

CORNERSTONE RESEARCH

Economic and Financial Consulting and Expert Testimony

Securities Class Action Filings

2020 Year in Review

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Executive Summary

As courts and firms sought to adapt to operating in a worldwide pandemic, the total number of securities class action filings fell below 400—to 334—for the first time since 2016.

Despite the lower filing activity, market capitalization losses were comparable to the elevated levels seen over the past three years and were driven by several mega filings.

Number and Size of Filings

- Plaintiffs filed 334 **new class action securities cases** (filings) across federal and state courts in 2020, a 22% decline from 427 in 2019. The 2020 total, however, is still 49% higher than the 1997–2019 average. “Core” filings—those excluding M&A filings—fell 12% to 234. (page 5)
- Federal and state court class actions alleging **claims under the Securities Act of 1933** (1933 Act) fell dramatically in the fourth quarter of 2020, contributing to the overall reduction in filings. (page 21)
- **Disclosure Dollar Loss (DDL)** decreased by 13% to \$245 billion in 2020. (pages 8–9)
- **Maximum Dollar Loss (MDL)** increased by 33% to \$1,584 billion due to several mega filings. (page 10)
- Although the number of **mega DDL filings** increased from eight in 2019 to 13 in 2020, total DDL from mega filings decreased by \$1 billion. There were 30 **mega MDL filings** in 2020, more than twice the historical average. (page 31)

Other Measures of Filing Intensity

- The percentage of **U.S. exchange-listed companies** subject to filings decreased for the first time in eight years, from a record high of 8.9% in 2019 to 6.3% in 2020. (page 12)
- 4.4% of **S&P 500** companies were defendants in a core federal filing during 2020, the lowest percentage since 2015. (pages 13–14)
- Monthly filing activity in 2020 had very large fluctuations, with both the lowest (November) and highest (April) monthly totals of core filings in the last three years. (page 6)

Class action securities filing activity in 2020 fell 22% from 2019.

Figure 1: Federal and State Class Action Filings Summary

(Dollars in Billions)

| | Annual (1997–2019) | | | 2019 | 2020 |
|------------------------------|--------------------|---------|---------|---------|---------|
| | Average | Maximum | Minimum | | |
| Class Action Filings | 224 | 427 | 120 | 427 | 334 |
| Core Filings | 190 | 267 | 120 | 267 | 234 |
| Disclosure Dollar Loss (DDL) | \$136 | \$331 | \$42 | \$282 | \$245 |
| Maximum Dollar Loss (MDL) | \$662 | \$2,046 | \$145 | \$1,187 | \$1,584 |

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. 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 18, 21, 27, 31, or 32.

Key Trends in Federal Filings

The percentage of U.S. exchange-listed companies subject to filings experienced the largest one-year drop on record. Core filings in federal courts against non-U.S. issuers (i.e., companies headquartered outside the U.S. with securities trading on U.S. exchanges) reached record levels.

U.S. Companies

- In 2020, the likelihood of core filings and M&A filings targeting **U.S. exchange-listed companies** dropped to their lowest combined level since 2016. (page 12)
- Core federal filings against **S&P 500 firms** in 2020 occurred at a rate of 4.4%, falling below the 2001–2019 average of 5.5%. (page 13)

Non-U.S. Companies

- Core federal filings against **non-U.S. companies** rose to 74, the highest level on record. (page 28)
- The likelihood of a core federal filing against a non-U.S. company surpassed the likelihood of such a filing against an S&P 500 company, largely driven by a decrease in likelihood of filings against S&P 500 companies. (page 30)

By Industry

- The majority of sectors saw a similar number of core federal filings in 2020 as in 2019. (page 32)
- 2020 core federal filings in the **Consumer Non-Cyclical, Communications, and Industrial** categories were lower than 2019 numbers. (page 32)

By Circuit

- There were 77 and 79 core federal filings in the **Second and Ninth Circuits**, respectively. Ninth Circuit core federal filings were the highest on record for that circuit. (page 33)
- Core federal filings in the **First Circuit** were the lowest on record with just two filings in 2020 compared with the 1997–2019 historical average of nine. (page 33)

M&A Filings

- Federal filings of **M&A class actions**—those involving M&A transactions with Section 14 claims but no Rule 10b-5, Section 11, or Section 12(a) claims—decreased again, from 160 in 2019 to 100 in 2020. (page 5)
- M&A filings continued to be concentrated in the **Third Circuit**. In 2020, 86% of M&A filings were filed in Delaware courts. (page 15)
- M&A filings had a much higher rate of dismissal (90%) than core federal filings (47%) from 2010 to 2019. (page 17)

Dismissal Rates by Plaintiffs' Counsel

- Complaints filed by the **three plaintiff law firms** that have most frequently filed first identified complaints have higher dismissal rates than those filed by other plaintiffs' counsel. (page 34)

Federal Filing Lag

- The median **filing lag** has remained higher than the 1997–2019 median, but is much lower for the three plaintiff law firms that have most frequently filed first identified complaints. (page 27)

New Developments

- Four California trial courts have followed the Delaware Supreme Court's decision in *Salzberg v. Sciabacucchi* (*Sciabacucchi*) enforcing federal forum-selection provisions in corporate charters. (page 35)
- The SEC's Division of Corporation Finance issued "CF Disclosure Guidance: Topic No. 10," which identified disclosure considerations for China-based companies that list on U.S. exchanges. (page 35)
- The explosion of IPOs involving special purpose acquisition companies (SPACs) in 2020 may lead to a higher number of Section 11 filings in 2021 and beyond. (page 35)

Featured: Annual Rank of Filing Intensity

Filing activity in 2020 declined dramatically from the record high filing counts observed in 2019. M&A filings have continued to decline since reaching their peak in 2017, but were also lower in 2020 than in the two previous years due to fewer large mergers.¹ Core filings in state courts have also fallen sharply, likely in response to the Delaware Supreme Court ruling in *Sciabacucchi*.

Core federal filings against companies in the S&P 500 index occurred with much lower frequency than in 2019, falling below the 2001–2019 average. Maximum Dollar Loss (MDL) reached its highest point since 2002. Disclosure Dollar Loss (DDL) remained elevated as well, but fell from the record highs seen in 2018–2019.

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

| | 2018 | 2019 | 2020 |
|--|------|------|------|
| Number of Total Filings | 2nd | 1st | 4th |
| Core Filings | 3rd | 1st | 4th |
| M&A Filings | 2nd | 3rd | 4th |
| Size of Core Filings | | | |
| Disclosure Dollar Loss | 1st | 2nd | 3rd |
| Maximum Dollar Loss | 4th | 5th | 2nd |
| Percentage of U.S. Exchange-Listed Companies Sued | | | |
| Total Filings | 2nd | 1st | 4th |
| Core Filings | 2nd | 1st | 3th |
| Percentage of S&P 500 Companies Subject to Core Federal Filings | 2nd | 4th | 14th |

Note: Rankings cover 1997 through 2020 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. 1933 Act filings brought in state courts are included in the rankings in all categories beginning in 2010, except the Percentage of S&P 500 Companies Subject to Core Federal Filings.

1. The number of non-withdrawn mergers over \$100 million with a public company target whose shares or American depository receipts (ADRs) traded on a U.S. exchange fell from approximately 140 with announcement dates in 2019 to fewer than 100 with announcement dates in 2020.

Featured: State Court 1933 Act Filings

State court securities class action filings with 1933 Act claims decreased substantially in 2020, likely due to the March 2020 Delaware Supreme Court decision in *Sciabacucchi* regarding the validity and enforceability of federal forum-selection provisions in corporate charters. This decline is in sharp contrast to the substantial increase in state 1933 Act securities filings in the last few years, which reached a historic high in 2019.

- The number of state 1933 Act filings in 2020 fell sharply from 53 to 17, particularly in the second half of 2020 when only four filings occurred, likely in response to two factors: (1) the *Sciabacucchi* ruling, and (2) strong stock market performance that makes it less likely that a company’s stock price will fall below its price as of the time of the registration statement. (pages 5, 21, 24)
- State 1933 Act filings in California courts continued to decline in 2020 with only four such filings, all but one of which had a parallel action in federal courts.
- New York remained the preferred venue for state 1933 Act filings, with seven of the 10 filings that were only filed in state courts.
- The number of state 1933 Act filings in 2020 dropped by 68% from 2019, reverting to roughly the average level from 2010 through 2019.

The number of state court 1933 Act filings decreased sharply in 2020, likely in response to the Sciabacucchi ruling.

Figure 3: State Court 1933 Act Class Action Filings Summary

| | Average 2010–2019 | 2019 | 2020 |
|--|----------------------|------|------|
| State Court 1933 Act Class Action Filings | | | |
| Filings in State Courts Only | 8 | 28 | 10 |
| California | 4 | 5 | 1 |
| New York | 2 | 13 | 7 |
| All Other States | 2 | 10 | 2 |
| Parallel Filings in State and Federal Courts | 9 | 25 | 7 |
| Total | 16 | 53 | 17 |

Note:

1. This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. 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 18, 21, 27, 31, or 32.
2. Beginning in 2018, the Securities Class Action Clearinghouse began tracking 1933 Act filings in California state courts containing Section 11 or Section 12 claims; there were six filings in California state courts with only Section 12 claims in 2018. Filings in other state courts are currently only those with Section 11 claims.
3. Figures may not sum due to rounding.

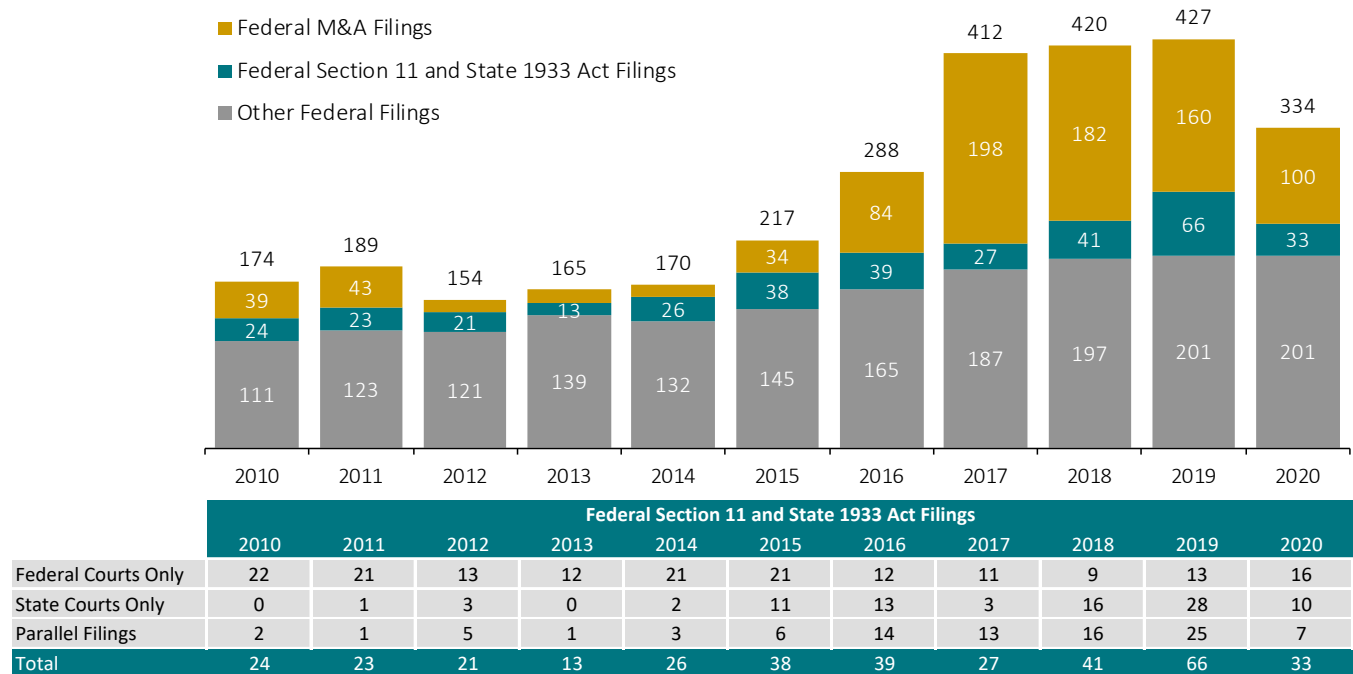
Combined Federal and State Filing Activity

- Plaintiffs filed 334 new securities class actions across federal and state courts, a 20% drop from the 2017–2019 average of 420, but still higher than 2010–2016 levels.

The number of class action filings across federal and state venues dropped largely due to a decline in M&A and state 1933 Act filings.

- The 234 new core securities class actions (consisting of 33 federal Section 11 and state 1933 Act filings, and 201 other federal filings) was only slightly lower than the 2017–2019 average of 240. However, M&A filings fell 38% from 2019.
- Of the 33 federal Section 11 and state 1933 Act filings, only 10 were filed exclusively in state courts—a 64% decrease from 2019.
- 48% of all federal Section 11 and state 1933 Act filings were federal-only filings, compared to 20% in 2019.
- Parallel filings in state and federal courts plummeted from 25 filings in 2019 to seven filings in 2020.

Figure 4: Federal Section 11 and State 1933 Act Class Action Filings by Venue 2010–2020



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

Note:

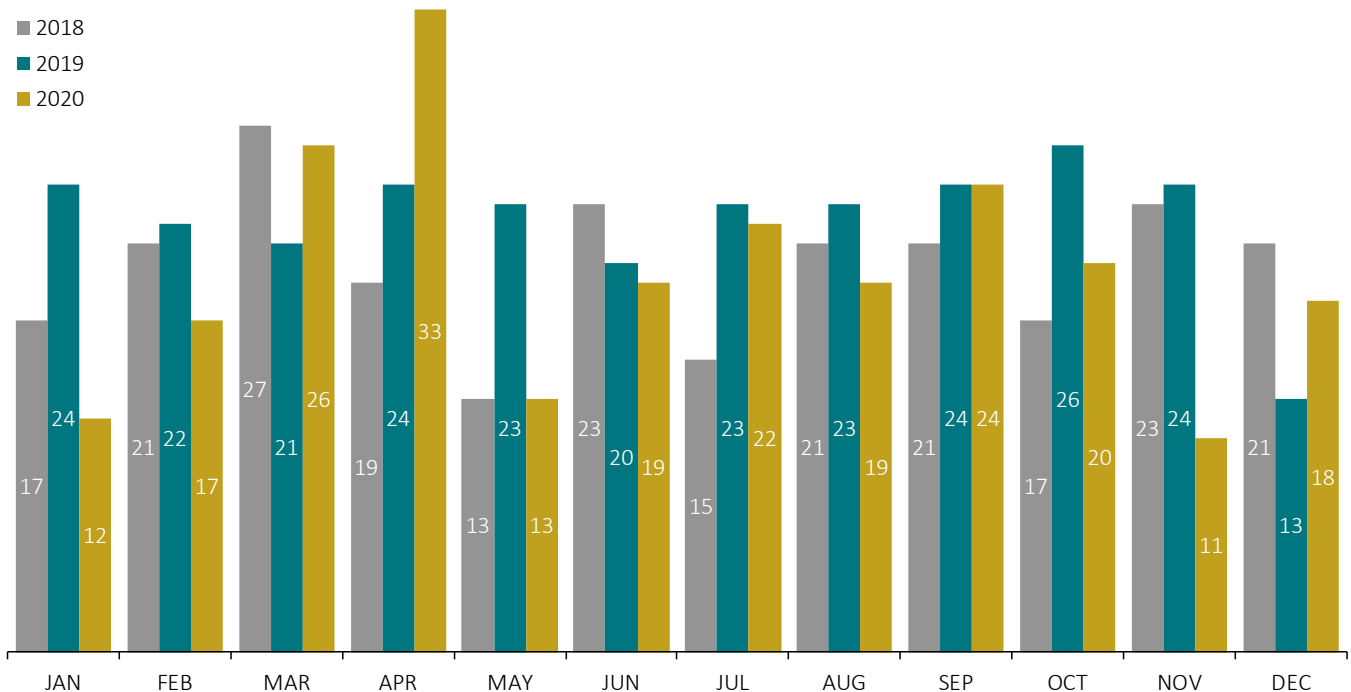
1. The federal Section 11 data displayed may contain Rule 10b-5 claims, but state 1933 Act filings do not.
2. This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. When parallel cases are filed in different years, only the earlier 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 18, 21, 27, 31, or 32.
3. 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.

Filing Counts by Month

- After lower filing activity in January, the number of filings steadily increased through April before declining again in May. Filings in June then rebounded to monthly totals higher than those in January and February. From July through October, filings were roughly in line with the monthly number of filings in the past two years, but in November, filings sharply declined to less than half of what they were in 2018 and 2019. The year ended with 18 filings in December, five more than in 2019.
- The peak in April was influenced by the filings on April 3, 2020, of 11 similar securities class actions brought by two law firms against companies that had initial coin offerings or that provided exchanges for the trading of cryptocurrencies.
- Monthly filing activity may generally be explained by stock market performance. Market performance was strong in January and February, followed by a sharp decline in March due to the onset of the COVID-19 pandemic. The S&P 500 index hit its lowest point for the year in late March, but then rose by 68% to finish the year up more than 16% compared to the beginning of the year, despite the pandemic.

Filing activity in 2020 had very large fluctuations, with both the lowest (November) and highest (April) monthly totals of core filings in the last three years.

Figure 5: Number of Core Filings by Month 2018–2020



Note:

1. Counts include core filings in federal court and 1933 Act filings in state court. Core filings exclude M&A filings.
2. This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. When parallel cases are filed in different months, 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 18, 21, 27, 31, or 32.
3. On April 3, 2020, 11 similar securities class actions brought by two law firms were filed against companies that had initial coin offerings or that provided exchanges for the trading of cryptocurrencies.

Summary of Trend Cases

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

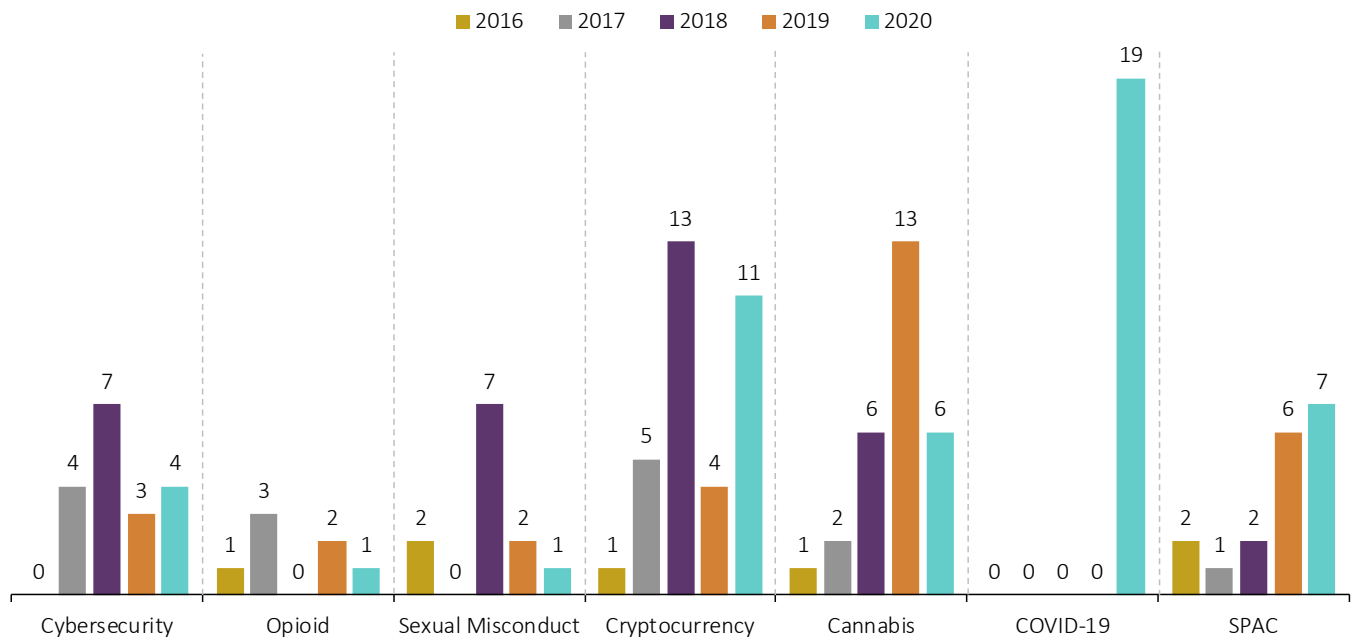
- Cybersecurity filings are those in which allegations relate to data breaches or security vulnerabilities.
- Opioid filings involve allegations related to opiate drugs that are addictive, were falsely marketed as non-addictive, or caused other opiate-related issues.
- Sexual misconduct filings involve allegations of sexual harassment that are central to the claims.
- Cryptocurrency filings include blockchain or cryptocurrency companies that engaged in the sale or exchange of tokens (commonly initial coin offerings), 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 filings include allegations related to companies negatively impacted by the virus or looking to address demand for products as a result of the virus.

- SPAC filings concern companies that went public for the express purpose of acquiring an existing company in the future.

Aside from a flurry of cryptocurrency filings, previous trend cases subsided while COVID-19-related cases surged.

- The most dominant trend in 2020 was COVID-19, with 19 filings. Cryptocurrency was the next most common trend with 11 filings.
- The seven SPAC filings in 2020 represent an upward trend in such filings since 2016 and may continue to rise in response to the explosion of SPAC IPOs in 2020. (pages 23, 35)
- Opioid and sexual misconduct filings continued their downward trend in 2020, both dropping from two to one filing.

Figure 6: Summary of Trend Cases—Core Filings 2016–2020



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

Note: There were six filings that appeared in multiple trend categories. SPAC counts include M&A filings. There were two M&A SPAC filings in 2020, five in 2019, and one in 2018. This figure has been updated to reflect new data on SPAC filings.

Market Capitalization Losses for Federal and State Filings

Disclosure Dollar Loss Index® (DDL Index®)

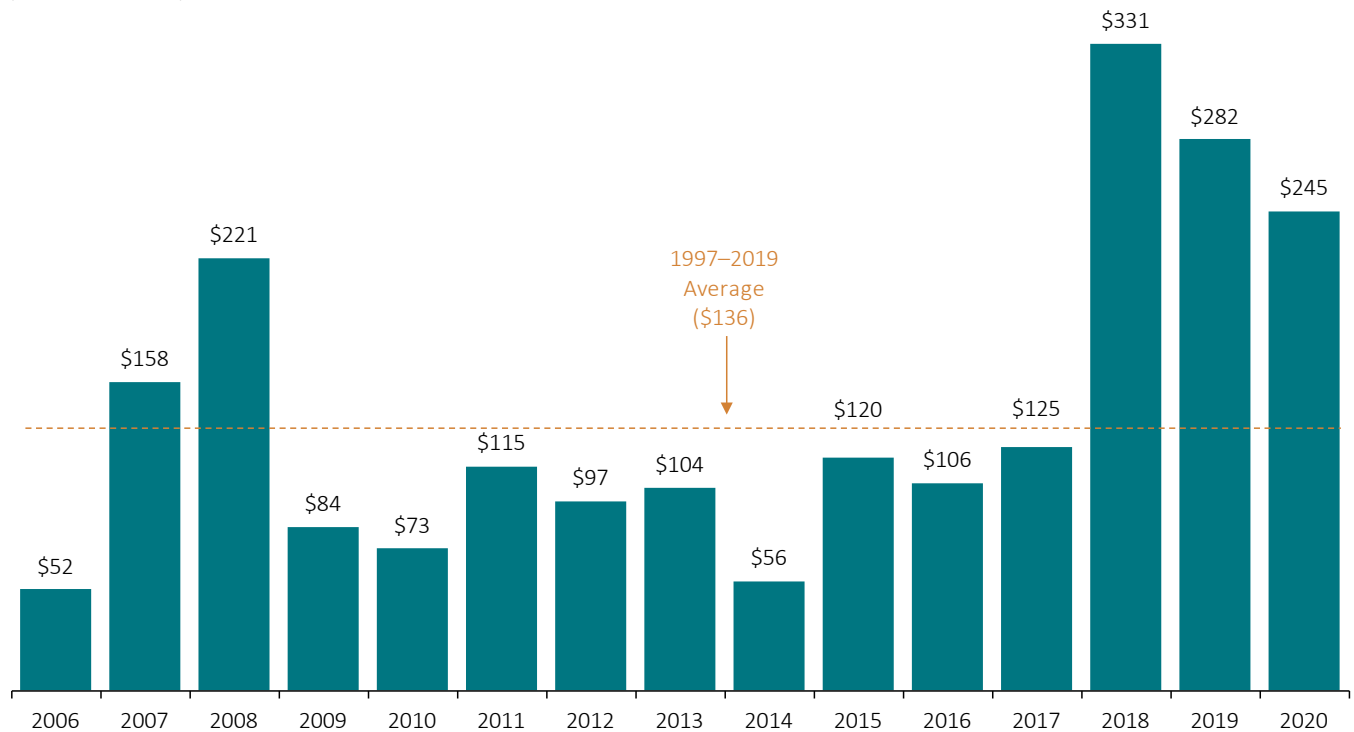
This index measures the aggregate annual DDL for all federal and state filings. DDL is the dollar value change in the defendant firm’s market capitalization between the trading day immediately preceding the end of the class period and the trading day immediately following the end of the class period.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

- The DDL Index fell for the second consecutive year to \$245 billion, down 13% from 2019 and 26% from 2018, but remained almost double the 1997–2019 average.
- As shown in Appendix 1, median DDL per filing in 2020 also fell for the second consecutive year, down 14% from last year and 38% from 2018, but remained above 2009–2017 levels and 32% above the 1997–2019 average. See Appendix 1 for DDL totals, averages, and medians from 1997 to 2020.

The DDL Index remained well above historical averages, despite a continued decline from the record high in 2018.

Figure 7: Disclosure Dollar Loss Index® (DDL Index®) 2006–2020

(Dollars in Billions)

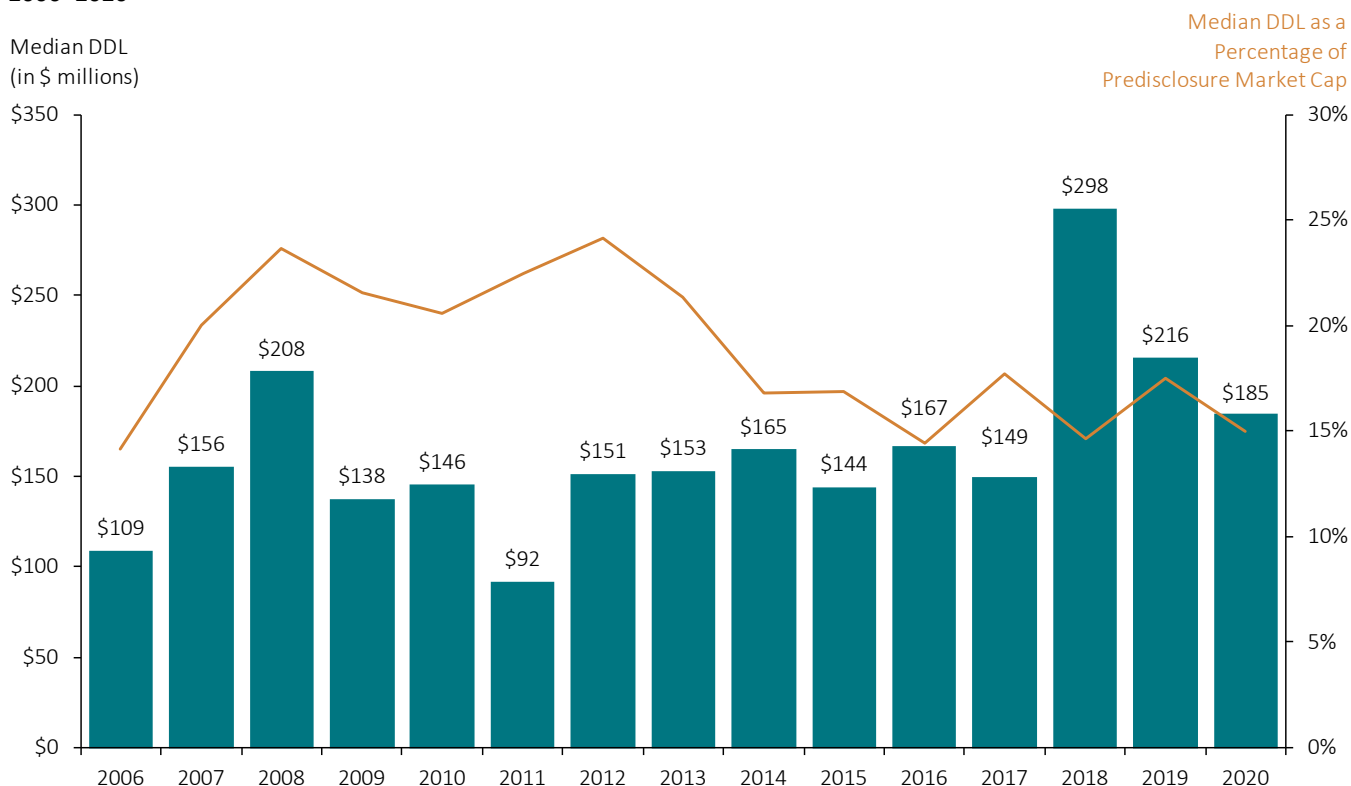


Note: This figure begins including DDL associated with state 1933 Act filings in 2010. DDL associated with parallel class actions is only counted once.

- 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 18% of the predisclosure market cap. That measure was 15% in 2020, similar to 2016 and 2018 levels.

Median DDL fell for the second consecutive year while the median value of DDL as a percentage of predisclosure market capitalization continued to oscillate between about 15% and 18%.

Figure 8: Median Disclosure Dollar Loss 2006–2020



Note: This figure begins including DDL associated with state 1933 Act filings in 2010. DDL associated with parallel class actions is only counted once.

Maximum Dollar Loss Index® (MDL Index®)

This index measures the aggregate annual MDL for all federal and state 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.

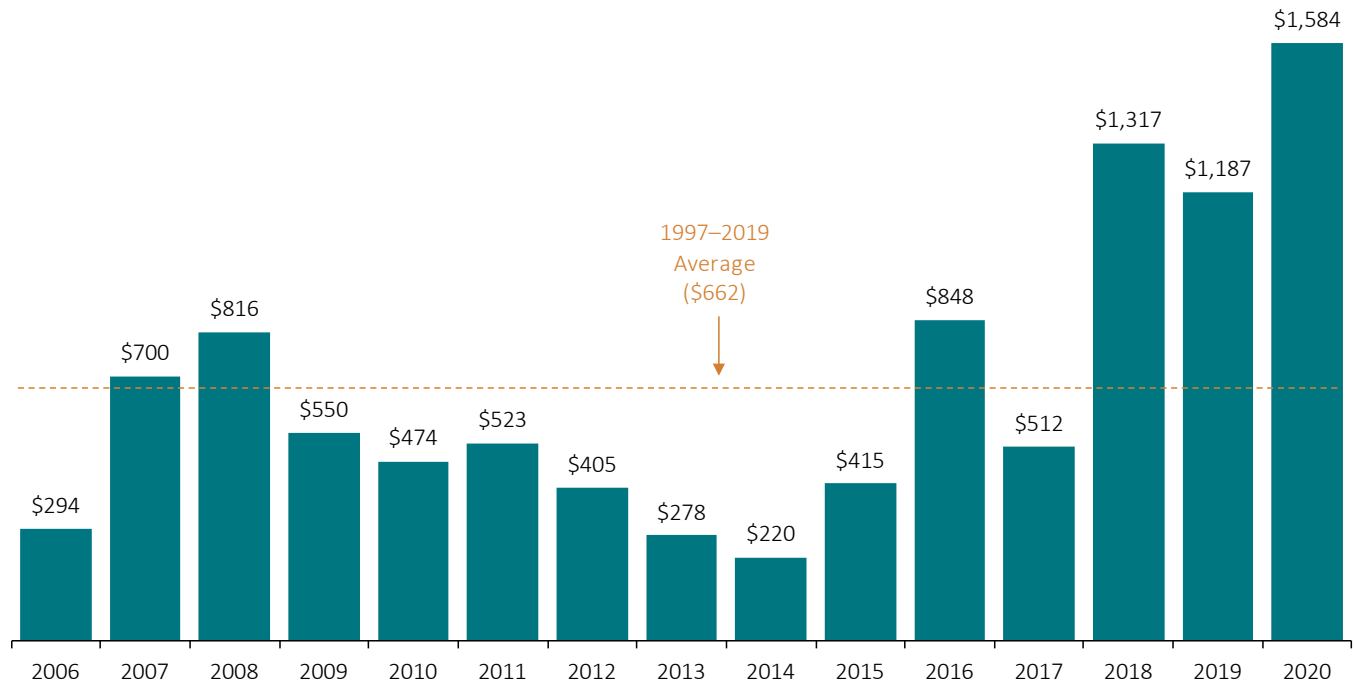
- The MDL Index reached \$1.6 trillion in 2020, the second-largest year on record, trailing only 2002. The 2020 MDL Index is well over twice the historical average. See Appendix 1 for MDL totals, averages, and medians from 1997 to 2020.

- There were 30 mega MDL filings in 2020, which accounted for \$1,309 billion, or 83%, of total MDL (see Figure 30).
- For the third consecutive year, there were at least 20 mega MDL filings, compared to the historical average of 14.

The MDL Index eclipsed \$1 trillion for a third consecutive year.

Figure 9: Maximum Dollar Loss Index® (MDL Index®) 2006–2020

(Dollars in Billions)



Note: This figure begins including MDL associated with state 1933 Act filings in 2010. MDL associated with parallel class actions is only counted once.

Classification of Federal Complaints

- Only 10% of core federal filings contained a Section 11 claim (down from 16% in 2019).
- Section 12(a) claims increased from 7% of core federal filings in 2019 to 11% in 2020.
- Allegations of misrepresentations in financial documents fell sharply from 98% in 2019 to only 90%, the lowest level over the last five years.
- For the fourth consecutive year, around a quarter of core federal filings included allegations related to accounting violations.

Section 11 claims were asserted in only 10% of core federal filings in 2020, down from 16% in 2019.

- Allegations of announced internal control weaknesses decreased from 10% to 7% of core federal filings.

Figure 10: Allegations Box Score—Core Federal Filings

| | Percentage of Filings ¹ | | | | |
|--|------------------------------------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| Allegations in Core Federal Filings² | | | | | |
| Rule 10b-5 Claims | 94% | 93% | 86% | 87% | 85% |
| Section 11 Claims | 12% | 12% | 10% | 16% | 10% |
| Section 12(a) Claims | 6% | 4% | 10% | 7% | 11% |
| Misrepresentations in Financial Documents | 99% | 100% | 95% | 98% | 90% |
| False Forward-Looking Statements | 45% | 46% | 48% | 47% | 43% |
| Trading by Company Insiders | 10% | 3% | 5% | 5% | 4% |
| Accounting Violations ³ | 30% | 22% | 23% | 23% | 27% |
| Announced Restatement ⁴ | 10% | 6% | 5% | 8% | 5% |
| Internal Control Weaknesses ⁵ | 21% | 14% | 18% | 18% | 18% |
| Announced Internal Control Weaknesses ⁶ | 7% | 7% | 7% | 10% | 7% |
| Underwriter Defendant | 7% | 8% | 8% | 11% | 9% |
| Auditor Defendant ⁷ | 2% | 0% | 0% | 0% | 0% |

Note:

1. The percentages do not add to 100% because complaints may include multiple allegations.
2. Core federal filings are all federal securities class actions excluding those defined as M&A filings.
3. First identified complaint (FIC) includes allegations 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 those standards.
4. FIC includes allegations of 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.
5. FIC includes allegations of internal control weaknesses over financial reporting.
6. FIC includes allegations of 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.
7. In each of 2018, 2019, and 2020, there was one filing with allegations against an auditor defendant.

U.S. Exchange-Listed Companies

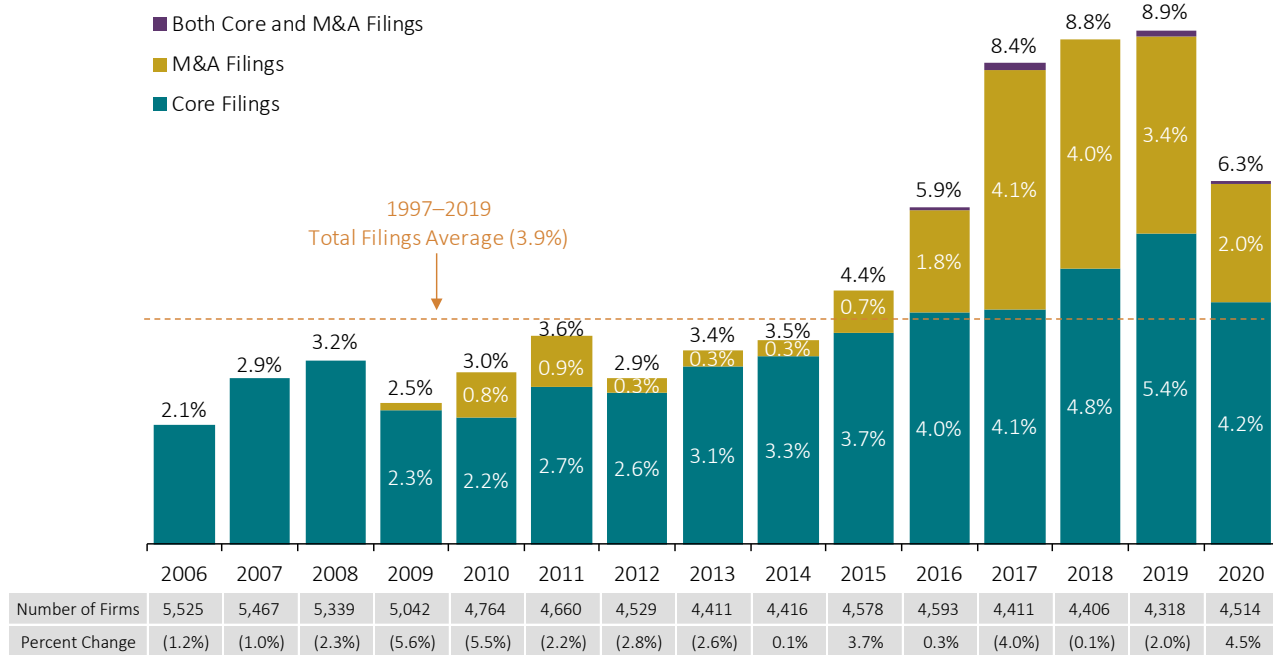
The percentage of companies subject to filings is calculated as the unique number of companies listed on the NYSE or Nasdaq subject to federal or state securities fraud class actions in a given year divided by the unique number of companies listed on the NYSE or Nasdaq in the same year.

- The percentage of companies subject to filings decreased for the first time in eight years, from a historic high of 8.9% in 2019 to 6.3% in 2020. This was also the largest one-year drop on record. Nonetheless, the 6.3% in 2020 remains well above the 1997–2019 average of 3.9%.

Although the likelihood of filings targeting U.S. exchange-listed companies dropped to its lowest level since 2016, it remained well above the historical average.

- The percentage of all companies subject to M&A filings decreased for the third consecutive year to 2.1%, but remained well above levels prior to 2016.
- Approximately one in 23 companies listed on U.S. exchanges was the subject of a core filing in 2020.

Figure 11: Percentage of U.S. Exchange-Listed Companies Subject to Federal or State Filings 2006–2020



Source: Securities Class Action Clearinghouse; Center for Research in Security Prices (CRSP)

Note:

- 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.
- 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 21 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 exchange listed-companies. In 2009, 2010, 2013, and 2015, these filings accounted for less than 0.1% of exchange-listed companies.
- 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 ADRs and listed on the NYSE or Nasdaq.
- This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. 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.

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 companies in the S&P 500 at the beginning of 2020, approximately one in 23 companies (4.4%) was a defendant in a core federal filing. This percentage is the lowest it has been since 2015. See Appendix 2A for percentage of companies by sector from 2001 to 2020.

The likelihood of an S&P 500 company being sued continued to decline after a decade high in 2018.

- The Consumer Staples, Industrials, and Communication Services/Telecommunications/Information Technology sectors all experienced large drops in the rate of federal filings compared to 2019.
- The companies in the Consumer Discretionary, Financials/Real Estate, and Utilities sectors have nearly the same or higher likelihoods of core federal filings this year compared to 2019, while rates in all other sectors have fallen, many of which are now the lowest they have been since 2015.
- Over the period 2011–2020, Energy/Materials is the only sector in which the percentage of companies subject to core federal filings (1.9% in 2020) has never risen above 5%.

Figure 12: Heat Maps of S&P 500 Securities Litigation™ Percentage of Companies Subject to Core Federal Filings

| | Average 2001–2019 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|-------------------|------|------|------|------|------|-------|------|-------|-------|------|
| Consumer Discretionary | 5.2% | 3.8% | 4.9% | 8.4% | 1.2% | 0.0% | 3.6% | 8.5% | 10.0% | 3.1% | 8.1% |
| Consumer Staples | 3.8% | 2.4% | 2.4% | 0.0% | 0.0% | 5.0% | 2.6% | 2.7% | 11.8% | 12.1% | 3.1% |
| Energy/Materials | 1.6% | 0.0% | 2.7% | 0.0% | 1.3% | 0.0% | 4.5% | 3.3% | 1.8% | 3.7% | 1.9% |
| Financials/Real Estate | 7.6% | 1.2% | 3.7% | 0.0% | 1.2% | 1.2% | 6.9% | 3.3% | 7.0% | 2.0% | 5.3% |
| Health Care | 9.1% | 2.0% | 1.9% | 5.7% | 0.0% | 1.9% | 17.9% | 8.3% | 16.1% | 12.9% | 6.3% |
| Industrials | 4.2% | 1.7% | 1.6% | 0.0% | 4.7% | 0.0% | 6.1% | 8.7% | 8.8% | 10.1% | 2.7% |
| Communication Services/ Telecommunications/ Information Technology | 6.5% | 7.1% | 3.8% | 9.1% | 0.0% | 4.2% | 6.8% | 8.5% | 12.7% | 10.0% | 2.0% |
| Utilities | 5.2% | 0.0% | 0.0% | 0.0% | 0.0% | 3.4% | 3.4% | 7.1% | 7.1% | 6.9% | 7.1% |
| All S&P 500 Companies | 5.5% | 2.6% | 3.0% | 3.4% | 1.2% | 1.6% | 6.6% | 6.4% | 9.4% | 7.2% | 4.4% |

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.
2. Sectors are based on the Global Industry Classification Standard (GICS).
3. Percentage of Companies Subject to New 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.
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 Facebook) were reclassified into the Communication Services sector.

- The percentage of total market capitalization of S&P 500 companies subject to core federal filings fell from 10% in 2019 to 4.3% in 2020. See Appendix 2B for market capitalization percentage by sector from 2001 to 2020.
- The percentage of companies in the Financials/Real Estate sector subject to core federal filings more than doubled relative to 2019, while the percentage of this sector's market capitalization subject to core federal filings increased more than sevenfold year-over-year.
- All sectors other than the Financials/Real Estate and Consumer Discretionary sectors saw a decrease in the percentage of market capitalization subject to core federal filings compared to 2019.

In six of the eight sectors, the percentage of market capitalization subject to core federal filings fell from the previous year.

Figure 13: Heat Maps of S&P 500 Securities Litigation™ Percentage of Market Capitalization Subject to Core Federal Filings

| | Average 2001–2019 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|-------------------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|
| Consumer Discretionary | 4.8% | 4.6% | 1.6% | 4.4% | 2.5% | 0.0% | 2.8% | 8.2% | 4.7% | 0.5% | 2.2% |
| Consumer Staples | 4.4% | 0.8% | 14.0% | 0.0% | 0.0% | 1.9% | 1.0% | 6.7% | 15.2% | 9.1% | 1.8% |
| Energy/Materials | 2.8% | 0.0% | 0.9% | 0.0% | 0.2% | 0.0% | 19.8% | 2.3% | 1.4% | 1.2% | 0.4% |
| Financials/Real Estate | 14.3% | 6.9% | 11.0% | 0.0% | 0.3% | 3.0% | 11.9% | 1.5% | 12.5% | 2.2% | 16.9% |
| Health Care | 12.3% | 0.7% | 0.8% | 4.4% | 0.0% | 3.1% | 13.2% | 2.7% | 26.3% | 6.6% | 4.7% |
| Industrials | 9.3% | 2.1% | 1.2% | 0.0% | 1.7% | 0.0% | 8.7% | 22.3% | 19.4% | 21.6% | 4.9% |
| Communication Services/ Telecommunications/ Information Technology | 10.4% | 13.4% | 2.2% | 16.6% | 0.0% | 7.0% | 12.3% | 4.4% | 19.4% | 18.0% | 1.6% |
| Utilities | 6.1% | 0.0% | 0.0% | 0.0% | 0.0% | 3.7% | 4.4% | 9.6% | 6.5% | 7.9% | 6.6% |
| All S&P 500 Companies | 9.0% | 5.0% | 4.3% | 4.7% | 0.6% | 2.8% | 10.0% | 6.1% | 14.9% | 10.0% | 4.3% |



Note:

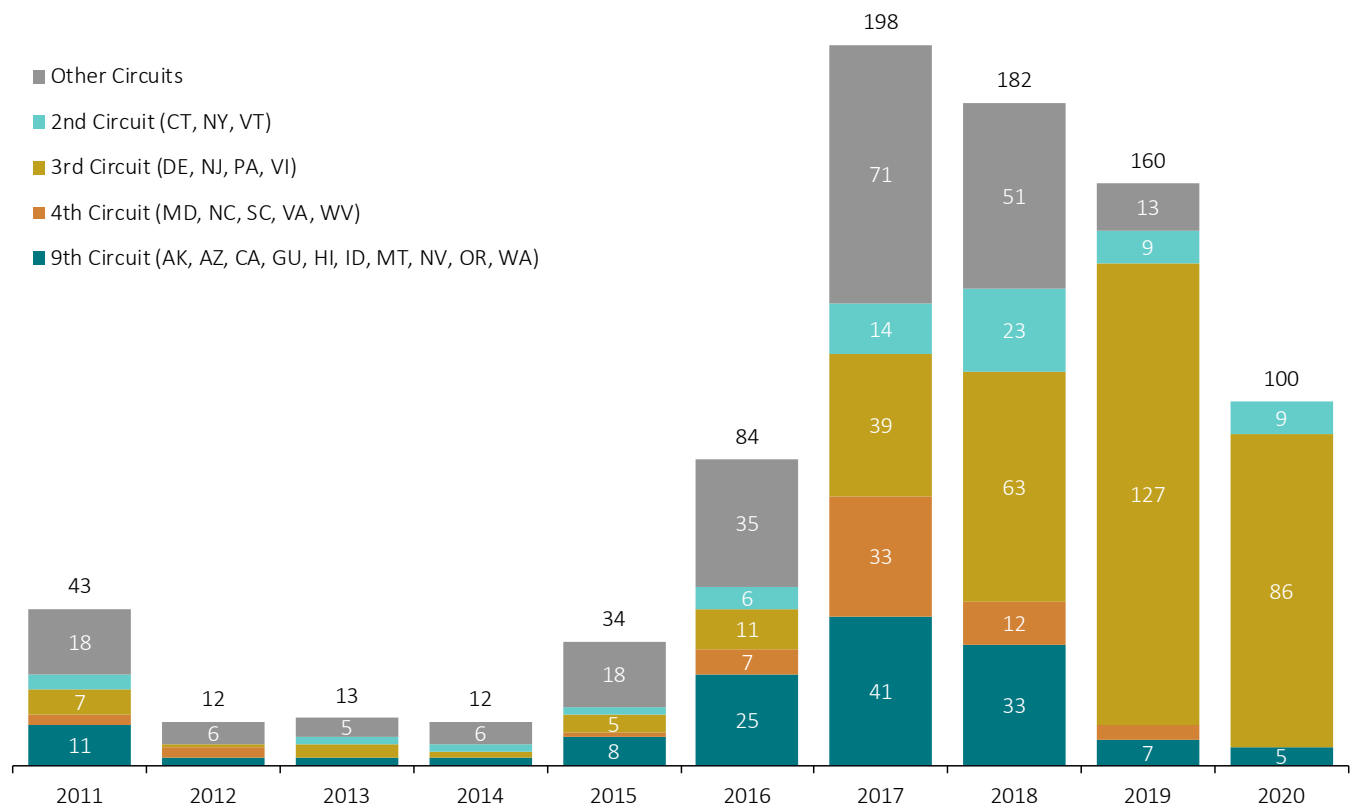
1. The figure is based on the composition of the S&P 500 as of the last trading day of the previous year.
2. Sectors are based on the Global Industry Classification Standard (GICS).
3. Percentage of Market Capitalization Subject to New Filings equals the market capitalization of companies subject to 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 Facebook) were reclassified into the Communication Services sector.

M&A Filings by Federal Circuit

- In January 2016, the Delaware Court of Chancery rejected a disclosure-only settlement in Zillow’s acquisition of Trulia.¹ This appears to have resulted in some venue shifting for M&A lawsuits from state to federal courts.
- There were 100 federal M&A filings in 2020, the fewest since 2016.
- Of all M&A filings in 2020, 86% were in the Third Circuit, the highest percentage attributable to one circuit since tracking began in 2009. All of these filings were brought in Delaware federal courts.
- There were no M&A filings in circuits other than the Second, Third, and Ninth Circuits. This is the first time this has occurred, and only the third time that there were no filings in the Fourth Circuit since tracking began.
- Of total filings in the Third Circuit in 2020, 78% were M&A filings, by far the highest percentage of any circuit.

86% of M&A filings in 2020 occurred in Delaware courts.

Figure 14: Annual M&A Filings by Federal Circuit 2011–2020



Note: The Securities Class Action Clearinghouse began tracking M&A filings as a separate category in 2009.

1. See *In re Trulia Inc. Stockholder Litigation*, C.A. No. 10020-CB (Del. Ch. Jan. 22, 2016), <http://courts.delaware.gov/opinions/download.aspx?ID=235370>.

Most Frequent Plaintiff Counsel on M&A Filings in Federal Courts

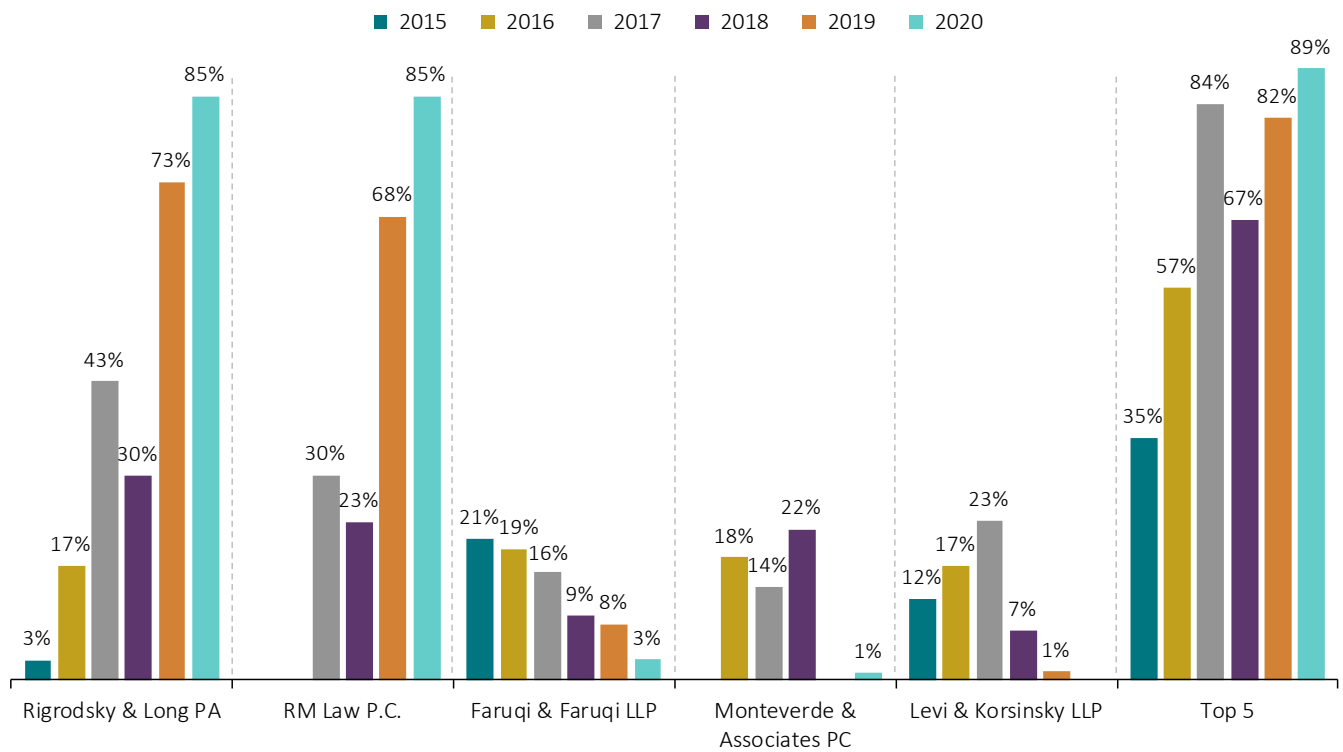
This analysis shows the five plaintiff firms listed most frequently on federal first identified M&A complaints against a given company from 2015 through 2020. Each instance in which they are counsel or co-counsel on a first identified complaint is presented.

- There were 100 M&A filings in federal courts in 2020. These five plaintiff firms were listed as counsel or co-counsel on 89 first identified complaints.
- The shares of first identified complaints filed by Faruqi & Faruqi LLP, Monteverde & Associates PC, and Levi & Korsinsky LLP—frequent filers in some of the prior years—have fallen dramatically, and are each under 4% of total federal M&A filings.

At least one of the top five firms was listed as plaintiff counsel or co-counsel on 89% of first identified M&A complaints in 2020.

- Rigrodsky & Long PA and RM Law P.C. have commonly been co-counsel. They were co-counsel on all 85 of their filings and were responsible for an absolute majority of federal first identified M&A complaints in 2020.
- Since 2015, at least one of these five plaintiff firms has been listed as counsel or co-counsel on 75% of M&A filings.

Figure 15: Most Frequent Plaintiff Counsel or Co-counsel on M&A Filings 2015–2020



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

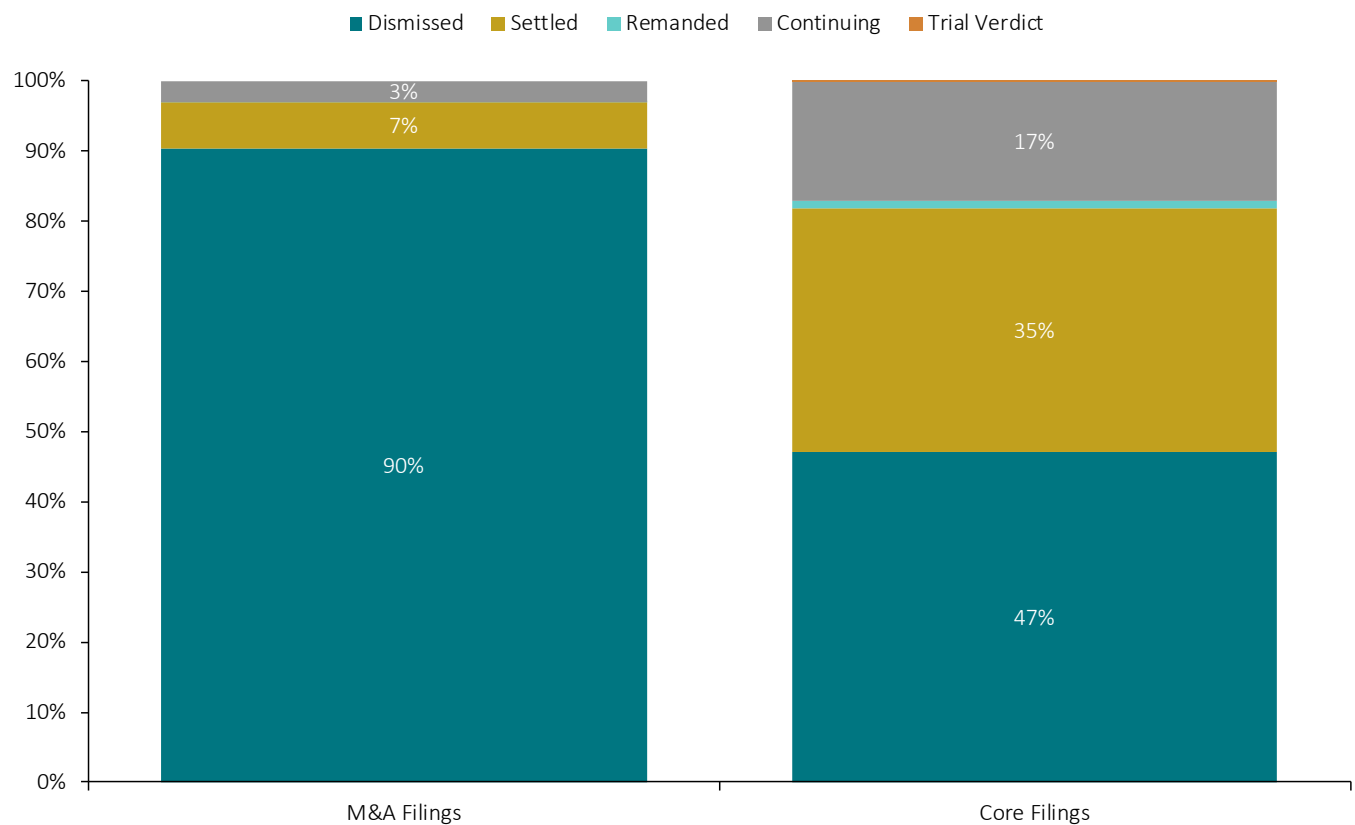
Note: These firms are the top five most frequent firms listed on first identified complaints from 2015 through 2020, not necessarily the five most frequent filers in each year. More than one plaintiff law firm can be listed on the first identified complaint. Therefore, the sums of individual filer shares presented may exceed the share of filings involving any one of the top five plaintiff firms.

Status of M&A Filings in Federal Courts

- There were 777 M&A filings between 2010 and 2019, compared to 1,763 core federal filings over the same period.
- From 2010 to 2019, about 97% of M&A filings were resolved as compared to about 82% of core filings.
- M&A filings exhibited settlement rates 28 percentage points below core federal filings. On the other hand, M&A filings exhibited dismissal rates 43% above (almost double) core federal filings. See Appendix 3 for a year-by-year overview of M&A and core filings status.

M&A filings were dismissed at a much higher rate and settled at a much lower rate than core federal filings.

Figure 16: Status of M&A Filings Compared to Core Federal Filings 2010–2019



Note:

1. The Securities Class Action Clearinghouse began tracking M&A filings as a separate category in 2009.
2. The 2020 filing cohort is excluded since a large percentage of cases are ongoing.
3. Since 2010, there have only been two cases tried to a verdict, both of which were core filings. One of these cases settled after trial and is categorized as settled in the data.
4. Percentages may not sum to 100% due to rounding.

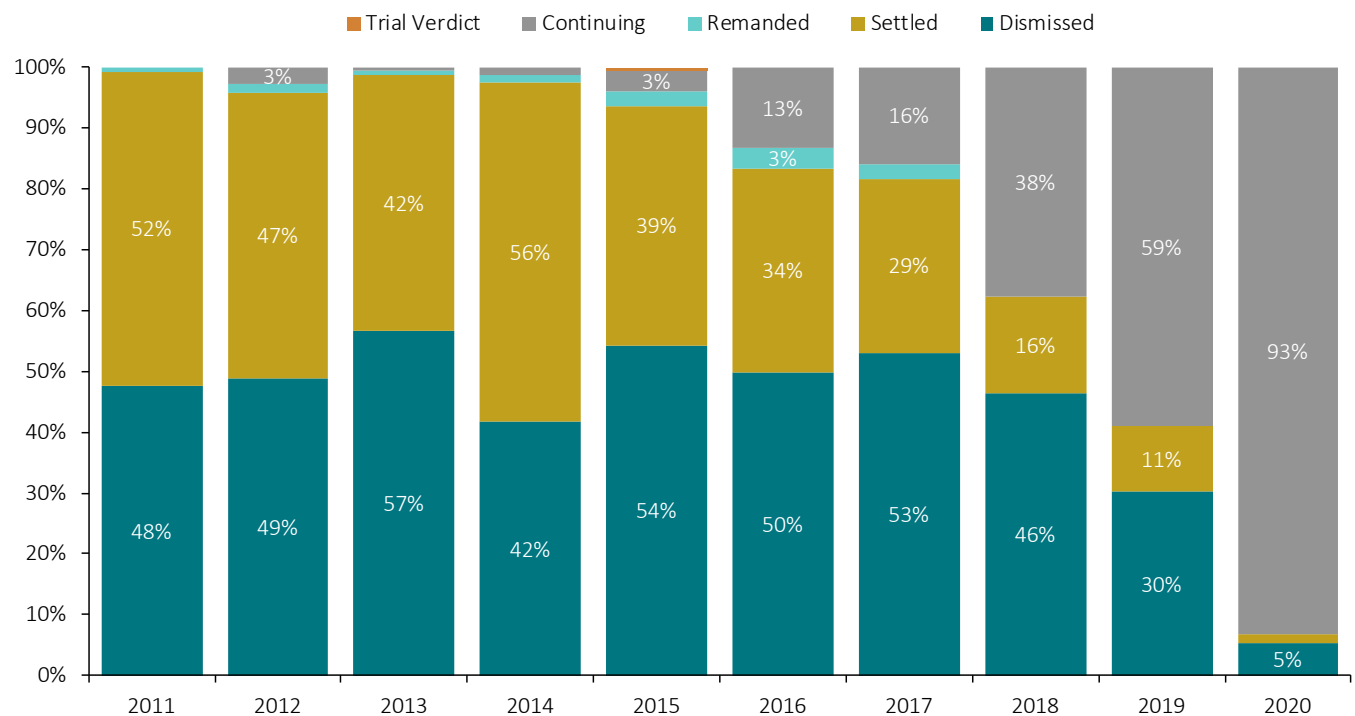
Status of Core Federal Securities Class Action Filings

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 trial verdict.

The dismissal rate for the 2018 core federal filings cohort is currently nearly half of all cases, despite 38% of cases still continuing.

- From 1997 to 2020, 46% of core federal filings were settled, 42% were dismissed, less than 1% were remanded, and 11% are continuing. During this time, only 0.4% of core federal filings (or 19 cases) reached trial, and 0.2% (11 cases) were tried to a verdict.
- Recent annual dismissal rates have been closer to 50%. From 2011 to 2018 the cohorts with the most divergent dismissal rates were 2014 (at 42%) and 2013 (at 57%).
- More recent cohorts have too many ongoing cases to determine their ultimate dismissal rates. However, the 2017 cohort will end up having a dismissal rate of at least 53%.

Figure 17: Status of Filings by Year—Core Federal Filings 2011–2020



Note:

1. Percentages may not sum to 100% due to rounding.
2. Since 2010, there have only been two cases tried to a verdict, both of which were core filings. One of these cases settled after trial and is categorized as settled in the data.
3. Since 2001, 14 cases have gone to trial. Since *Halliburton II* was decided on June 30, 2014, only one case has gone to trial.

1933 Act Cases Filed in State Courts

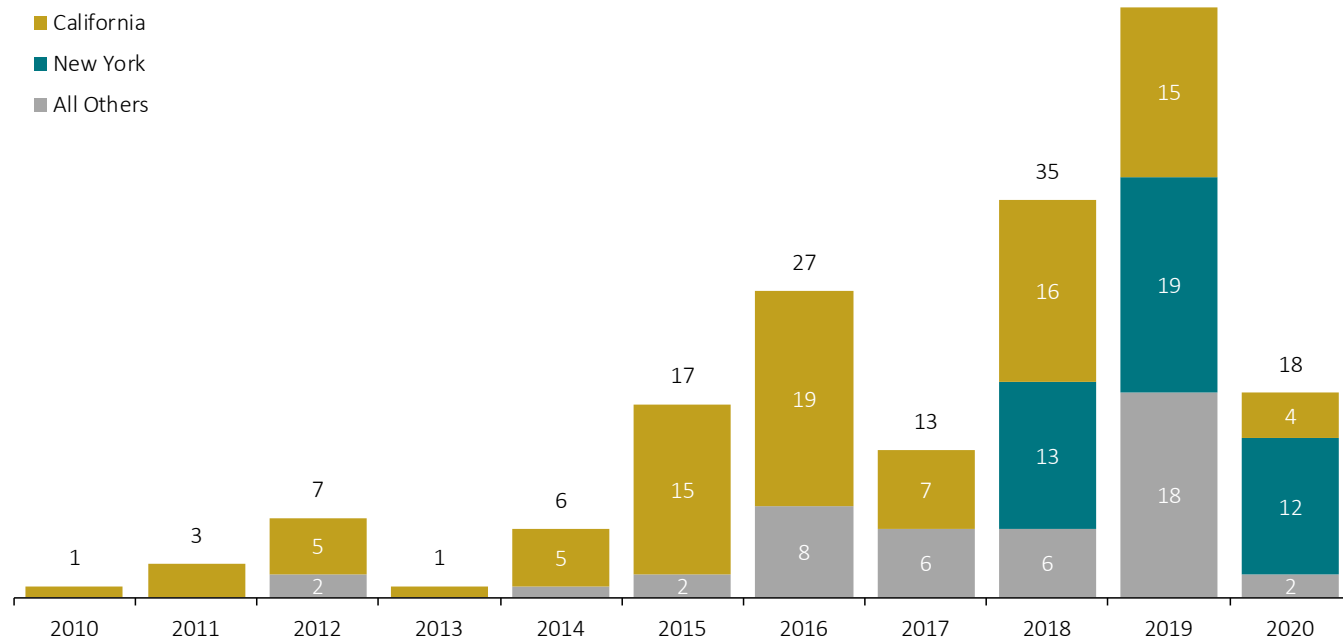
The following data include 1933 Act filings in California, New York, and other state courts. Filings from prior years are added retrospectively when identified. These filings may include Section 11, Section 12, and Section 15 claims, but do not include Rule 10b-5 claims.

- In 2020, the number of state 1933 Act filings dropped dramatically with only four filings in California state courts, 12 filings in New York state courts, and only two filings in other state courts.

- Filings in New York state courts accounted for the vast majority of state filings in 2020.
- State filings in states outside of New York and California dropped to the lowest level since 2015. Massachusetts and Ohio each accounted for one state filing.

State 1933 Act filing activity decreased by 65% from 2019, driven largely by reduced filings in state courts outside of New York.

Figure 18: State 1933 Act Filings by State 2010–2020



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

Note:

1. 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 3, 4, 20, or 22.
2. All Others contains filings in Alabama, Arizona, Colorado, Florida, Georgia, Illinois, Iowa, Massachusetts, Michigan, Nevada, New Hampshire, New Jersey, Ohio, Oregon, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, Washington, West Virginia, and Wisconsin.
3. 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.

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

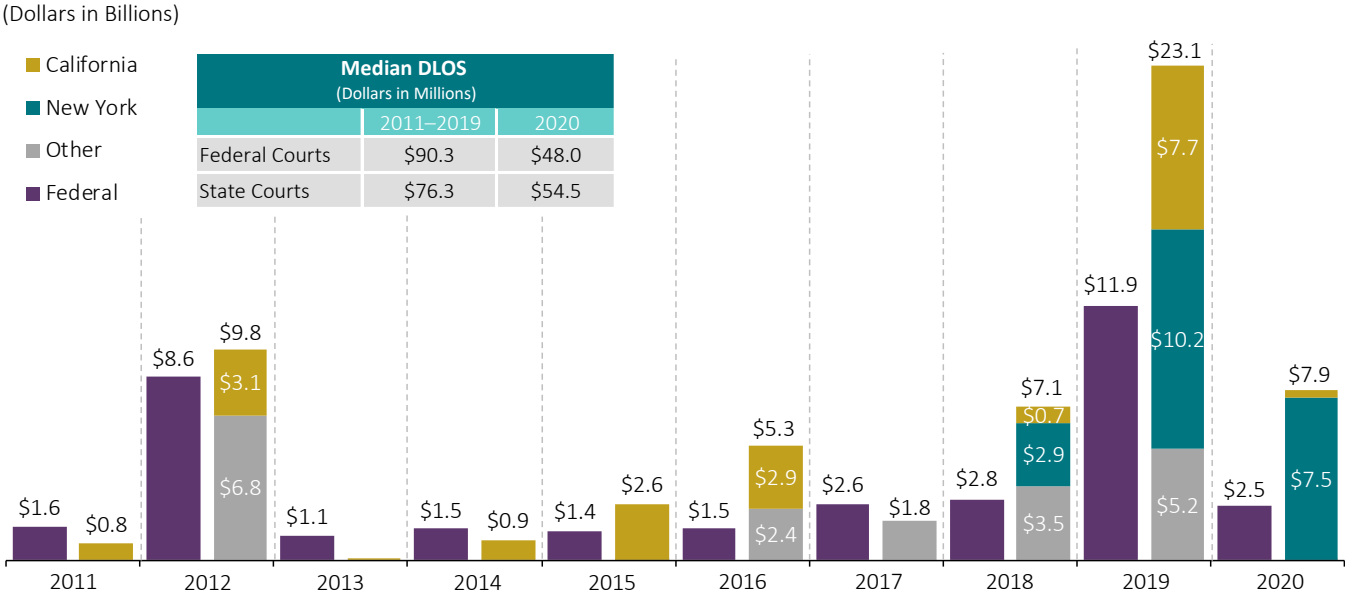
This analysis calculates the loss of market value of class members’ shares offered in securities issuances that are subject to 1933 Act claims. It is calculated as the shares offered at issuance (e.g., in an initial public offering (IPO), a seasoned equity offering (SEO), or a corporate merger or spinoff)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

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.

In 2020, the Dollar Loss on Offered Shares for filings in New York was nearly three times the amount in all federal courts, a first for any state.

- While total DLOS for federal filings fell below the 2011–2019 average of \$3.7 billion, total DLOS for state 1933 Act filings was above the 2011–2019 average of \$5.7 billion.
- In 2020, 1933 Act filings in New York accounted for 95% of all state 1933 Act DLOS, the highest percentage for any one state since 2015.

Figure 19: Dollar Loss on Offered Shares™ (DLOS Index™) for Federal Section 11–Only and State 1933 Act Filings 2011–2020



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

1. 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.
2. 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.

Comparison of Federal Section 11 Filings with State 1933 Act Filings

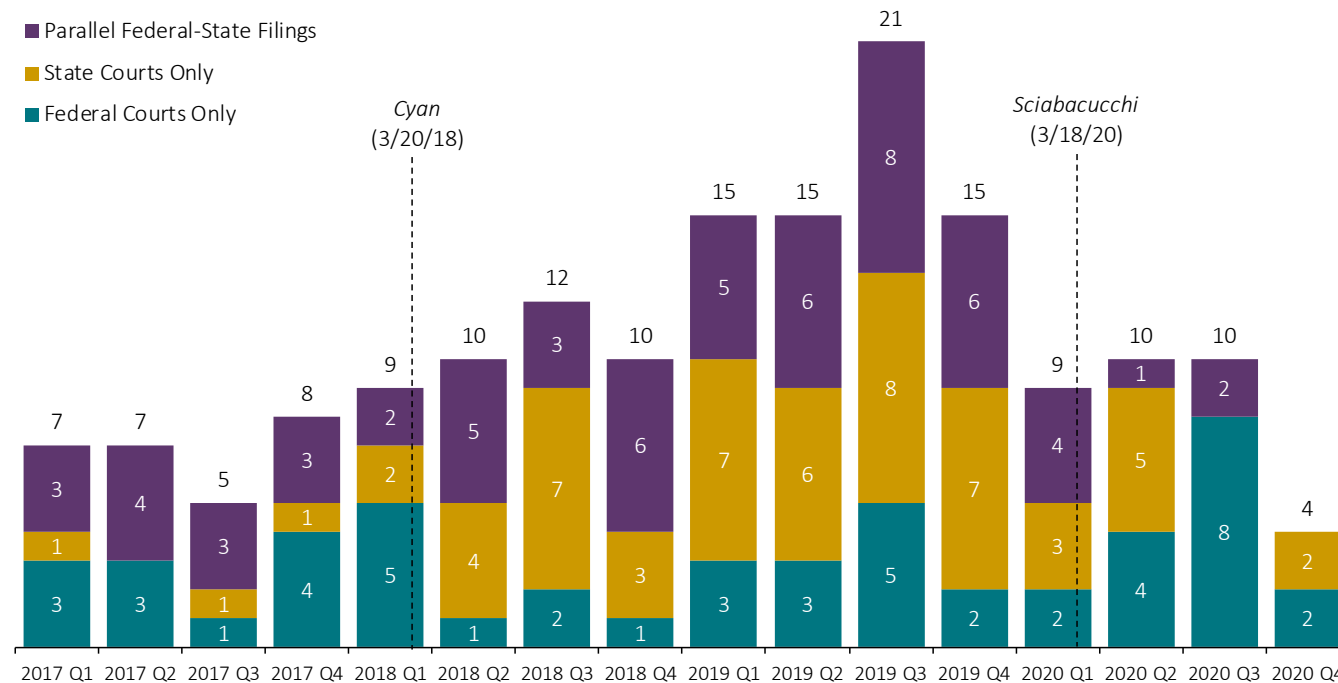
The figure below is a combined measure of Section 11 filing activity in federal courts and 1933 Act filings in state courts. It highlights parallel (or related) class actions in federal and state courts.

- Following *Cyan* but before the *Sciabacucchi* decision (i.e., 2018 Q2–2019 Q4), 43% were state-only filings and 40% were parallel filings. However, since *Sciabacucchi*, the percentage of state-only filings decreased to 29%, and the percentage of parallel filings decreased to 13%. During this same period, federal-only filings increased from 17% to 58%.

- In 2020, the combined number of federal Section 11 filings and state 1933 Act filings was 33, a 50% decrease from 2019. This consisted of seven parallel filings, 10 state-only filings, and 16 federal-only filings.
- Overall, the decrease in these filings can be attributed to decreases in parallel and state-only filings.

The third quarter of 2020 had the largest quarterly number of federal-only Section 11 filings since 2011, likely the effect of the Sciabacucchi decision.

Figure 20: Quarterly Federal Section 11 and State 1933 Act Filings 2017–2020



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

Note:

- The federal Section 11 filings displayed may include Rule 10b-5 claims, but state 1933 Act filings do not.
- This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. When parallel cases are filed in different quarters, 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 18 or 21.
- 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.

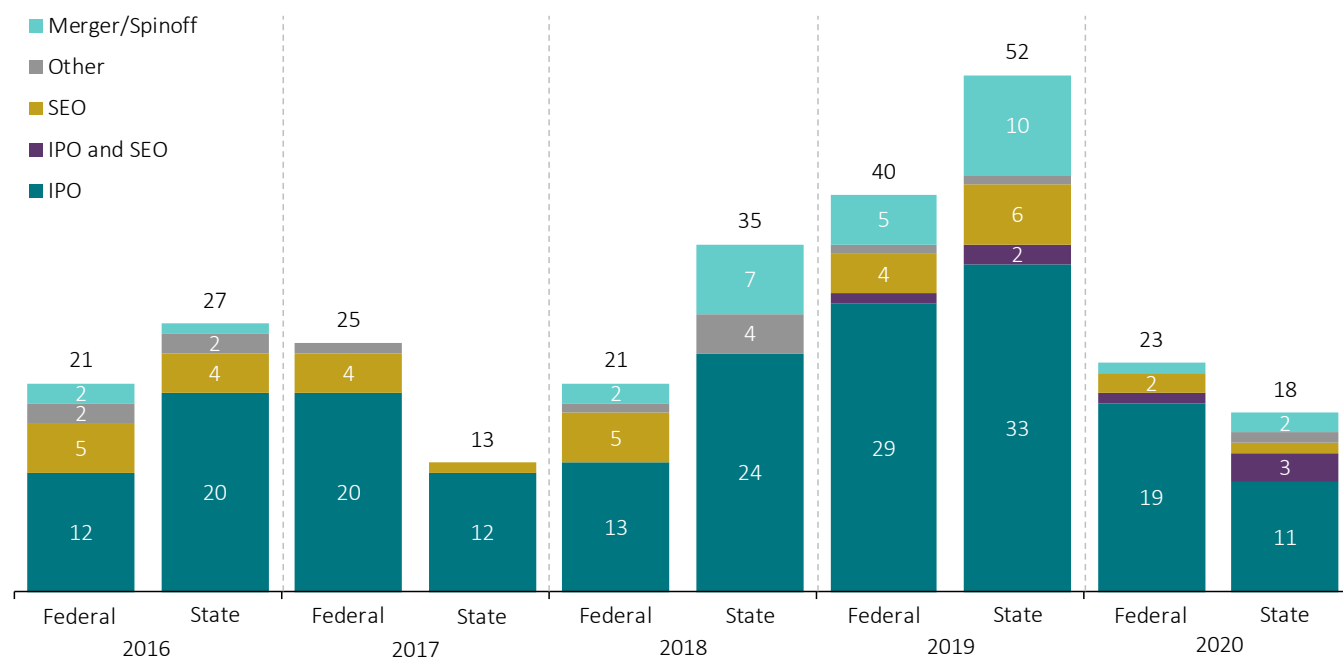
Type of Security Issuance Underlying Federal Section 11 and State 1933 Act Filings

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.

Filings related to mergers and spinoffs in both federal and state courts fell from last year's all-time high.

- Filings related to mergers and spinoffs fell substantially in 2020, from 10 to two in state courts and from five to one in federal courts. It is unclear how long this low level of merger-related filings will last given the likely increase in stock-for-stock mergers associated with SPACs. See discussion of IPOs and SPACs on the following page and on page 35.

Figure 21: Federal Section 11 and State 1933 Act Class Action Filings by Type of Security Issuance 2016–2020



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 3, 4, 20, or 22.
- The federal Section 11 data displayed may contain Rule 10b-5 claims, but state 1933 Act filings do not.
- 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.
- 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.

IPO Activity and Federal Section 11 and State 1933 Act Filings

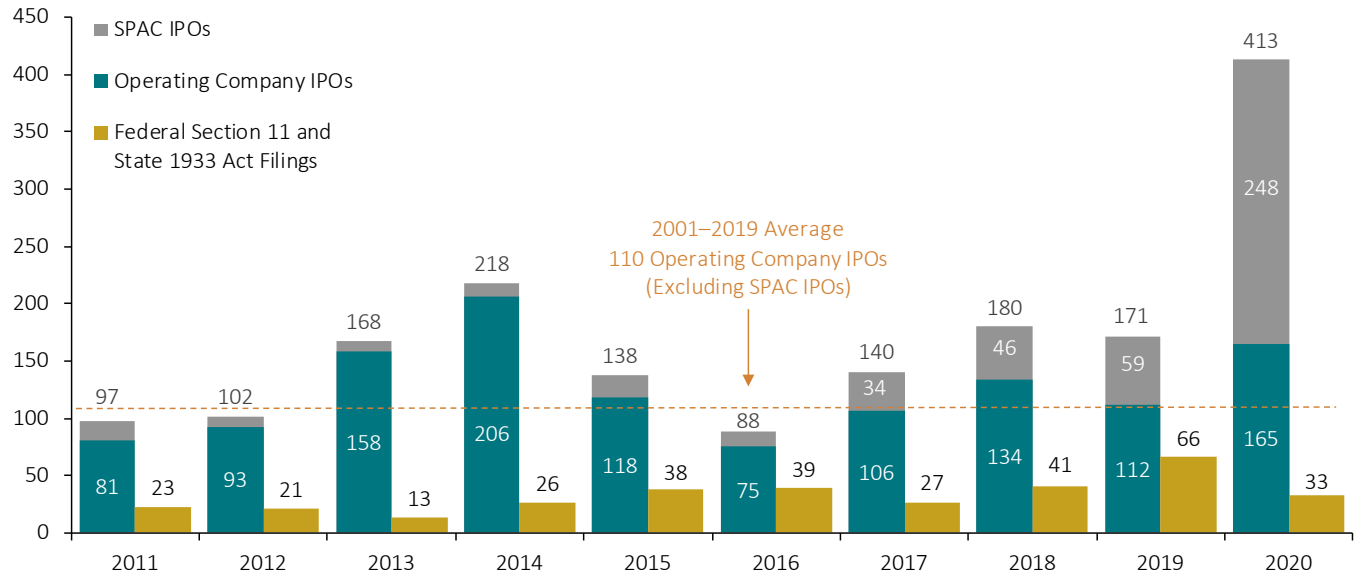
This figure compares IPO activity (operating company IPOs and SPAC IPOs) with counts of federal Section 11 and state 1933 Act filings.

- With 165 IPOs, the number of operating company IPOs increased 47% from 2019 to 2020, the largest percentage increase since 2013, and 50% above the 2001–2019 average of 110 operating company IPOs.
- Although historically SPACs have represented only a small portion of IPOs, in 2020 the number of SPAC IPOs more than quadrupled, increasing from 59 to 248.
- Generally, heavier IPO activity appears to be correlated with increased levels of federal Section 11 and state 1933 Act filings in ensuing years. Although the number of operating company IPOs increased to 165 from 112 in 2020, the number of federal Section 11 and state 1933 Act filings decreased from 66 to 33.

While the number of IPOs rose in 2020, filings with 1933 Act claims fell for the first time since 2017.

- In addition to the effect of the *Sciabacucchi* decision, 1933 Act filings were less numerous perhaps due to the fact that market declines in the first quarter of 2020 were driven by the COVID-19 pandemic—which was presumably unanticipated at the time of prior public offerings, followed by overall favorable market conditions beginning in April 2020—and the fact that a majority of IPOs occurred in the second half of 2020. The boom of SPACs in 2020 may lead to substantial future litigation.

Figure 22: Number of IPOs on Major U.S. Exchanges and Number of Filings of Federal Section 11 and State 1933 Act Claims 2011–2020



Source: Jay R. Ritter, “Initial Public Offerings: Updated Statistics,” University of Florida, January 10, 2021

Note:

1. 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).
2. SPAC IPOs include unit and non-unit SPAC IPOs, as defined by Professor Ritter.
3. This figure presents combined federal and state data. Filings in federal courts may have parallel cases filed in state courts. 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 18 or 21. The federal Section 11 cases displayed may include Rule 10b-5 claims, but state 1933 Act filings do not.

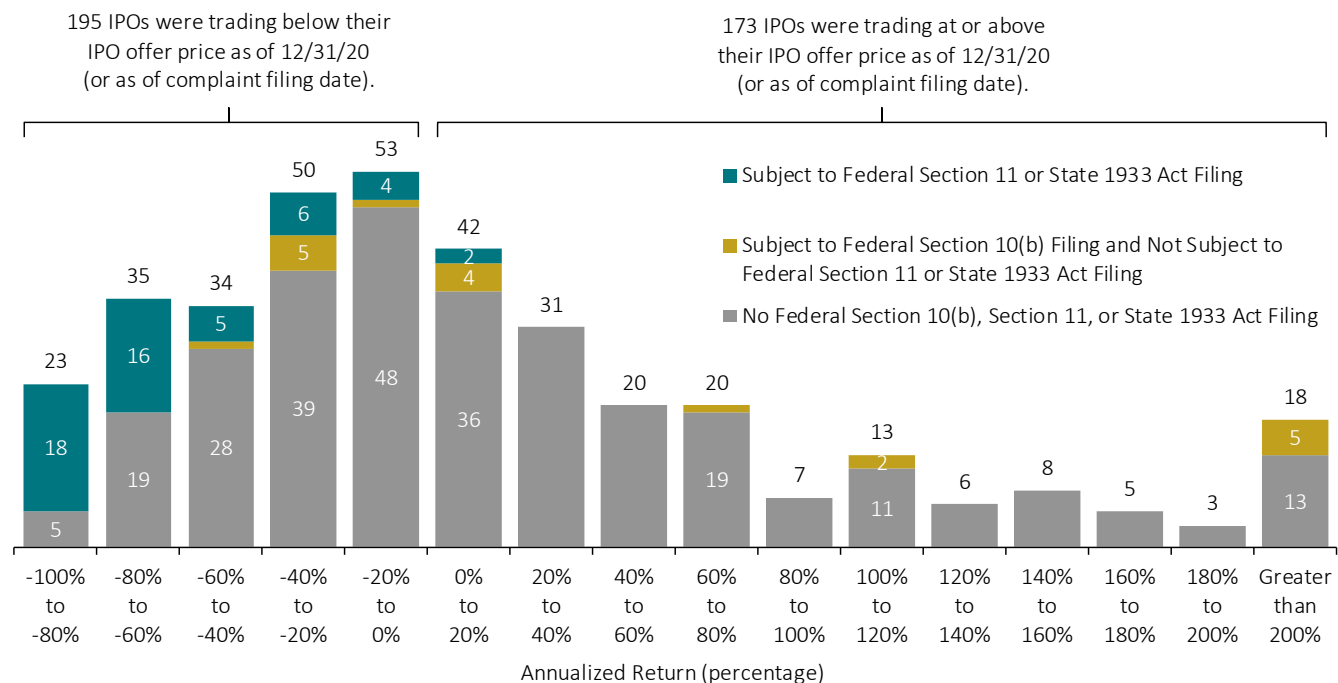
Performance of Recent IPOs

This analysis explores the relationship between a company's performance following its IPO and the degree to which these companies were the subject of a federal Section 11 filing, state 1933 Act filing, or federal Section 10(b) filing. IPOs from January 2018 to December 2019 are analyzed. The performance of these IPOs is evaluated through December 2020.

Fifty-one of 380 companies (13%) that undertook an IPO between January 2018 and December 2019 were later subject to a federal Section 11 or state 1933 Act filing.

- Post-IPO performance indicates that 53% of all companies that had undertaken an IPO and had not been delisted since January 2018 were trading below their IPO offer price at the time of a securities fraud complaint or as of December 31, 2020. Twelve companies were delisted as of December 31, 2020.
- Perhaps not surprisingly, companies with poorer post-IPO returns were more likely to be the target of a federal Section 11 or state 1933 Act filing.
- Nearly all (49 out of 51) companies that were subject to a federal Section 11 or state 1933 Act filing were trading below their IPO offer price as of the complaint filing date.

Figure 23: Performance of Recent IPOs 2018–2019



Source: Nasdaq; Bloomberg Law; ISS' SCAS; Refinitiv Eikon
Note:

1. IPOs examined exclude special-purpose acquisition companies, blank-check companies, and companies that were delisted or acquired before December 31, 2020. Bars without a number label represent one filing. Companies that were subject to a federal Section 11 filing or state 1933 Act filing have their returns calculated as the most recent closing stock price as of the complaint filing date, divided by the split-adjusted IPO offer price, minus one. Otherwise, returns are calculated as the closing stock price on December 31, 2020, divided by the split-adjusted IPO offer price, minus one. Returns are then annualized using the following formula: $\text{annualized return} = (1 + \text{nominal return})^{1 / \text{return period in years}}$. For simplicity, this analysis does not account for dividends.

2. The median lag between the IPO date and the date of an IPO-related Section 11 or state 1933 Act filing from 2010 to 2019 was roughly nine months (see Figure 24). The sample is therefore restricted to IPOs before December 31, 2019, one year before the publication of this report, to account for IPO filing lag.

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

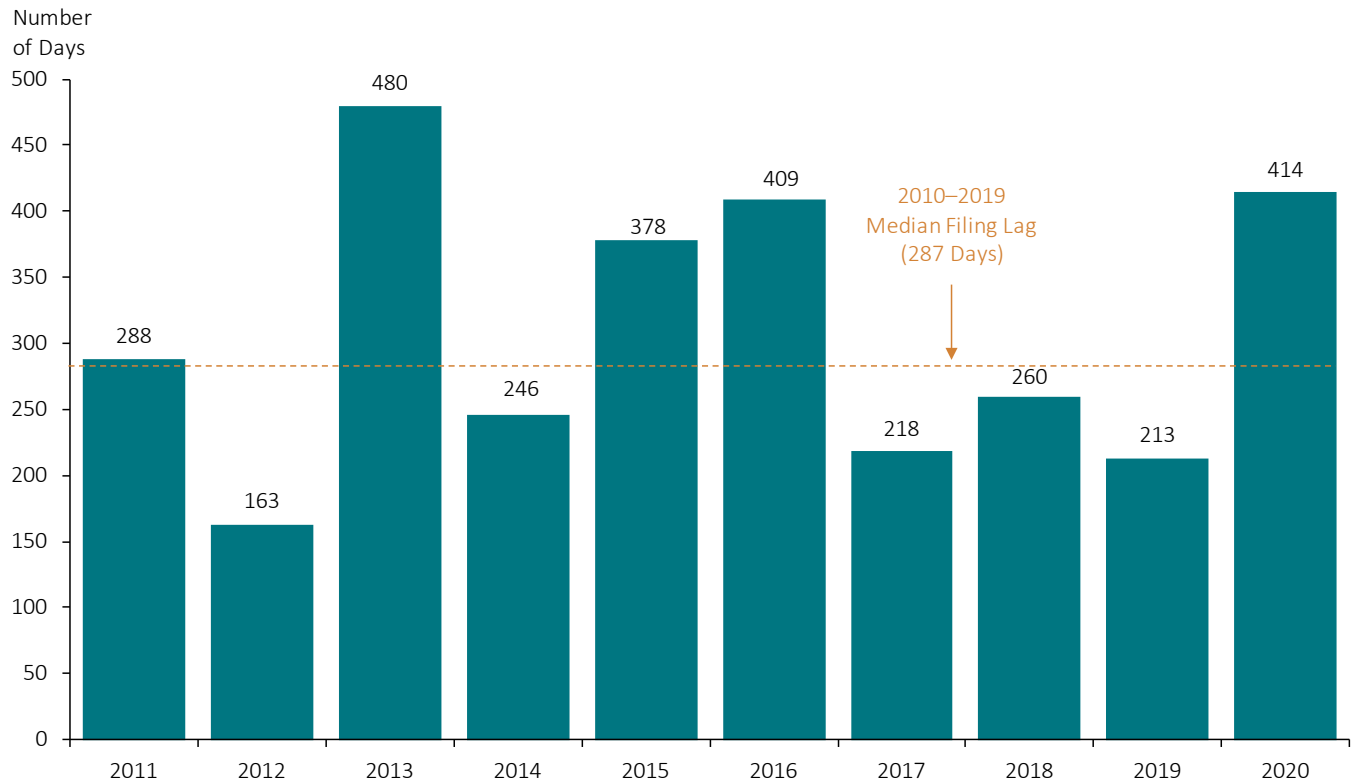
This analysis reviews the number of days between the IPO of a company and the filing date of a federal Section 11 or state 1933 Act securities class action.

- The IPO filing lag has varied substantially since 2010, but is fairly centered around the median filing lag of 287 days.
- The IPO filing lag grew 94% relative to 2019.

- 2020 is the first year to have an IPO filing lag greater than the 2010–2019 median filing lag since 2016.

During the period 2010–2019, the median filing lag for an IPO subject to a federal Section 11 or state 1933 Act claim was roughly nine months.

Figure 24: Lag between IPO and Federal Section 11 and State 1933 Act Filings 2011–2020



Note:

1. 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.
2. Year refers to the year in which the complaint was filed.

IPO Litigation Likelihood

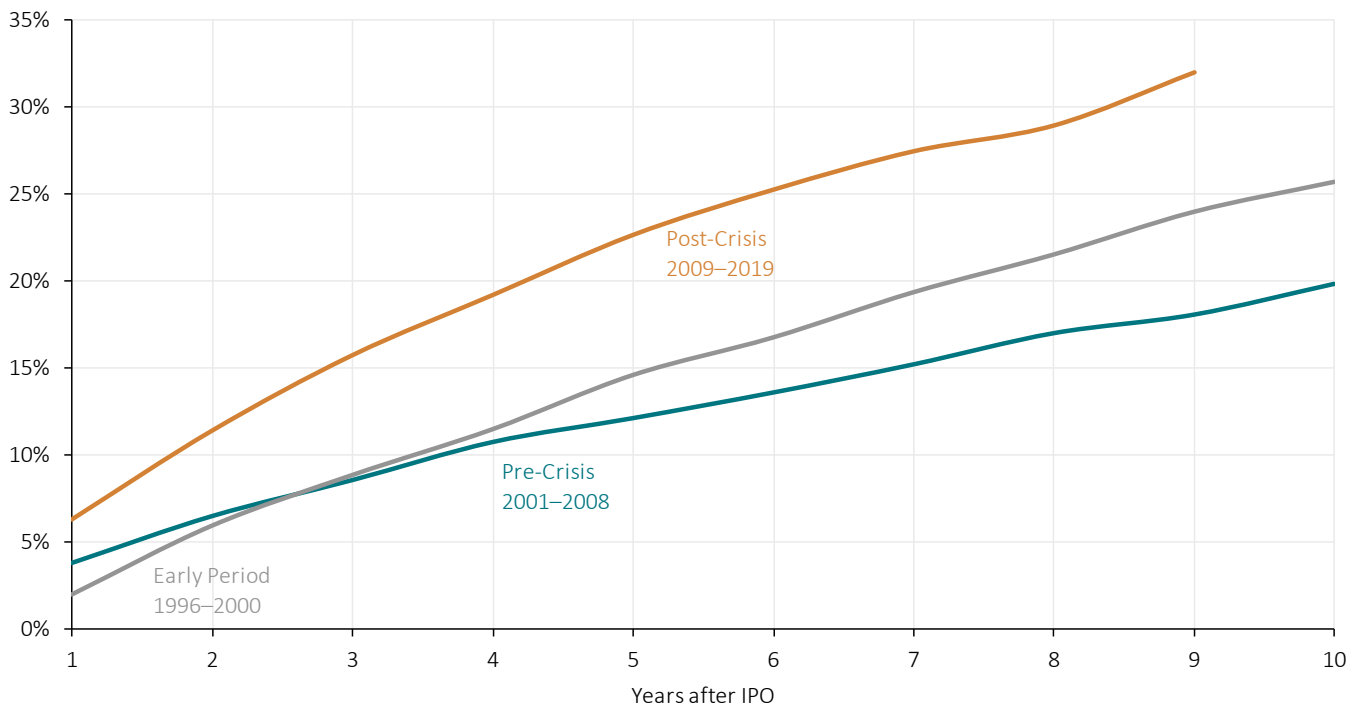
This figure compares the cumulative litigation exposure of IPOs to core federal and state 1933 Act filings since the 2008 credit crisis (post-crisis: 2009–2019) with two other groups of IPOs—core federal filings prior to the credit crisis (pre-crisis: 2001–2008) and prior to the dot-com collapse (early period: 1996–2000). 1933 Act filings exclusively in state courts enter into this analysis beginning in 2010.

- Post-crisis IPOs have faced higher litigation exposure in the first few years after an offering than IPOs in prior periods. For example, 19.2% of post-crisis IPOs have been subject to a core filing within four years of the IPO, compared to 10.8% for the pre-crisis cohort and 11.5% for the early period cohort.

IPOs from 2009 through 2019 have been subject to litigation at a steadily higher rate than earlier cohorts.

- For each IPO grouping, the incremental litigation exposure generally decreased with each year further removed from the IPO. See Appendix 5 for incremental exposure litigation values.

Figure 25: Likelihood of Litigation against Recent IPOs—Core Filings
2009–2019 IPOs versus Prior-Period IPOs



Source: Jay R. Ritter, “Founding Dates for Firms Going Public in the U.S. during 1975–2020,” University of Florida, January 2020; CRSP

Note:

1. Cumulative litigation exposure measures the probability that a surviving company will be a defendant in at least one securities class action during the analysis period. For a detailed explanation about the methodology, see Cornerstone Research, *Securities Class Action Filings—2014 Midyear Assessment*, page 10 and Appendix 3.
2. The post-crisis IPO cumulative litigation exposure is not presented for 10 years after the IPO due to limited data for cohorts with an IPO date toward the end of this period.
3. State 1933 Act filings enter into this analysis beginning in 2010.

Federal Filing Lag

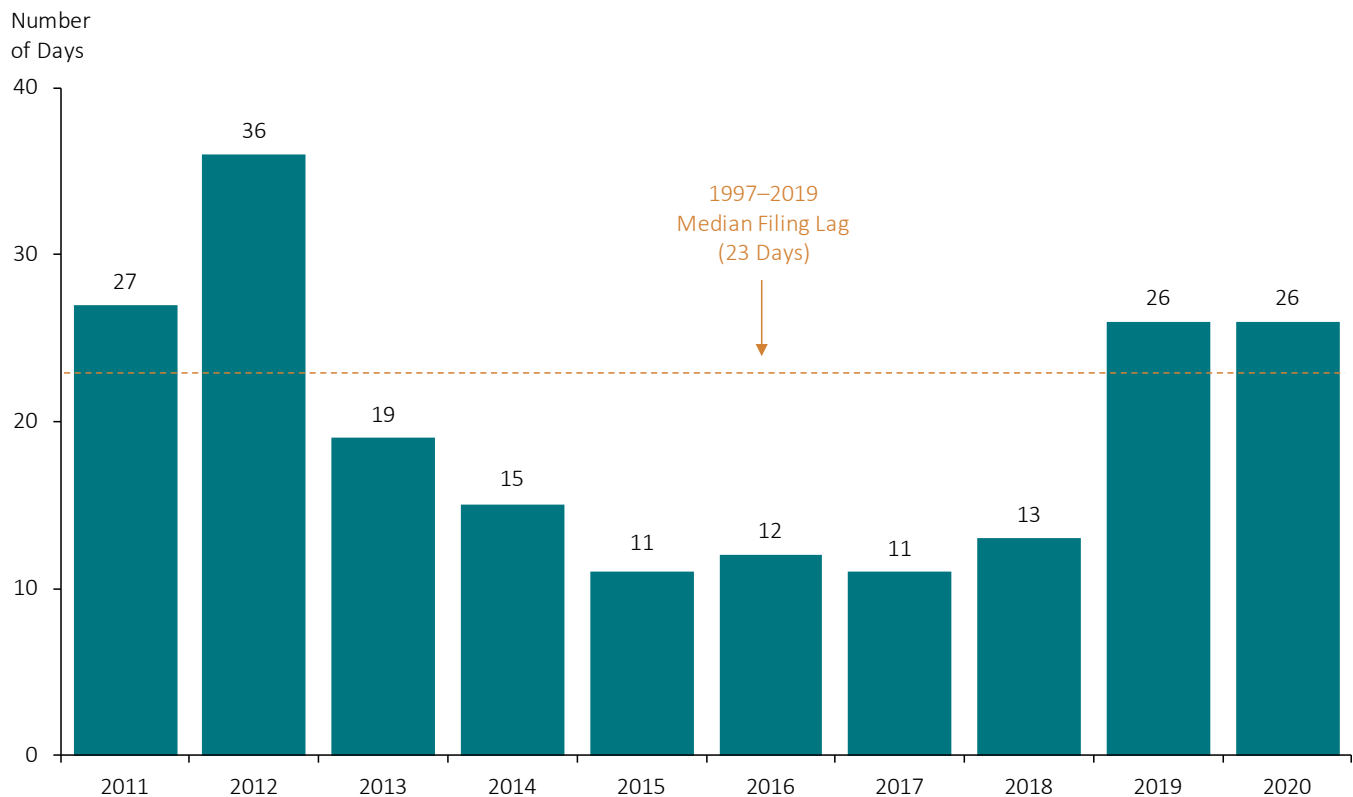
This analysis considers the number of days between the end of the class period and the filing date of a core federal securities class action.

- The median filing lag in 2020 remained at 26 days, which is slightly above the historical median value.
- From 2015 to 2018, the median filing lag fluctuated between 11 and 13 days.
- A comparison of MDL and DDL data with filing lag data indicates that, in 2020, filings with a lag greater than the median (26 days) had median MDL and DDL values that were more than double the median MDL and DDL values for filings with a lag lower than the median.

- The median filing lag for the three plaintiff firms listed most frequently on federal first identified complaints was 14 days, much lower than that for all other plaintiff firms (34 days).

The median filing lag in 2020 was 26 days, unchanged from 2019.

Figure 26: Annual Median Lag between Class Period End Date and Filing Date—Core Federal Filings 2011–2020



Note: This analysis excludes filings with only Section 11 claims and filings related to initial coin offerings or cryptocurrency because there is often no specified end of the class period.

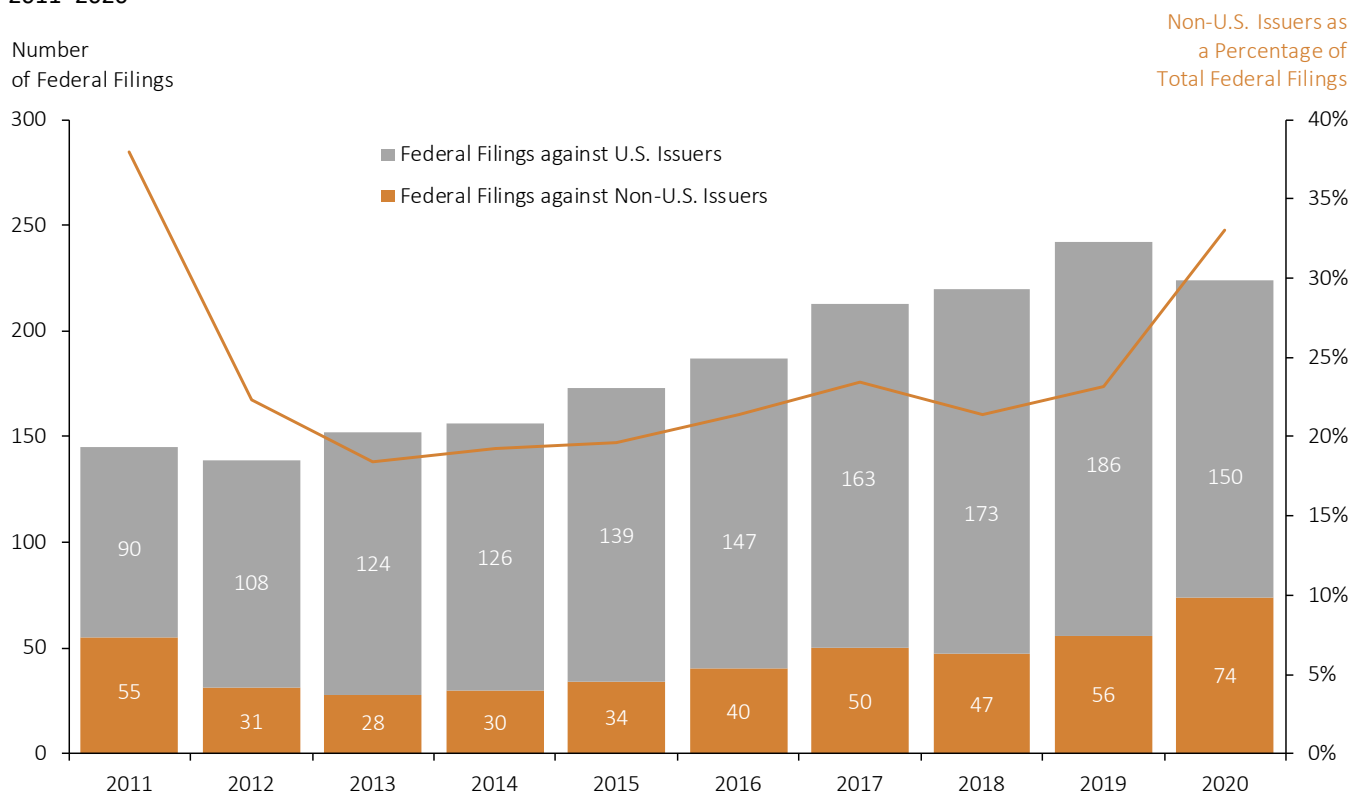
Non-U.S. Core Federal Filings

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 generally been trending upwards since 2013.
- As a percentage of total core federal filings, core federal filings against non-U.S. issuers increased to 33% in 2020, the highest since 2011 and the second highest on record.

The number of core federal filings against non-U.S. issuers reached a record high of 74.

Figure 27: Annual Number of Class Action Filings by Location of Headquarters—Core Federal Filings 2011–2020



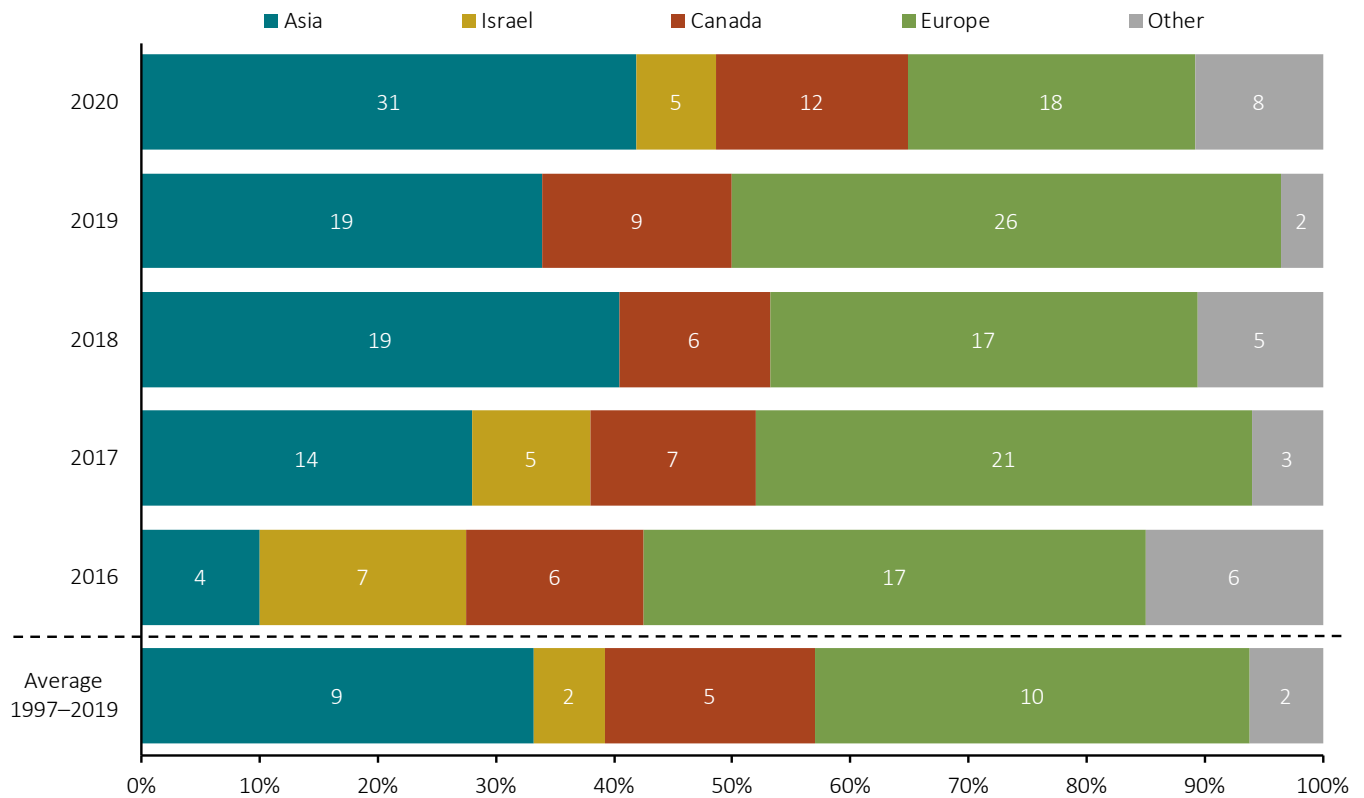
Note: This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In 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, 4, or 5.

- There were 31 core federal filings against Asian firms, the highest since a spike in Chinese reverse merger filings in 2011. Of these 31 filings, 24 involved Chinese firms. All four of the Singaporean filings had allegations related to cryptocurrency or SPACs.
- Of the 18 core federal filings against European firms, there were no more than four filings against companies headquartered in any one country.
- There were 12 core federal filings against Canadian firms, the highest since tracking began in 1997.

- Overall, this year’s percentage breakdown by region was fairly standard with all regions (excluding Europe), within 9 percentage points of their respective 1997–2019 averages.

The number of filings against Asian firms was the highest since 2011.

Figure 28: Non-U.S. Filings by Location of Headquarters—Core Federal Filings



Source: United Nations, “Regional Groups of Member States”

Note:

1. The “Asia” category includes filings for companies headquartered in Hong Kong.
2. In 2020, the definition for region was changed to use groupings set by the United Nations. As a result, counts in this figure may not match those in prior reports.
3. 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, 4, or 5.

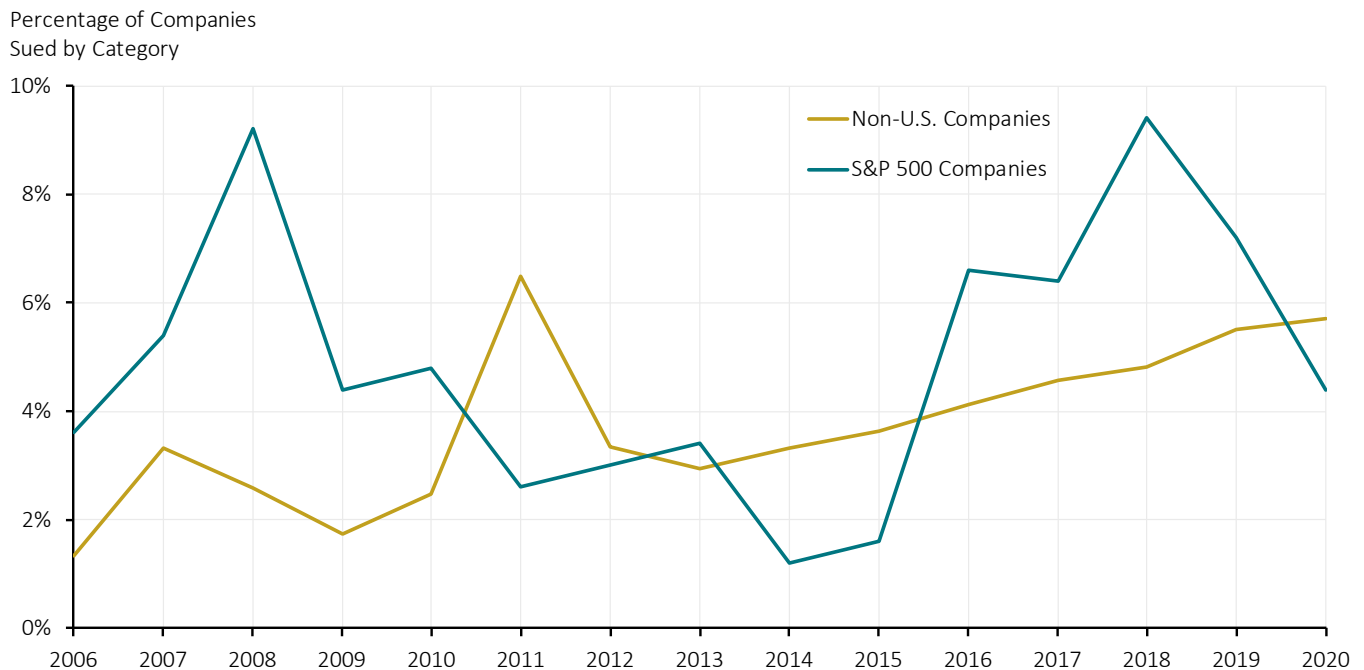
Non-U.S. Company Litigation Likelihood of Federal Filings

This figure examines the incidence of non-U.S. core federal filings relative to the likelihood of S&P 500 companies being the subject of a class action.

The percentage of S&P 500 companies sued dropped to 4.4%, falling below the percentage for non-U.S. companies for the first time since 2015.

- The percentage of non-U.S. companies subject to core federal filings increased for the seventh consecutive year, rising to the second-highest level since tracking began in 1997.
- The percentage of S&P 500 companies sued in 2020 was less than the 2000–2019 yearly average of 5.5% for the first time since 2015.

Figure 29: Percentage of Companies Sued by Listing Category or Domicile—Core Federal Filings 2006–2020



Source: CRSP; Yahoo Finance

Note:

1. Non-U.S. companies are defined as companies with headquarters outside the United States, Puerto Rico, and Virgin Islands. Companies were counted if they issue common stock or ADRs and are listed on the NYSE or Nasdaq.
2. Percentage of companies sued is calculated as the number of filings against unique companies in each category divided by the total number of companies in each category in a given year.

Mega Federal 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 only presented for core federal filings.

- Although the number of mega DDL filings increased from eight in 2019 to 13 in 2020, total DDL from mega filings decreased by \$1 billion.
- There were 30 mega MDL filings in 2020, more than twice the historical average.
- In 2020, total MDL for mega core federal filings was \$1,309 billion, a noticeable increase from 2019 and nearly three times the 1997–2019 average.

- In 2020, the percentages of total federal DDL and MDL represented by mega filings were higher than the historical average. The MDL for mega filings represented 83% of total federal MDL, compared to the historical average of 70%. The DDL for mega filings represented 60% of total federal DDL, compared to the historical average of 54%.

The number of mega DDL and MDL filings was significantly higher than the historical average.

Figure 30: Mega Filings—Core Federal Filings

(Dollars in Billions)

| | Average 1997–2019 | 2018 | 2019 | 2020 |
|--|----------------------|-------|-------|---------|
| Mega Disclosure Dollar Loss (DDL) Filings³ | | | | |
| Mega DDL Filings | 6 | 17 | 8 | 13 |
| DDL for Mega Core Federal Filings | \$73 | \$212 | \$147 | \$146 |
| Percentage of Total Federal DDL | 54% | 64% | 53% | 60% |
| Mega Maximum Dollar Loss (MDL) Filings⁴ | | | | |
| Mega MDL Filings | 14 | 27 | 20 | 30 |
| MDL for Mega Core Federal Filings | \$461 | \$963 | \$825 | \$1,309 |
| Percentage of Total Federal MDL | 70% | 73% | 71% | 83% |

Note:

1. This figure does not present data on a combined federal and state filings basis.
2. There are core filings for which data are not available to estimate MDL and DDL accurately. These core filings are excluded from MDL and DDL analysis and counts.
3. Mega DDL filings have a disclosure dollar loss of at least \$5 billion.
4. Mega MDL filings have a maximum dollar loss of at least \$10 billion.

Industry Comparison of Federal Filings

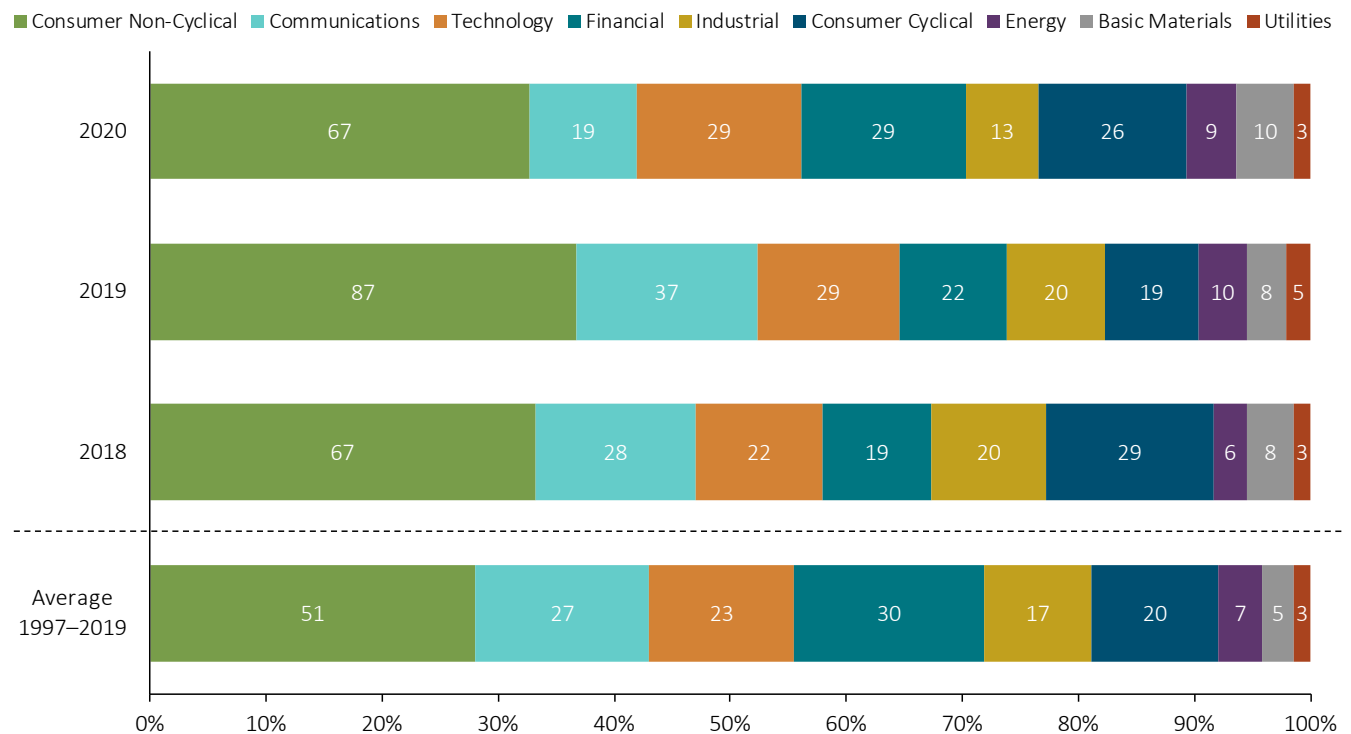
This analysis of core federal filings encompasses both smaller companies and the large capitalization companies of the S&P 500.

- The DDL from Utilities and Financial filings in 2020 was significantly higher than in the two years preceding and when compared to the 1997–2019 average (see Appendix 6).
- Although Consumer Non-Cyclical companies (primarily composed of pharmaceutical, healthcare, and biotechnology firms) had fewer filings in 2020 (67) than in 2016, 2017, and 2019, that number still surpassed the 1997–2019 average by over 31%.
- There were 19 Communications filings in 2020, far fewer than in the previous two years and also below the 1997–2019 average of 27.

- The number of Basic Materials filings in 2020 was the highest that it has been since 2017.
- From 1997 to 2019 the average number of Consumer Non-Cyclical filings was about the same as the number of Technology and Communications filings. In 2020, as in the previous two years, there were significantly more Consumer Non-Cyclical filings than Technology and Communications filings.

The majority of industries had a similar number of filings in 2020 as in the previous two years.

Figure 31: Filings by Industry—Core Federal Filings



Note:

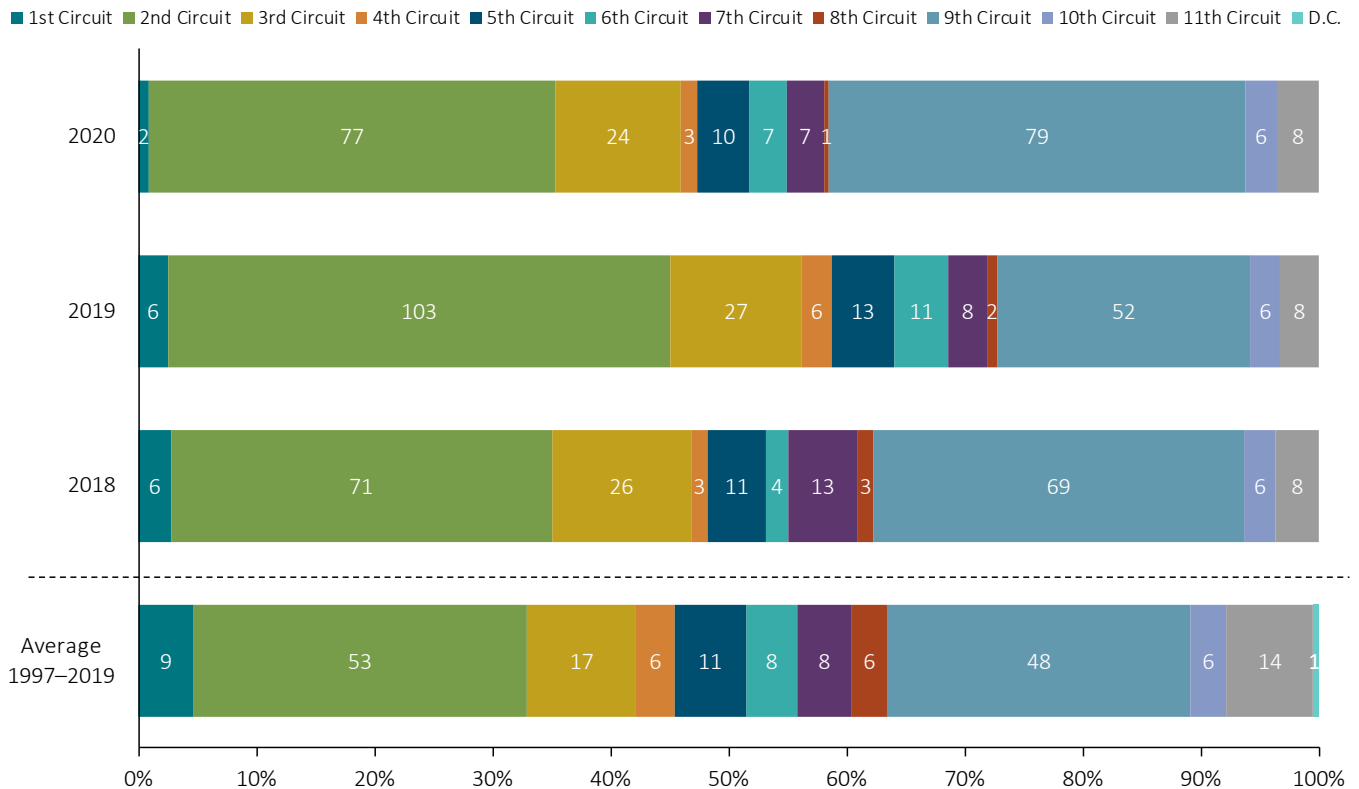
1. This analysis only considers federal filings. It does not present combined federal and state data, and cases are not identified as parallel. This is different from other figures in this report that account for filings in federal courts that also have parallel cases identified in state courts. In those 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, 4, or 5.
2. 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 the report.
3. Sectors are based on the Bloomberg Industry Classification System.

Federal Filings by Circuit

- The Second and Ninth Circuits combined made up 70% of all core federal filings in 2020, roughly in line with 2019 (64%) and above the 1997–2019 average of 54%.
- Core federal filings in the Ninth Circuit increased by 52% to 79 filings, the highest number on record for that circuit. Core filings in the Second Circuit decreased by 25% from the record high of 103 in 2019 to 77 filings, which is still above the 1997–2019 average of 53.
- Core federal filings in the First Circuit decreased by 67% to two filings, well below the 1997–2019 average of nine filings. DDL and MDL in this circuit were below \$1 billion.
- The total MDL for the Ninth Circuit increased from \$501 billion in 2019 to \$586 billion in 2020, three times the 1997–2019 average. See Appendix 7.
- Total MDL for the Second Circuit increased by 70% from \$360 billion in 2019 to \$612 billion in 2020. See Appendix 7.

Core federal filings in the Ninth Circuit were the highest on record, while in the Second Circuit, core federal filings fell from last year's record high.

Figure 32: Filings by Circuit—Core Federal Filings



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, 4, or 5.

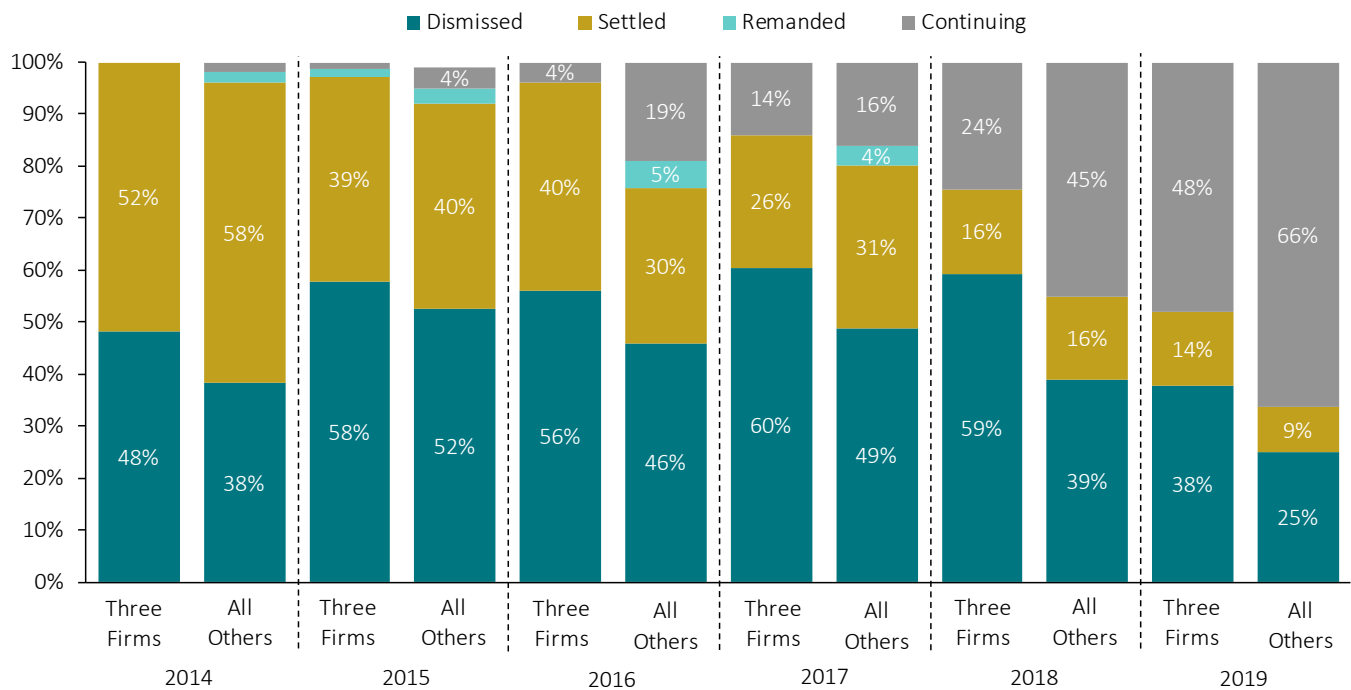
Federal Case Status by Plaintiffs' Counsel

Three law firms—The Rosen Law Firm, Pomerantz LLP, and Glancy Prongay & Murray LLP—have been responsible for more than half of first filed securities class action complaints in federal courts since 2015. See Cornerstone Research, *Securities Class Action Filings—2020 Midyear Assessment*, Figure 23. The figure below examines case outcomes for core federal filings for which these three firms were listed as counsel of record on the operative complaint. These case outcomes are compared with filings for which other plaintiff law firms are the counsel of record.

- From 2014 through 2019, these three firms have had 53% of their class actions dismissed, compared to 41% for all other plaintiff firms. However, 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 these differences 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.

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

Figure 33: Case Status by Plaintiff Law Firm of Record on the Operative Complaint—Core Federal Filings 2014–2019



Note:

1. The analysis relies on the counsel of record on the operative complaint.
2. 1% of core federal filings in 2018 and 1% of core federal filings in 2019 do not have counsel of record assigned yet. These filings are not included in this analysis.
3. Percentages may not sum to 100% due to rounding.

New Developments

State Court 1933 Act Claims

As reported in Cornerstone Research’s *Securities Class Action Filings—2020 Midyear Assessment*, on March 18, 2020, the Delaware Supreme Court held in *Sciabacucchi* 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.

In the last six months, four trial courts in California have enforced these federal forum-selection provisions; no trial court has ruled that they are unenforceable. In the future, other courts will likely consider this issue. Courts may also consider related issues, such as whether corporate charters can require arbitration of internal corporate claims, including those involving violations of securities laws.

SEC Guidance Regarding Disclosures of China-Based Companies Listing on U.S. Exchanges

In November 2020, the SEC’s Division of Corporation Finance issued CF Disclosure Guidance: Topic No. 10, which identified disclosure considerations for China-based companies that list on U.S. exchanges. According to the SEC, due to limitations on the SEC’s ability to enforce disclosure standards for China-based issuers, there is substantially greater risk that disclosures by such issuers will be incomplete and misleading and that investors will have substantially less recourse relative to what they have with other non-U.S. issuers. The SEC stated that China-based issuers must fully disclose material risks related to their operations in China, and identified specific disclosure guidelines.

The SEC’s guidance follows legislation and executive action that would (i) prohibit listing of securities if the issuer’s auditor has not been inspected by the Public Company Accounting Oversight Board, or when the auditor does not demonstrate sufficient resources, geographic reach, or experience; and (ii) prohibit U.S. persons from holding investments in certain Chinese companies affiliated with the Chinese military.

Surge of SPAC IPO Activity in 2020

SPACs exploded in popularity in 2020. Also known as “blank check” companies, SPACs are used as vehicles to take companies public without going through the traditional IPO process. Over half of all IPOs in 2020 involved SPACs, with over \$75.3 billion raised across 248 SPAC IPOs.¹ Although there were relatively few SPAC-related filings in 2020, that trend will likely change given the large number of 2020 SPAC IPOs.

1. Jay R. Ritter, “IPOs 2020 SPACs,” University of Florida, December 31, 2020.

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.

Cohort is the group of securities class actions all filed in a particular calendar year.

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.

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.

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 class members. It is the difference in the price of offered shares (i.e., from the date of the registration statement until the complaint filing date) multiplied by the shares offered. DLOS should not be considered an indicator of liability or measure of potential damages. 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.

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 filed against the same defendant or set of defendants.

Halliburton II refers to *Halliburton Co. v. Erica P. John Fund Inc.*, decided June 30, 2014, by the U.S. Supreme Court.

Heat Maps of S&P 500 Securities Litigation™ analyze securities class action activity by industry sector. The analysis focuses on companies in the Standard & Poor's 500 (S&P 500) index, which comprises 500 large, publicly traded companies in all major sectors. 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, and (2) the percentage of the total market capitalization of these companies subject to new securities class actions in federal court during each calendar year.

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.

Mega filings include mega DDL filings, securities class action filings with a DDL of at least \$5 billion; and mega MDL filings, securities class action filings with an MDL of at least \$10 billion.

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.

Appendices

Appendix 1: Basic Filings Metrics

| Year | Class | | Disclosure Dollar Loss | | | Maximum Dollar Loss | | | U.S. Exchange-Listed Firms: Core Filings | | |
|---------------------|----------------|--------------|-------------------------|-----------------------|----------------------|-------------------------|-----------------------|----------------------|--|-----------------------------|---------------------------------|
| | Action Filings | Core Filings | DDL Total (\$ Billions) | Average (\$ Millions) | Median (\$ Millions) | MDL Total (\$ Billions) | Average (\$ Millions) | Median (\$ Millions) | Number | Number of Listed Firms Sued | Percentage of Listed Firms Sued |
| 1997 | 174 | 174 | \$42 | \$272 | \$57 | \$145 | \$940 | \$405 | 8,113 | 165 | 2.0% |
| 1998 | 242 | 242 | \$80 | \$365 | \$61 | \$224 | \$1,018 | \$294 | 8,190 | 225 | 2.7% |
| 1999 | 209 | 209 | \$140 | \$761 | \$101 | \$364 | \$1,978 | \$377 | 7,771 | 197 | 2.5% |
| 2000 | 216 | 216 | \$240 | \$1,251 | \$119 | \$761 | \$3,961 | \$689 | 7,418 | 205 | 2.8% |
| 2001 | 180 | 180 | \$198 | \$1,215 | \$93 | \$1,487 | \$9,120 | \$771 | 7,197 | 168 | 2.3% |
| 2002 | 224 | 224 | \$201 | \$989 | \$136 | \$2,046 | \$10,080 | \$1,494 | 6,474 | 204 | 3.2% |
| 2003 | 192 | 192 | \$77 | \$450 | \$100 | \$575 | \$3,363 | \$478 | 5,999 | 181 | 3.0% |
| 2004 | 228 | 228 | \$144 | \$739 | \$108 | \$726 | \$3,722 | \$498 | 5,643 | 210 | 3.7% |
| 2005 | 182 | 182 | \$93 | \$595 | \$154 | \$362 | \$2,321 | \$496 | 5,593 | 168 | 3.0% |
| 2006 | 120 | 120 | \$52 | \$496 | \$109 | \$294 | \$2,827 | \$413 | 5,525 | 114 | 2.1% |
| 2007 | 177 | 177 | \$158 | \$1,013 | \$156 | \$700 | \$4,489 | \$715 | 5,467 | 158 | 2.9% |
| 2008 | 224 | 224 | \$221 | \$1,516 | \$208 | \$816 | \$5,591 | \$1,077 | 5,339 | 170 | 3.2% |
| 2009 | 164 | 157 | \$84 | \$830 | \$138 | \$550 | \$5,447 | \$1,066 | 5,042 | 118 | 2.3% |
| 2010 | 174 | 135 | \$73 | \$691 | \$146 | \$474 | \$4,515 | \$598 | 4,764 | 107 | 2.2% |
| 2011 | 189 | 146 | \$115 | \$850 | \$92 | \$523 | \$3,876 | \$439 | 4,660 | 127 | 2.7% |
| 2012 | 154 | 142 | \$97 | \$758 | \$151 | \$405 | \$3,139 | \$647 | 4,529 | 119 | 2.6% |
| 2013 | 165 | 152 | \$104 | \$750 | \$153 | \$278 | \$2,011 | \$532 | 4,411 | 137 | 3.1% |
| 2014 | 170 | 158 | \$56 | \$378 | \$165 | \$220 | \$1,489 | \$528 | 4,416 | 144 | 3.3% |
| 2015 | 217 | 183 | \$120 | \$671 | \$144 | \$415 | \$2,332 | \$512 | 4,578 | 169 | 3.7% |
| 2016 | 288 | 204 | \$106 | \$554 | \$167 | \$848 | \$4,418 | \$1,038 | 4,593 | 188 | 4.1% |
| 2017 | 412 | 214 | \$125 | \$637 | \$149 | \$512 | \$2,613 | \$665 | 4,411 | 186 | 4.2% |
| 2018 | 420 | 238 | \$331 | \$1,584 | \$298 | \$1,317 | \$6,299 | \$1,063 | 4,406 | 211 | 4.8% |
| 2019 | 427 | 267 | \$282 | \$1,190 | \$216 | \$1,187 | \$5,008 | \$1,010 | 4,318 | 237 | 5.5% |
| 2020 | 334 | 234 | \$245 | \$1,209 | \$185 | \$1,584 | \$7,803 | \$1,008 | 4,514 | 193 | 4.3% |
| Average (1997–2019) | 224 | 190 | \$136 | \$807 | \$140 | \$662 | \$3,937 | \$687 | 5,602 | 170 | 3.1% |

Note:

1. 1933 Act filings in state courts are included in the data beginning in 2010.
2. 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.
3. 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.

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

| Year | Consumer Discretionary | Consumer Staples | Energy/ Materials | Financials/ Real Estate | Health Care | Industrials | Telecomm./ Comm./IT | Utilities | All S&P 500 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% |
| Average 2001–2019 | 5.2% | 3.8% | 1.6% | 7.6% | 9.1% | 4.2% | 6.5% | 5.2% | 5.5% |

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

| Year | Consumer Discretionary | Consumer Staples | Energy/ Materials | Financials/ Real Estate | Health Care | Industrials | Telecomm./ Comm./IT | Utilities | All S&P 500 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% |
| Average 2001–2019 | 4.8% | 4.4% | 2.8% | 14.3% | 12.3% | 9.3% | 10.4% | 6.1% | 9.0% |

Note: Average figures are calculated as the sum of the market capitalization subject to core filings in a given sector from 2001 to 2019 divided by the sum of market capitalization in that sector from 2001 to 2019

Appendix 3: M&A Federal Filings Overview

| Year | M&A Filings | M&A Case Status | | | | | Case Status of All Other Federal Filings | | | | |
|------|-------------|-----------------|---------|----------|------------|---------------|--|---------|----------|------------|---------------|
| | | Dismissed | Settled | Remanded | Continuing | Trial Verdict | Dismissed | Settled | Remanded | Continuing | Trial Verdict |
| 2010 | 39 | 33 | 6 | 0 | 0 | 0 | 69 | 65 | 1 | 1 | 0 |
| 2011 | 43 | 40 | 3 | 0 | 0 | 0 | 69 | 75 | 1 | 0 | 0 |
| 2012 | 12 | 9 | 3 | 0 | 0 | 0 | 68 | 65 | 2 | 4 | 0 |
| 2013 | 13 | 7 | 6 | 0 | 0 | 0 | 86 | 64 | 1 | 1 | 0 |
| 2014 | 12 | 9 | 3 | 0 | 0 | 0 | 65 | 87 | 2 | 2 | 0 |
| 2015 | 34 | 27 | 7 | 0 | 0 | 0 | 94 | 68 | 4 | 6 | 1 |
| 2016 | 84 | 67 | 14 | 0 | 3 | 0 | 93 | 63 | 6 | 25 | 0 |
| 2017 | 198 | 189 | 5 | 1 | 3 | 0 | 113 | 61 | 5 | 34 | 0 |
| 2018 | 182 | 173 | 4 | 0 | 5 | 0 | 102 | 35 | 0 | 83 | 0 |
| 2019 | 160 | 148 | 0 | 0 | 12 | 0 | 73 | 26 | 0 | 143 | 0 |
| 2020 | 100 | 88 | 0 | 0 | 12 | 0 | 12 | 3 | 0 | 209 | 0 |

Note:

1. The Securities Class Action Clearinghouse began tracking M&A filings as a separate category in 2009.
2. Case status is as of the end of 2020.
3. Since 2010, there have only been two cases tried to a verdict, both of which were core filings. One of these cases settled after trial and is categorized as settled in the data.

Appendix 4: Case Status by Year—Core Federal Filings

| Filing Year | In the First Year | | | | In the Second Year | | | | In the Third Year | | | | Total Resolved within Three Years |
|-------------|-------------------|-----------|-------|----------------|--------------------|-----------|-------|----------------|-------------------|-----------|-------|----------------|-----------------------------------|
| | Settled | Dismissed | Other | Total Resolved | Settled | Dismissed | Other | Total Resolved | Settled | Dismissed | Other | Total Resolved | |
| 1997 | 0.0% | 7.5% | 0.6% | 8.0% | 14.9% | 8.6% | 0.0% | 31.6% | 16.7% | 4.0% | 0.0% | 52.3% | |
| 1998 | 0.8% | 7.4% | 0.0% | 8.3% | 16.1% | 12.4% | 0.0% | 36.8% | 15.7% | 7.9% | 0.0% | 60.3% | |
| 1999 | 0.5% | 6.7% | 0.0% | 7.2% | 11.0% | 12.0% | 0.0% | 30.1% | 18.2% | 9.1% | 0.0% | 57.4% | |
| 2000 | 1.9% | 4.2% | 0.0% | 6.0% | 11.6% | 13.0% | 0.0% | 30.6% | 15.7% | 10.6% | 0.5% | 57.4% | |
| 2001 | 1.7% | 6.7% | 0.0% | 8.3% | 11.7% | 10.6% | 0.0% | 30.6% | 17.8% | 5.0% | 0.0% | 53.3% | |
| 2002 | 0.9% | 5.8% | 0.4% | 7.1% | 6.7% | 9.4% | 0.0% | 23.2% | 15.2% | 11.6% | 0.0% | 50.0% | |
| 2003 | 0.5% | 7.8% | 0.0% | 8.3% | 7.8% | 13.5% | 0.0% | 29.7% | 14.6% | 14.6% | 0.0% | 58.9% | |
| 2004 | 0.0% | 10.5% | 0.0% | 10.5% | 9.6% | 16.2% | 0.0% | 36.4% | 12.3% | 9.6% | 0.0% | 58.3% | |
| 2005 | 0.5% | 11.5% | 0.0% | 12.1% | 8.2% | 19.8% | 0.0% | 40.1% | 17.6% | 8.8% | 0.0% | 66.5% | |
| 2006 | 0.8% | 9.2% | 0.0% | 10.0% | 8.3% | 16.7% | 0.0% | 35.0% | 14.2% | 6.7% | 0.0% | 55.8% | |
| 2007 | 0.6% | 6.8% | 0.0% | 7.3% | 7.9% | 13.0% | 0.0% | 28.2% | 17.5% | 14.7% | 0.0% | 60.5% | |
| 2008 | 0.0% | 13.0% | 0.9% | 13.9% | 3.6% | 18.4% | 0.0% | 35.9% | 9.9% | 11.2% | 0.0% | 57.0% | |
| 2009 | 0.0% | 9.6% | 0.0% | 9.6% | 4.5% | 19.7% | 0.0% | 33.8% | 8.3% | 6.4% | 0.0% | 48.4% | |
| 2010 | 1.5% | 11.8% | 0.7% | 14.0% | 7.4% | 15.4% | 0.0% | 36.8% | 3.7% | 14.7% | 0.0% | 55.1% | |
| 2011 | 0.0% | 11.7% | 0.7% | 12.4% | 2.8% | 15.9% | 0.0% | 31.0% | 18.6% | 12.4% | 0.0% | 62.1% | |
| 2012 | 0.7% | 12.2% | 1.4% | 14.4% | 4.3% | 22.3% | 0.0% | 41.0% | 8.6% | 10.1% | 0.0% | 59.7% | |
| 2013 | 0.0% | 17.1% | 0.7% | 17.8% | 5.3% | 19.7% | 0.0% | 42.8% | 9.2% | 9.9% | 0.0% | 61.8% | |
| 2014 | 0.6% | 7.7% | 1.3% | 9.6% | 5.1% | 18.6% | 0.0% | 33.3% | 9.0% | 10.3% | 0.0% | 52.6% | |
| 2015 | 0.0% | 13.9% | 2.3% | 16.2% | 2.3% | 21.4% | 0.0% | 39.9% | 9.2% | 6.4% | 0.0% | 55.5% | |
| 2016 | 0.0% | 12.8% | 1.6% | 14.4% | 4.3% | 17.1% | 0.5% | 36.4% | 9.1% | 9.1% | 1.1% | 55.6% | |
| 2017 | 0.0% | 18.8% | 1.9% | 20.7% | 2.3% | 16.4% | 0.5% | 39.9% | 12.7% | 10.8% | 0.0% | 63.4% | |
| 2018 | 0.0% | 12.7% | 0.0% | 12.7% | 5.9% | 21.8% | 0.0% | 40.5% | 10.0% | 11.8% | 0.0% | 62.3% | |
| 2019 | 0.4% | 14.9% | 0.0% | 15.3% | 10.3% | 15.3% | 0.0% | 40.9% | - | - | - | - | |
| 2020 | 1.3% | 5.4% | 0.0% | 6.7% | - | - | - | - | - | - | - | - | |

Note: Percentages may not sum due to rounding. Percentages below the dashed lines indicate cohorts for which data are not complete. “Other” represents cases that were remanded or went to trial. 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.

Appendix 5: Litigation Exposure for IPOs in the Given Periods—Core Filings

| Years Since IPO | Cumulative Exposure | | | Incremental Exposure | | |
|-----------------|---------------------|-----------|-----------|----------------------|-----------|-----------|
| | 2009–2019 | 2001–2008 | 1996–2000 | 2009–2019 | 2001–2008 | 1996–2000 |
| 1 | 6.3% | 3.8% | 2.0% | 6.3% | 3.8% | 2.0% |
| 2 | 11.5% | 6.5% | 5.9% | 5.1% | 2.7% | 4.0% |
| 3 | 15.8% | 8.6% | 8.8% | 4.3% | 2.1% | 2.9% |
| 4 | 19.2% | 10.8% | 11.5% | 3.5% | 2.2% | 2.6% |
| 5 | 22.7% | 12.2% | 14.6% | 3.5% | 1.4% | 3.1% |
| 6 | 25.3% | 13.6% | 16.7% | 2.6% | 1.5% | 2.2% |
| 7 | 27.5% | 15.3% | 19.3% | 2.2% | 1.6% | 2.6% |
| 8 | 29.0% | 17.0% | 21.5% | 1.5% | 1.8% | 2.2% |
| 9 | 32.0% | 18.1% | 24.0% | 3.1% | 1.1% | 2.5% |
| 10 | - | 19.9% | 25.7% | - | 1.8% | 1.7% |

Note:

1. The post-crisis IPO cumulative litigation exposure is not presented for 10 years after the IPO due to limited data for cohorts with an IPO date toward the end of this period. 1933 Act filings that are exclusively in the state courts enter into this analysis beginning in 2010.

2. Cumulative litigation exposure correcting for survivorship bias is calculated using the following formula:

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

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

Appendix 6: Filings by Industry—Core Federal Filings

(Dollars in Billions)

| Industry | Class Action Filings | | | | Disclosure Dollar Loss | | | | Maximum Dollar Loss | | | |
|--------------------------|----------------------|------------|------------|------------|------------------------|--------------|--------------|--------------|----------------------|----------------|----------------|----------------|
| | Average 1997–2019 | 2018 | 2019 | 2020 | Average 1997–2019 | 2018 | 2019 | 2020 | Average 1997–2019 | 2018 | 2019 | 2020 |
| Financial | 30 | 19 | 22 | 29 | \$18 | \$25 | \$10 | \$43 | \$108 | \$138 | \$41 | \$784 |
| Consumer Non-Cyclical | 51 | 67 | 87 | 67 | \$40 | \$104 | \$68 | \$68 | \$157 | \$435 | \$324 | \$309 |
| Industrial | 17 | 20 | 20 | 13 | \$13 | \$28 | \$22 | \$16 | \$50 | \$240 | \$105 | \$45 |
| Technology | 23 | 22 | 29 | 29 | \$23 | \$65 | \$100 | \$69 | \$95 | \$150 | \$426 | \$126 |
| Consumer Cyclical | 20 | 29 | 19 | 26 | \$10 | \$28 | \$9 | \$12 | \$52 | \$120 | \$38 | \$125 |
| Communications | 27 | 28 | 37 | 19 | \$24 | \$65 | \$55 | \$16 | \$148 | \$166 | \$163 | \$98 |
| Energy | 7 | 6 | 10 | 9 | \$4 | \$1 | \$5 | \$5 | \$22 | \$4 | \$25 | \$40 |
| Basic Materials | 5 | 8 | 8 | 10 | \$2 | \$10 | \$9 | \$4 | \$15 | \$33 | \$23 | \$15 |
| Utilities | 3 | 3 | 5 | 3 | \$1 | \$3 | \$2 | \$11 | \$10 | \$25 | \$20 | \$25 |
| Unknown/ Unclassified | 3 | 18 | 5 | 19 | \$0 | \$0 | \$0 | \$1 | \$0 | \$2 | \$0 | \$4 |
| Total | 186 | 220 | 242 | 224 | \$136 | \$330 | \$280 | \$244 | \$657 | \$1,311 | \$1,165 | \$1,571 |

Note: Figures may not sum due to rounding.

Appendix 7: Filings by Circuit—Core Federal Filings

(Dollars in Billions)

| Circuit | Class Action Filings | | | | Disclosure Dollar Loss | | | | Maximum Dollar Loss | | | |
|--------------|----------------------|------------|------------|------------|------------------------|--------------|--------------|--------------|----------------------|----------------|----------------|----------------|
| | Average 1997–2019 | 2018 | 2019 | 2020 | Average 1997–2019 | 2018 | 2019 | 2020 | Average 1997–2019 | 2018 | 2019 | 2020 |
| 1st | 9 | 6 | 6 | 2 | \$7 | \$3 | -\$1 | \$0 | \$21 | \$18 | \$30 | \$0 |
| 2nd | 53 | 71 | 103 | 77 | \$44 | \$88 | \$82 | \$40 | \$234 | \$494 | \$360 | \$612 |
| 3rd | 17 | 26 | 27 | 24 | \$18 | \$44 | \$18 | \$21 | \$68 | \$190 | \$99 | \$107 |
| 4th | 6 | 3 | 6 | 3 | \$2 | \$3 | \$1 | \$1 | \$12 | \$11 | \$9 | \$4 |
| 5th | 11 | 11 | 13 | 10 | \$7 | \$3 | \$4 | \$5 | \$35 | \$11 | \$20 | \$48 |
| 6th | 8 | 4 | 11 | 7 | \$7 | \$6 | \$8 | \$13 | \$26 | \$19 | \$24 | \$34 |
| 7th | 8 | 13 | 8 | 7 | \$8 | \$11 | \$29 | \$10 | \$31 | \$50 | \$106 | \$105 |
| 8th | 6 | 3 | 2 | 1 | \$3 | \$2 | \$2 | \$0 | \$12 | \$7 | \$5 | \$1 |
| 9th | 48 | 69 | 52 | 79 | \$33 | \$162 | \$133 | \$145 | \$181 | \$489 | \$501 | \$586 |
| 10th | 6 | 6 | 6 | 6 | \$2 | \$2 | \$2 | \$1 | \$12 | \$9 | \$7 | \$13 |
| 11th | 14 | 8 | 8 | 8 | \$5 | \$5 | \$1 | \$7 | \$21 | \$14 | \$4 | \$61 |
| D.C. | 1 | 0 | 0 | 0 | \$1 | \$0 | \$0 | \$0 | \$3 | \$0 | \$0 | \$0 |
| Total | 186 | 220 | 242 | 224 | \$136 | \$330 | \$280 | \$244 | \$657 | \$1,311 | \$1,165 | \$1,571 |

Note: Figures may not sum due to rounding.

Appendix 8: Filings by Exchange Listing—Core Federal Filings

| | Average (1997–2019) | | 2019 | | 2020 | |
|-------------------------------|---------------------|---------|---------|---------|----------|---------|
| | NYSE/Amex | Nasdaq | NYSE | Nasdaq | NYSE | Nasdaq |
| Class Action Filings | 91 | 113 | 193 | 187 | 121 | 175 |
| Core Filings | 76 | 94 | 116 | 111 | 85 | 112 |
| Disclosure Dollar Loss | | | | | | |
| DDL Total (\$ Billions) | \$89 | \$47 | \$115 | \$164 | \$121 | \$121 |
| Average (\$ Millions) | \$1,277 | \$501 | \$1,069 | \$1,543 | \$1,526 | \$1,128 |
| Median (\$ Millions) | \$276 | \$108 | \$338 | \$150 | \$524 | \$129 |
| Maximum Dollar Loss | | | | | | |
| MDL Total (\$ Billions) | \$426 | \$227 | \$541 | \$623 | \$1,136 | \$413 |
| Average (\$ Millions) | \$6,076 | \$2,420 | \$5,006 | \$5,874 | \$14,380 | \$3,862 |
| Median (\$ Millions) | \$1,368 | \$482 | \$1,758 | \$735 | \$2,588 | \$651 |

Note:

1. Average and median numbers are calculated only for filings with MDL and DDL data.
2. NYSE/Amex was renamed NYSE MKT in May 2012.

Research Sample

- The Securities Class Action Clearinghouse, cosponsored by Cornerstone Research and Stanford Law School, has identified 5,911 federal securities class action filings between January 1, 1996, and December 31, 2020 (securities.stanford.edu). The analysis in this report is based on data identified by Stanford as of January 10, 2021.
- 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 186 state class action filings in state courts from January 1, 2010, to December 31, 2020, have also been identified.

The views expressed in this report are solely those of the authors, who are responsible for the content, and 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 study.

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