firms by Michael Klausner, Professor of Law at Stanford Law School, and Jason Hegland, Executive Director of Stanford Securities Litigation Analytics, indicated these firms had higher dismissal rates between 2006 and 2015 as well. See "Guest Post: Deeper Trends in Securities Class Actions 2006–2015," The D&O Diary, June 23, 2016.

Figure 33: Case Status by Plaintiff Law Firm of Record—Core Federal Filings 2016–2021



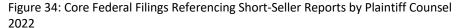
Note: The analysis relies on the counsel of record. Of core federal filings in 2021, 3% do not have counsel of record assigned yet; these filings are excluded from this analysis. Percentages may not sum to 100% due to rounding. This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from Figures 1–3, 13–16,18, 26, and Appendix 1, which account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis.

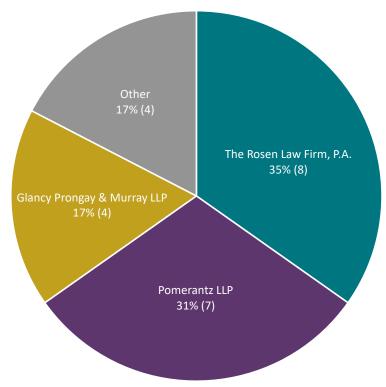
Filings Referencing Short-Seller Reports by Plaintiff Counsel

This analysis examines which plaintiff law firms reference reports by short sellers most frequently.

- In 2022, 23 core federal first identified complaints, or about 12%, referenced reports published by short sellers, a decline of 42% relative to 2021.
- Of these 23 core federal filings, 19 (about 83%)
 were made by three plaintiff law firms—Rosen,
 Pomerantz, and Glancy. These firms' share of core
 federal filings referencing short-seller reports
 greatly exceeded their share of all core federal
 filings (54%) in 2022.
- Of the four filings referencing short sellers made by other law firms, Kessler Topaz Meltzer & Check filed two.

In 2022, three plaintiff law firms—Rosen, Pomerantz, and Glancy—filed 83% of the core federal filings that referenced reports published by short sellers.





Source: Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse

Note: Only short-seller reports mentioned in the first identified complaint are included in this analysis. Filings that contained at least one of the three plaintiff law firms were included in the relevant category; otherwise, they were included in "Other." Five of the filings made by Rosen, Pomerantz, and Glancy also included an additional law firm. This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts may not match Figures 1–3, 13–16, 18, 26, or Appendix 1.

New Developments

Slack Technologies Inc. v. Pirani

On December 13, 2022, the U.S. Supreme Court in *Slack Technologies Inc. v. Pirani* agreed to hear Slack's appeal of a Ninth Circuit Court of Appeals *en banc* decision to uphold the denial of Slack's motion to dismiss plaintiff's Section 11 claims arising out of a direct listing.¹

In a direct offering, both registered and unregistered shares enter the market and become commingled, preventing investors from being able to establish whether they purchased registered or unregistered shares and thus trace their purchase to the at-issue registration statement. The Ninth Circuit had rejected Slack's argument that plaintiff lacked standing to sue because he could not show that he had purchased registered rather than unregistered shares.

Goldman Sachs Group v. Arkansas Teacher Retirement System

As reported in Cornerstone Research's Securities Class Action Filings—2022 Midyear Assessment, in May 2022, Goldman Sachs Group petitioned the Second Circuit Court of Appeals to reverse the district court's decision to grant class certification, arguing that the district court had incorrectly applied the U.S. Supreme Court's instruction to consider the degree of mismatch between purported misstatements that are generic and specific alleged corrective disclosures. The Second Circuit heard oral argument in September 2022. A decision is expected early this year.

Increased Legal and Regulatory Scrutiny of Cryptocurrency

Cryptocurrency has come under increasing legal and regulatory scrutiny over the past year. In the first two months of 2022, cryptocurrency prices were at all-time highs as cryptocurrency companies spent millions of dollars on marketing campaigns.² By the end of the year, a number of cryptocurrencies and cryptocurrency companies, including FTX and BlockFi, had collapsed. As reported in Cornerstone Research's SEC Cryptocurrency Enforcement: 2022 Update, the SEC brought 30 enforcement actions against cryptocurrency-related entities. The number of cryptocurrency-related securities class action filings reached 23, seven of which were filed in December. (continued in next column)

Further, of the 30 SEC cryptocurrency-related enforcement actions in 2022, four had a parallel securities class action filing. Given these events, the number of cryptocurrency-related securities class action filings will likely continue at elevated rates over the next year.

Second Circuit: Standing Limited in Section 10(b) Disclosure Claims

In Menora Mivtachim Insurance Ltd. et al. v. Frutarom Industries Ltd., the Second Circuit Court of Appeals held that purchasers of a security of an acquiring company do not have standing under Section 10(b) to sue the target company for alleged misstatements the target made about itself prior to the merger of the two companies.³

Because the target company made the alleged misstatements about itself prior to the merger, investors who, after the announcement of the planned merger, had purchased shares of the acquiror (but not shares of the target company) did not have standing to bring disclosure claims under Section 10(b) against the target. The court rejected the plaintiffs' argument that it had standing given the "significant" and "direct" relationship between the acquiror and the target (including the acquiror's incorporation of the misstatements into its press releases and registration statement relating to the merger, as well as the direct impact of the misstatements on the acquiror's stock price).

^{1.} Slack Technologies Inc. v. Pirani, No. 22-200 (S. Ct. Dec. 13, 2022).

^{2.} See, e.g., "2022 Was the Year Crypto Came Crashing Down to Earth," NPR, December 29, 2022.

^{3.} Menora Mivtachim Insurance Ltd. et al. v. Frutarom Industries Ltd., No. 21-1076 (2d Cir. Sept. 30, 2022).

Glossary

Annual Number of Class Action Filings by Location of Headquarters (formerly known as the Class Action Filings Non-U.S. Index) tracks the number of core federal filings against non-U.S. issuers (companies headquartered outside the United States) relative to total core federal filings.

Class Action Filings Index® (CAF Index®) tracks the number of federal securities class action filings.

Core filings are all state 1933 Act class actions and all federal securities class actions, excluding those defined as M&A filings.

Cyan refers to *Cyan Inc. v. Beaver County Employees*Retirement Fund. In this March 2018 opinion, the U.S.
Supreme Court ruled that 1933 Act claims may be brought to state venues and are not removable to federal court.

De-SPAC Transaction refers to the transaction by which a SPAC acquires and merges with a previously private company, which assumes the SPAC's exchange listing.

Disclosure Dollar Loss Index® (DDL Index®) measures the aggregate DDL for all federal and state filings over a period of time. DDL is the dollar-value change in the defendant firm's market capitalization between the trading day immediately preceding the end of the class period and the trading day immediately following the end of the class period. DDL should not be considered an indicator of liability or measure of potential damages. Instead, it estimates the impact of all information revealed at the end of the class period, including information unrelated to the litigation. Reported DDL is inflation-adjusted to 2022 dollars (from the year of the end of the alleged class period for Rule 10b-5 cases and the filing year for all other cases) using the Consumer Price Index for All Urban Consumers (CPI-U).

Dollar Loss on Offered Shares Index™ (DLOS Index™)

measures the aggregate DLOS for federal filings with only Section 11 claims and for state 1933 Act filings. DLOS is the change in the dollar-value of shares acquired by members of the putative class. It is the difference in the price of offered shares (i.e., from the date the registration statement becomes effective through the filing date of the first identified complaint multiplied by the shares offered). DLOS should not be considered an indicator of liability or measure of potential damages. (continued in next column)

Instead, it estimates the impact of all information revealed between the date of the registration statement and the complaint filing date, including information unrelated to the litigation. Reported DLOS is inflation-adjusted to 2022 dollars from the filing year using the Consumer Price Index for All Urban Consumers (CPI-U).

Filing lag is the number of days between the end of a class period and the filing date of the securities class action.

First identified complaint is the first complaint filed of one or more securities class action complaints with the same underlying allegations against the same defendant or set of defendants. When there is no federal complaint and multiple state complaints are filed, they are treated as separate filings.

Market capitalization losses measure changes to market values of the companies subject to class action filings. This report tracks market capitalization losses for defendant firms during and at the end of class periods. They are calculated for publicly traded common equity securities, closed-ended mutual funds, and exchange-traded funds where data are available. Declines in market capitalization may be driven by market, industry, and/or firm-specific factors. To the extent that the observed losses reflect factors unrelated to the allegations in class action complaints, indices based on class period losses would not be representative of potential defendant exposure in class actions. This is especially relevant in the post-Dura securities litigation environment. In April 2005, the U.S. Supreme Court ruled that plaintiffs in a securities class action are required to establish a causal connection between alleged wrongdoing and subsequent shareholder losses. This report tracks market capitalization losses at the end of each class period using DDL, and market capitalization losses during each class period using MDL.

Maximum Dollar Loss Index® (MDL Index®) measures the aggregate MDL for all federal and state filings over a period of time. MDL is the dollar-value change in the defendant firm's market capitalization from the trading day with the highest market capitalization during the class period to the trading day immediately following the end of the class period. MDL should not be considered an indicator of liability or measure of potential damages. Instead, it estimates the impact of all information revealed during or at the end of the class period, including information unrelated to the litigation. (continued on next page)

Maximum Dollar Loss Index® (MDL Index®), continued

Reported MDL is inflation-adjusted to 2022 dollars (from the year of the end of the alleged class period for Rule 10b-5 cases and the filing year for all other cases) using the Consumer Price Index for All Urban Consumers (CPI-U).

Merger and acquisition (M&A) filings are securities class actions filed in federal courts that have Section 14 claims, but no Rule 10b-5, Section 11, or Section 12(a) claims, and involve merger and acquisition transactions.

Sciabacucchi refers to *Salzberg v. Sciabacucchi*. On March 18, 2020, the Delaware Supreme Court held that forum-selection provisions in corporate charters requiring that some class action securities claims under the 1933 Act be adjudicated in federal courts are enforceable.

Securities Class Action Clearinghouse is an authoritative source of data and analysis on the financial and economic characteristics of federal securities fraud class action litigation, cosponsored by Cornerstone Research and Stanford Law School.

State 1933 Act filing is a class action filed in a state court that asserts claims under Section 11 and/or Section 12 of the Securities Act of 1933. These filings may also have Section 15 claims, but do not have Rule 10b-5 claims.

Additional Notes to Figures

Figure 3: Federal Filings and State 1933 Act Filings by Venue

- 1. The federal Section 11 data displayed may contain Rule 10b-5 claims, but state 1933 Act filings do not.
- 2.Beginning in 2018, California state filings may contain either Section 11 or Section 12 claims. Of the 16 filings in California in 2018, six filings contained Section 12 claims without also containing Section 11 claims. Since 2018, there have been two such filings.

Figure 4: Summary of Trend Cases—Core Federal Filings

Definitions:

Cybersecurity filings are those in which allegations relate to data breaches or security vulnerabilities.

Cryptocurrency-related filings include blockchain or cryptocurrency companies that engaged in the sale or exchange of tokens (commonly initial coin offerings) or non-fungible tokens (NFTs), cryptocurrency mining, cryptocurrency derivatives, or that designed blockchain-focused software.

Cannabis filings include companies financing, farming, distributing, or selling cannabis and cannabidiol products.

COVID-19-related filings include allegations related to companies negatively impacted by the pandemic or looking to address demand for products as a result of the pandemic.

SPAC filings concern companies that went public for the express purpose of acquiring an existing company in the future. These include current and former SPACs.

1. In 2022, two filings against SPACs also had cryptocurrency-related allegations. One filing against a SPAC also had COVID-19-related allegations. In 2021, one filing had both cryptocurrency-related allegations and cybersecurity allegations. One filing against a cannabis company also had COVID-19-related allegations. In 2020, one filing against a SPAC also had cryptocurrency-related allegations. In 2018, one filing had cryptocurrency-related allegations and involved a company in the cannabis industry.

Figure 8: Summary of Cryptocurrency-Related Filings— Core Federal Filings

- 1.Cryptocurrency-related filings include, but are not limited to, coin issuers, cryptocurrency exchanges, cryptocurrency miners, securitizers of cryptocurrencies or cryptocurrency mining contracts, and companies adjacent to cryptocurrency.
- 2.Crypto-Adjacent Companies include companies selling mining rigs and chips, companies attempting to enter the cryptocurrency space, and companies partnering with cryptocurrency companies to provide services.
- 3. Litigation involving NFTs are included in the "Coin Issuer" category.

Figure 9: Filings by Industry—Core Federal SPAC Filings

- 1.SPAC filings concern companies that went public for the express purpose of acquiring an existing company in the future. These include current and former SPACs.
- 2. Sectors are based on the Bloomberg Industry Classification System.

Figure 17: Allegations Box Score—Core Federal Filings

Definitions:

Misrepresentations in financial documents are allegations made in the first identified complaint (FIC) that financial documents included misrepresentations. Financial documents include, but are not limited to, those filed with the U.S. Securities and Exchange Commission (SEC) (e.g., Form 10-Ks and registration statements) and press releases announcing financial results.

Accounting violations are allegations made in the FIC of U.S. GAAP violations or violations of other reporting standards such as IFRS. In some cases, plaintiff(s) may not have expressly referenced violations of U.S. GAAP or other reporting standards; however, the allegations, if true, would represent violations of U.S. GAAP or other reporting standards.

Announced restatements are alleged when the FIC includes accounting violations and refers to an announcement during or subsequent to the class period that the company will restate, may restate, or has unreliable financial statements.

Internal control weaknesses are allegations made in the FIC of internal control weaknesses over financial reporting.

Announced internal control weaknesses are alleged when the FIC includes internal control weaknesses and refers to an announcement during or subsequent to the class period that the company has internal control weaknesses over financial reporting.

Figure 18: Percentage of U.S. Exchange-Listed Companies Subject to Federal or State Filings

- 1. Percentages are calculated by dividing the count of issuers listed on the NYSE or Nasdaq subject to filings by the number of companies listed on the NYSE or Nasdaq as of the beginning of the year. Percentages may not sum due to rounding.
- 2.Core Filings and M&A Filings do not include instances in which a company has been subject to both a core and M&A filing in the same year. These are reported separately in the category labeled Both Core and M&A Filings. Since 2009 there have been 22 instances in which a company has been subject to both core and M&A filings in the same year. In 2016, 2017, 2019, and 2020, these filings represented 0.1% of U.S. exchange-listed companies. In 2009, 2010, 2013, 2015, and 2021, these filings accounted for less than 0.1% of U.S. exchange-listed companies.
- 3.Listed companies were identified by taking the count of listed securities at the beginning of each year and accounting for cross-listed companies or companies with more than one security traded on a given exchange. Securities were counted if they were classified as common stock or American depositary receipts (ADRs) and listed on the NYSE or Nasdaq.
- 4. This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. All federal filings are counted only once—at the time of the earliest filing. When parallel cases are filed in different years, only the earlier filing is reflected in the figure above. Filings against the same company brought in different states without a filing brought in federal court are counted as unique state filings. The figure begins including issuers facing suits in state 1933 Act filings in 2010.

Figure 23: State 1933 Act Filings by State

1.All Others contains filings in Alabama, Arizona, Colorado, Florida, Georgia, Illinois, Indiana, Iowa, Massachusetts, Michigan, Nevada, New Hampshire, New Jersey, Ohio, Oregon, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, Washington, West Virginia, and Wisconsin. 2. Beginning in 2018, California state filings may contain either Section 11 or Section 12 claims. Of the 16 filings in California in 2018, six filings contained Section 12 claims without also containing Section 11 claims. Since 2018, there have been two such filings. 3. This analysis compares all Section 11 filings in federal courts with all 1933 Act filings in state courts. It does not present data on a combined federal and state basis, nor does it identify or account for cases that have parallel filings in both state and federal courts. The numbers shown in this figure have been inflation-adjusted to 2022 dollars and will not match prior reports.

Figure 24: Dollar Loss on Offered Shares™ (DLOS Index™) for Federal Section 11–Only and State 1933 Act Filings

1.Federal filings included in this analysis must contain a Section 11 claim and may contain a Section 12 claim, but do not contain Section 10(b) claims. Beginning in 2018, California state filings may contain either Section 11 or Section 12 claims. Of the 16 filings in California in 2018, six filings contained Section 12 claims without also containing Section 11 claims. Since 2018, there have been two such filings.

2.Starting with Cornerstone Research's Securities Class Action Filings—2021 Year in Review, the DLOS methodology has been changed from using the difference between the offering price of the shares and their closing price on the day of the first identified complaint's first alleged corrective disclosure (if none were mentioned, instead the price the day after the complaint filing day was used), to using the difference between the offering price of the shares and their price on the filing date of the first identified complaint.

Figure 25: Federal Section 11 and State 1933 Act Class Action Filings by Type of Security Issuance

- 1. The federal Section 11 data displayed may contain Rule 10b-5 claims, but state 1933 Act filings do not.
- 2.Beginning in 2018, California state filings may contain either Section 11 or Section 12 claims. Of the 16 filings in California in 2018, six filings contained Section 12 claims without also containing Section 11 claims. Since 2018, there have been two such filings.
- 3.There was one federal court filing in 2019 related to both a merger-related issuance and SEO. This analysis categorizes this filing as relating to a merger-related issuance to avoid double-counting. Similarly, there was an SEO and other state filing in 2021 marked as SEO, a merger-related and other federal filing in 2022 marked as merger-related, and an IPO/SEO and other state filing in 2022 marked as IPO/SEO, all for the same reason.

Appendices

Appendix 1: Basic Filings Metrics

			Disc	losure Dollar	Loss	Max	imum Dolla	Loss	U.S. Ex	change-Liste Core Filings	
	Class		DDL Total	Average	Median	MDL Total	Average	Median		Number	Percentage
	Action	Core	(\$	(\$	(\$	(\$	(\$	(\$		of Listed	of Listed
Year	Filings	Filings	Billions)	Millions)	Millions)	Billions)	Millions)	Millions)	Number	Firms Sued	Firms Sued
1997	174	174	\$77	\$498	\$104	\$267	\$1,736	\$739	8,113	165	2.0%
1998	242	242	\$145	\$657	\$110	\$403	\$1,831	\$528	8,190	225	2.7%
1999	209	209	\$247	\$1,340	\$179	\$641	\$3,482	\$663	7,771	197	2.5%
2000	216	216	\$409	\$2,129	\$203	\$1,295	\$6,744	\$1,191	7,418	205	2.8%
2001	180	180	\$331	\$2,028	\$153	\$2,480	\$15,217	\$1,275	7,197	168	2.3%
2002	224	224	\$327	\$1,612	\$223	\$3,342	\$16,462	\$2,432	6,474	204	3.2%
2003	192	192	\$124	\$724	\$160	\$924	\$5,403	\$765	5,999	181	3.0%
2004	228	228	\$224	\$1,151	\$167	\$1,142	\$5,857	\$783	5,643	210	3.7%
2005	182	182	\$140	\$898	\$232	\$552	\$3,536	\$743	5,593	168	3.0%
2006	120	120	\$76	\$726	\$158	\$433	\$4,163	\$600	5,525	114	2.1%
2007	177	177	\$225	\$1,440	\$220	\$998	\$6,394	\$1,009	5,467	158	2.9%
2008	224	224	\$302	\$2,069	\$292	\$1,116	\$7,641	\$1,464	5,339	170	3.2%
2009	164	157	\$115	\$1,135	\$188	\$751	\$7,434	\$1,453	5,042	118	2.3%
2010	174	135	\$98	\$934	\$195	\$642	\$6,119	\$803	4,764	107	2.2%
2011	189	146	\$150	\$1,113	\$120	\$689	\$5,106	\$590	4,660	127	2.7%
2012	154	142	\$125	\$977	\$195	\$522	\$4,043	\$829	4,529	119	2.6%
2013	165	152	\$130	\$945	\$192	\$350	\$2,538	\$672	4,411	137	3.1%
2014	170	158	\$69	\$469	\$204	\$273	\$1,847	\$653	4,416	144	3.3%
2015	217	183	\$148	\$829	\$178	\$513	\$2,880	\$633	4,578	169	3.7%
2016	288	204	\$130	\$677	\$203	\$1,036	\$5,394	\$1,274	4,593	188	4.1%
2017	412	214	\$150	\$767	\$178	\$615	\$3,139	\$794	4,411	186	4.2%
2018	420	238	\$387	\$1,852	\$347	\$1,540	\$7,369	\$1,249	4,406	211	4.8%
2019	427	267	\$324	\$1,368	\$248	\$1,364	\$5,755	\$1,157	4,318	237	5.5%
2020	332	233	\$310	\$1,526	\$208	\$1,812	\$8,928	\$1,139	4,514	193	4.3%
2021	218	200	\$297	\$1,686	\$408	\$1,022	\$5,804	\$1,533	4,759	181	3.8%
2022	208	201	\$593	\$3,549	\$248	\$2,433	\$14,568	\$2,147	5,741	172	3.0%
Average 1997–2021	228	192	\$202	\$1,182	\$203	\$989	\$5,793	\$999	5,534	171	3.2%

Note: This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. All federal filings are counted only once—at the time of the earliest filing. When parallel cases are filed in different years, only the earlier filing is reflected in the figure above. Filings against the same company brought in different states without a filing brought in federal court are counted as unique state filings. As a result, this figure's filing counts may not match those in Figures 4–12, 17, 19–25, 28–34, or Appendices 2–9. 1933 Act filings in state courts are included in the data beginning in 2010. Average and median numbers are calculated only for filings with MDL and DDL data. Filings without MDL and DDL data include M&A-only filings, initial coin offering filings, and other filings where calculations of MDL and DDL are non-obvious. The number and percentage of U.S. exchange-listed firms sued are based on core filings and include companies that were subject to both an M&A filing and a core filing in the same year. This differs from Figure 18, which separately categorizes companies with both an M&A filing and core filing in the same year. The numbers shown in this figure have been inflation-adjusted to 2022 dollars and will not match prior reports.

Appendix 2A: S&P 500 Securities Litigation—Percentage of S&P 500 Companies Subject to Core Federal Filings

	Consumer	Consumer	Energy/	Financials/	Health		Telecomm./		All S&P 500
Year	Discretionary	Staples	Materials	Real Estate	Care	Industrials	Comm./IT	Utilities	Companies
2001	2.4%	8.3%	0.0%	1.4%	7.1%	0.0%	18.0%	7.9%	5.6%
2002	10.2%	2.9%	3.1%	16.7%	15.2%	6.0%	11.0%	40.5%	12.0%
2003	4.6%	2.9%	1.7%	8.6%	10.4%	3.0%	5.6%	2.8%	5.2%
2004	3.4%	2.7%	1.8%	19.3%	10.6%	8.5%	3.2%	5.7%	7.2%
2005	10.3%	8.6%	1.7%	7.3%	10.7%	1.8%	6.7%	3.0%	6.6%
2006	4.4%	2.8%	0.0%	2.4%	6.9%	0.0%	8.1%	0.0%	3.6%
2007	5.7%	0.0%	0.0%	10.3%	12.7%	5.8%	2.3%	3.1%	5.4%
2008	4.5%	2.6%	0.0%	31.2%	13.7%	3.6%	2.5%	3.2%	9.2%
2009	3.8%	4.9%	1.5%	9.5%	3.7%	6.9%	1.2%	0.0%	4.2%
2010	5.1%	0.0%	4.3%	10.3%	13.5%	0.0%	2.4%	0.0%	4.8%
2011	3.8%	2.4%	0.0%	1.2%	2.0%	1.7%	7.1%	0.0%	2.6%
2012	4.9%	2.4%	2.7%	3.7%	1.9%	1.6%	3.8%	0.0%	3.0%
2013	8.4%	0.0%	0.0%	0.0%	5.7%	0.0%	9.1%	0.0%	3.4%
2014	1.2%	0.0%	1.3%	1.2%	0.0%	4.7%	0.0%	0.0%	1.2%
2015	0.0%	5.0%	0.0%	1.2%	1.9%	0.0%	4.2%	3.4%	1.6%
2016	3.6%	2.6%	4.5%	6.9%	17.9%	6.1%	6.8%	3.4%	6.6%
2017	8.5%	2.7%	3.3%	3.3%	8.3%	8.7%	8.5%	7.1%	6.4%
2018	10.0%	11.8%	1.8%	7.0%	16.1%	8.8%	12.7%	7.1%	9.4%
2019	3.1%	12.1%	3.7%	2.0%	12.9%	10.1%	10.0%	6.9%	7.2%
2020	8.1%	3.1%	1.9%	5.3%	6.3%	2.7%	2.0%	7.1%	4.4%
2021	0.0%	6.3%	5.7%	0.0%	0.0%	1.4%	5.1%	0.0%	2.2%
2022	3.3%	0.0%	0.0%	2.1%	7.8%	4.2%	6.0%	3.6%	3.8%
Average									
2001–2021	5.1%	3.8%	1.8%	7.1%	8.4%	3.9%	6.2%	5.1%	5.3%

Appendix 2B: S&P 500 Securities Litigation—Percentage of Market Capitalization of S&P 500 Companies Subject to Core Federal Filings

	Consumer	Consumer	Energy/	Financials/	Health		Telecomm./		All S&P 500
Year	Discretionary	Staples	Materials	Real Estate	Care	Industrials	Comm./IT	Utilities	Companies
2001	1.3%	6.3%	0.0%	0.8%	5.4%	0.0%	32.6%	17.4%	10.9%
2002	24.7%	0.3%	1.2%	29.2%	35.2%	13.3%	9.1%	51.0%	18.8%
2003	2.0%	2.3%	0.4%	19.9%	16.3%	4.6%	1.7%	4.3%	8.0%
2004	7.9%	0.1%	29.7%	46.1%	24.1%	8.8%	1.2%	4.8%	17.7%
2005	5.7%	11.4%	1.6%	22.2%	10.1%	5.6%	10.3%	5.6%	10.7%
2006	8.9%	0.8%	0.0%	8.2%	18.1%	0.0%	8.3%	0.0%	6.7%
2007	4.4%	0.0%	0.0%	18.1%	22.5%	2.2%	3.4%	5.5%	8.2%
2008	7.2%	2.6%	0.0%	55.0%	20.0%	26.4%	1.4%	4.0%	16.2%
2009	1.9%	3.9%	0.8%	30.7%	1.7%	23.2%	0.3%	0.0%	7.6%
2010	4.9%	0.0%	5.2%	31.1%	32.7%	0.0%	5.9%	0.0%	11.1%
2011	4.6%	0.8%	0.0%	6.9%	0.7%	2.1%	13.4%	0.0%	5.0%
2012	1.6%	14.0%	0.9%	11.0%	0.8%	1.2%	2.2%	0.0%	4.3%
2013	4.4%	0.0%	0.0%	0.0%	4.4%	0.0%	16.6%	0.0%	4.7%
2014	2.5%	0.0%	0.2%	0.3%	0.0%	1.7%	0.0%	0.0%	0.6%
2015	0.0%	1.9%	0.0%	3.0%	3.1%	0.0%	7.0%	3.7%	2.8%
2016	2.8%	1.0%	19.8%	11.9%	13.2%	8.7%	12.3%	4.4%	10.0%
2017	8.2%	6.7%	2.3%	1.5%	2.7%	22.3%	4.4%	9.6%	6.1%
2018	4.7%	15.2%	1.4%	12.5%	26.3%	19.4%	19.4%	6.5%	14.9%
2019	0.5%	9.1%	1.2%	2.2%	6.6%	21.6%	18.0%	7.9%	10.0%
2020	2.2%	1.8%	0.4%	16.9%	4.7%	4.9%	1.6%	6.6%	4.3%
2021	0.0%	17.7%	12.0%	0.0%	0.0%	0.5%	8.2%	0.0%	5.1%
2022	30.3%	0.0%	0.0%	4.7%	12.3%	6.1%	4.0%	7.2%	8.4%
Average									
2001–2021	4.0%	5.2%	3.1%	13.4%	10.4%	8.2%	8.7%	5.6%	8.1%

Note: Average figures are calculated as the sum of the market capitalization subject to core filings in a given sector from 2001 to 2021 divided by the sum of market capitalization in that sector from 2001 to 2021.

Appendix 3: M&A Federal Filings Overview

			N	1&A Case Sta	atus		Cas	se Status o	of All Other F	ederal Filings	
Year	M&A Filings	Dismissed	Settled	Remanded	Continuing	Trial	Dismissed	Settled	Remanded	Continuing	Trial
2012	12	9	3	0	0	0	68	69	2	0	0
2013	13	7	6	0	0	0	86	65	1	0	0
2014	12	9	3	0	0	0	66	87	2	1	0
2015	34	27	7	0	0	0	95	71	4	2	1
2016	84	69	14	0	1	0	92	78	6	10	1
2017	198	190	7	1	0	0	114	85	4	10	0
2018	182	176	4	0	2	0	123	71	0	26	0
2019	160	156	2	0	2	0	122	79	0	41	0
2020	99	97	0	0	2	0	108	39	0	72	0
2021	18	14	0	0	4	0	41	13	1	138	0
2022	7	3	0	0	4	0	14	3	0	174	0

Note: The Securities Class Action Clearinghouse began tracking M&A filings as a separate category in 2009. Case status is as of the end of 2022. This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figures filing counts may not match Figures 1–3, 13–16, 18, 26, or Appendix 1.

Appendix 4: Case Status by Year—Core Federal Filings

		In the First \	'ear		In the Second	Year		In the Third Y	/ear
			Total Resolved			Total Resolved within Two			Total Resolved within Three
Filing Year	Settled	Dismissed	within One Year	Settled	Dismissed	Years	Settled	Dismissed	Years
1997	0.6%	7.5%	8.0%	14.9%	8.6%	31.6%	17.8%	4.0%	53.4%
1998	0.8%	7.4%	8.3%	16.1%	12.8%	37.2%	15.7%	7.9%	60.7%
1999	0.5%	6.7%	7.2%	11.0%	12.0%	30.1%	18.2%	9.1%	57.4%
2000	1.9%	4.2%	6.0%	11.6%	13.0%	30.6%	15.7%	10.6%	57.4%
2001	1.7%	6.7%	8.3%	11.7%	10.6%	30.6%	18.3%	5.0%	53.9%
2002	0.9%	5.8%	7.1%	6.7%	9.4%	23.2%	15.2%	11.6%	50.0%
2003	0.5%	7.8%	8.3%	7.8%	13.5%	29.7%	14.6%	14.6%	58.9%
2004	0.0%	10.5%	10.5%	9.6%	16.2%	36.4%	12.7%	9.6%	58.8%
2005	0.5%	11.5%	12.1%	8.8%	19.8%	40.7%	17.0%	8.8%	66.5%
2006	0.8%	9.2%	10.0%	8.3%	17.5%	35.8%	16.7%	7.5%	60.0%
2007	0.6%	7.3%	7.9%	7.9%	18.1%	33.9%	19.8%	11.9%	65.5%
2008	0.0%	13.0%	13.9%	4.9%	20.2%	39.0%	10.3%	10.3%	59.6%
2009	0.0%	9.6%	9.6%	6.4%	22.9%	38.9%	8.3%	8.9%	56.1%
2010	1.5%	11.0%	13.2%	8.8%	20.6%	42.6%	5.9%	13.2%	61.8%
2011	0.0%	12.4%	13.1%	4.1%	18.6%	35.9%	22.1%	11.7%	69.7%
2012	0.7%	12.9%	15.1%	6.5%	25.9%	47.5%	15.8%	6.5%	69.8%
2013	0.0%	19.1%	19.7%	10.5%	25.0%	55.3%	14.5%	5.3%	75.0%
2014	0.6%	10.9%	12.8%	11.5%	21.8%	46.2%	16.0%	7.7%	69.9%
2015	0.0%	17.3%	19.7%	6.4%	23.7%	49.7%	11.6%	8.7%	69.9%
2016	0.0%	14.4%	16.0%	8.0%	22.5%	47.1%	11.8%	7.5%	67.4%
2017	0.0%	18.3%	19.7%	5.6%	22.5%	48.4%	11.3%	8.0%	67.6%
2018	0.0%	13.2%	13.2%	6.8%	22.7%	42.7%	9.1%	12.3%	64.1%
2019	0.0%	14.5%	14.5%	6.2%	25.2%	45.9%	15.3%	7.4%	68.6%
2020	0.5%	17.4%	17.8%	5.0%	26.5%	49.3%	12.3%	5.5%	67.1%
2021	0.0%	13.5%	14.0%	6.7%	7.8%	28.5%	-	-	-
2022	1.1%	7.4%	8.4%	-	-	-	-	-	-

Note: Percentages may not sum due to rounding. Percentages below the lines indicate cohorts for which data are not complete. Case status is reported as of the last significant docket update as determined by the Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse and is up to date as of the end of 2022. This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figures filing counts may not match Figures 1–3, 13–16, 18, 26, or Appendix 1.

Appendix 5: Litigation Exposure for SPACs after De-SPAC Transactions Compared to IPOs—Core Federal Filings

Years Since	SPAC Exposu	ıre 2019–2022	IPO Exposure 2019–2022				
De-SPAC Transaction or IPO	Cumulative Exposure	Incremental Exposure	Cumulative Exposure	Incremental Exposure			
1	11.1%	11.1%	8.7%	8.7%			
2	14.2%	3.2%	14.7%	6.0%			
3	16.3%	2.1%	16.1%	1.4%			

Note: Tracking of core federal SPAC filings began in 2019. SPAC filings prior to 2019 have not been identified. Filings against companies that completed their De-SPAC transactions prior to 2019 are not considered. Additionally, filings that occurred prior to the De-SPAC Transaction are not considered in this analysis. Partial years since De-SPAC Transactions are counted as full years. For comparison to SPAC exposure, IPO-related filings prior to 2019 have not been considered. Filings against companies that completed their IPO prior to 2019 are not considered. Partial years since IPO are counted as full years. Cumulative litigation exposure correcting for survivorship bias is calculated using the following formula:

(cumulative litigation exposure in
$$\, {\rm year} \, t \, \big) = 1 - \prod_{i=1}^t (1 - p_i) \, ,$$
 where:

number of companies sued in year i

 $p_i = \frac{1}{\text{number of companies surviving at the end of year } (i-1)}$

Appendix 6: Filings by Industry—Core Federal Filings

(Dollars in 2022 billions)

		Class Actio	on Filings		[Disclosure	Dollar Loss			Maximum	Dollar Loss	
Industry	Average 1997–2021	2020	2021	2022	Average 1997–2021	2020	2021	2022	Average 1997–2021	2020	2021	2022
Financial	30	29	18	11	\$28	\$85	\$7	\$28	\$178	\$911	\$36	\$186
Consumer Non-Cyclical	53	65	69	65	\$59	\$77	\$72	\$123	\$223	\$351	\$199	\$617
Industrial	17	13	10	9	\$18	\$18	\$6	\$4	\$66	\$51	\$11	\$35
Technology	23	28	29	24	\$34	\$78	\$44	\$31	\$135	\$143	\$110	\$204
Consumer Cyclical	20	26	24	28	\$15	\$14	\$48	\$20	\$82	\$142	\$146	\$220
Communications	27	18	21	19	\$37	\$12	\$90	\$365	\$225	\$99	\$280	\$1,051
Energy	7	9	10	7	\$5	\$6	\$14	\$3	\$38	\$46	\$191	\$37
Basic Materials	5	10	4	5	\$3	\$4	\$3	\$2	\$19	\$17	\$8	\$6
Utilities	3	3	0	3	\$2	\$12	\$0	\$0	\$14	\$28	\$0	\$4
Unknown/ Unclassified	3	18	8	19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	188	219	193	190	\$201	\$305	\$284	\$575	\$980	\$1,788	\$981	\$2,360

Note: Figures may not sum due to rounding. The numbers shown in this figure have been inflation-adjusted to 2022 dollars and will not match prior reports. This analysis only considers core federal filings. It does not present M&A cases or combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts, DDL, and MDL may not match Figures 1–3, 13–16, 18, 26, or Appendix 1.

Appendix 7: Filings by Circuit—Core Federal Filings

(Dollars in 2022 billions)

		Class Actio	n Filings			Disclosure	Dollar Loss		Maximum Dollar Loss			
Circuit	Average 1997–2021	2020	2021	2022	Average 1997–2021	2020	2021	2022	Average 1997–2021	2020	2021	2022
1st	8	2	4	3	\$9	\$0	\$2	\$2	\$29	\$1	\$5	\$33
2nd	55	76	82	73	\$64	\$81	\$118	\$72	\$348	\$716	\$401	\$367
3rd	17	23	15	16	\$26	\$24	\$15	\$52	\$99	\$121	\$59	\$297
4th	6	3	6	7	\$4	\$1	\$6	\$3	\$18	\$5	\$19	\$18
5th	11	9	8	7	\$10	\$6	\$12	\$1	\$59	\$55	\$171	\$22
6th	8	7	6	1	\$10	\$14	\$2	\$1	\$39	\$38	\$8	\$7
7th	8	7	4	7	\$10	\$12	\$1	\$26	\$45	\$119	\$2	\$108
8th	5	1	1	1	\$4	\$0	\$0	\$8	\$17	\$1	\$2	\$49
9th	49	77	57	59	\$53	\$158	\$122	\$403	\$274	\$651	\$295	\$1,415
10th	6	6	3	7	\$3	\$1	\$1	\$6	\$17	\$14	\$3	\$35
11th	13	8	7	8	\$7	\$8	\$6	\$0	\$33	\$69	\$17	\$9
D.C.	1	0	0	1	\$1	\$0	\$0	\$1	\$4	\$0	\$0	\$1
Total	188	219	193	190	\$201	\$306	\$284	\$575	\$981	\$1,791	\$981	\$2,360

Note: Figures may not sum due to rounding. The numbers shown in this figure have been inflation-adjusted to 2022 dollars and will not match prior reports. This analysis only considers core federal filings. It does not present M&A cases or combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts, DDL, and MDL may not match Figures 1–3, 13–16, 18, 26, or Appendix 1.

Appendix 8: Filings by Exchange Listing—Core Federal Filings

	Average (1	1997–2021)	20:	21	20	22
	NYSE/Amex	Nasdaq	NYSE	Nasdaq	NYSE	Nasdaq
Class Action Filings	91	116	69	127	74	98
Core Filings	76	96	62	116	71	94
Disclosure Dollar Loss						
DDL Total (\$ Billions)	\$128	\$72	\$101	\$180	\$121	\$455
Average (\$ Millions)	\$1,867	\$747	\$1,911	\$1,611	\$1,828	\$4,996
Median (\$ Millions)	\$404	\$156	\$565	\$391	\$306	\$195
Maximum Dollar Loss						
MDL Total (\$ Billions)	\$629	\$346	\$365	\$608	\$786	\$1,566
Average (\$ Millions)	\$8,974	\$3,602	\$6,880	\$5,426	\$11,905	\$17,204
Median (\$ Millions)	\$1,999	\$708	\$2,802	\$1,313	\$2,727	\$1,864

Note: Average and median numbers are calculated only for filings with MDL and DDL data. NYSE/Amex was renamed NYSE MKT in May 2012. The numbers shown in this figure have been inflation-adjusted to 2022 dollars and will not match prior reports. This analysis only considers core federal filings. It does not present M&A cases or combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those analyses, when parallel cases are filed in different years, only the earlier filing date is reflected in the analysis. As a result, this figure's filing counts, DDL, and MDL may not match Figures 1–3, 13–16, 18, 26, or Appendix 1.

Appendix 9: Cryptocurrency-Related Filings by Defendant Type—Core Federal Filings

	2016	2017	2018	2019	2020	2021	2022
Coin Issuer	1	5	10	3	8	1	10
Cryptocurrency Exchange	0	0	2	0	5	4	10
Securitizer of Cryptocurrency	1	0	0	0	0	0	7
Cryptocurrency Miner	1	0	4	1	0	4	3
Cryptocurrency-Adjacent Company	0	0	2	1	1	3	2
Multiple Defendant Types	1	0	4	1	1	1	8
Total Cryptocurrency-Related Filings	1	5	14	4	13	11	23

Note: Counts may not sum to total cryptocurrency-related filings in a year because a filing can include multiple defendant types. The "Multiple Defendant Types" category includes filings that have more than one defendant type. In 2022, "Multiple Defendant Types" included one filing against an issuer and an exchange, three filings against an exchange and a securitizer, two filings against an issuer and a securitizer, one filing against an issuer and a crypto-adjacent company, and one filing against an issuer, exchange, and securitizer. In 2021, "Multiple Defendant Types" included one filing against an exchange and a crypto-adjacent company. In 2020, "Multiple Defendant Types" included one filing against an issuer and an exchange. In 2019, "Multiple Defendant Types" included one filing against an issuer and a miner. In 2018, "Multiple Defendant Types" included two filings against an issuer and an exchange, one filing against an issuer and a miner, and one filing against a miner, and a securitizer.

Research Sample

- The Securities Class Action Clearinghouse, cosponsored by Cornerstone Research and Stanford Law School, has identified 6,313 federal securities class action filings between January 1, 1996, and December 31, 2022 (securities.stanford.edu). The analysis in this report is based on data identified by Stanford as of January 11, 2022.
- The sample used in this report includes federal filings that typically allege violations of Sections 11 or 12 of the Securities Act of 1933, or Sections 10(b) or 14(a) of the Securities Exchange Act of 1934.
- The sample is referred to as the "classic filings" sample and excludes IPO allocation, analyst, and mutual fund filings (313, 68, and 25 filings, respectively).
- Multiple filings related to the same allegations against the same defendant(s) are consolidated in the database through a unique record indexed to the first identified complaint.
- In addition to federal filings, class actions filed in state courts since January 1, 2010, alleging violations of the Securities Act of 1933 are also separately tracked.
- An additional 215 state class action filings in state courts, from January 1, 2010, to December 31, 2022, have also been identified.

The views expressed herein do not necessarily represent the views of Cornerstone Research.

The authors request that you reference Cornerstone Research and the Stanford Law School Securities Class Action Clearinghouse in any reprint of the information or figures included in this report.

Please direct any questions to:

Alexander Aganin 650.853.1660 aaganin@cornerstone.com

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