CORNERSTONE RESEARCH

Economic and Financial Consulting and Expert Testimony

Securities Class Action Filings

2018 Year in Review

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Executive Summary

Securities class action activity remained at near record levels for both core and M&A filings. Driven by a large number of mega filings, market capitalization losses surpassed \$1 trillion. Last year also saw more companies on U.S. exchanges facing a greater threat of securities litigation than in any previous year.

Number and Size of Filings

- Plaintiffs filed 403 new federal class action securities cases (filings) in 2018. This was 2 percent lower than 2017, but still nearly double the 1997–2017 average. "Core" filings—those excluding M&A filings—increased to the fifth-most on record. (pages 5–6)
- **Disclosure Dollar Loss (DDL)** increased by 152 percent to \$330 billion, the highest on record. (page 7)
- Maximum Dollar Loss (MDL) also grew by more than 150 percent to \$1,311 billion in 2018. (page 8)
- In 2018, 17 mega filings made up 64 percent of DDL and 27 mega filings made up 73 percent of MDL. Both of these percentages are above historical averages. Filings with a DDL of at least \$5 billion or an MDL of at least \$10 billion are considered mega filings. (pages 30–32)

Other Measures of Filing Intensity

- In 2018, the likelihood of litigation involving a core filing for U.S. exchange-listed companies was greater than in any previous year. This measure reached record levels because of both the heightened filing activity against public companies and an extended decline in the number of public companies over the last 15 years. (page 11)
- One in about 11 S&P 500 companies (9.4 percent) was sued in 2018. Companies in the Health Care sector were the most frequent targets of new core filings. (pages 12–13)

Core filings in 2018 exceeded the previous year's level, even though total filings declined slightly.

Figure 1: Federal Class Action Filings Summary

(Dollars in Billions)

		Annual (1997–2017)	2017	2018	
	Average	Maximum	Minimum		
Class Action Filings	203	412	120	412	403
Core Filings	182	242	120	214	221
Disclosure Dollar Loss (DDL)	\$120	\$240	\$42	\$131	\$330
Maximum Dollar Loss (MDL)	\$602	\$2,046	\$145	\$521	\$1,311

Key Trends

S&P 500 firms were twice as likely to be the subject of core filings than U.S. exchange-listed companies, even as companies on U.S. exchanges were more likely to be sued in 2018 than in any previous year. Although core filings against non-U.S. issuers dipped for the first time since 2013, their litigation rate exceeded the overall rate for all companies listed on U.S. exchanges.

U.S. Companies

- In 2018, 4.5 percent of **U.S. exchange-listed companies** were the subject of core filings. (page 11)
- Core filings against S&P 500 firms in 2018 occurred at a rate of 9.4 percent, the highest percentage since 2002. (page 12)

Non-U.S. Companies

- The number of core filings against **non-U.S. companies** decreased for the first time since 2013. (pages 27–28)
- However, the likelihood of a core filing against a non-U.S. company increased from 4.6 percent to 4.8 percent from 2017 to 2018. (page 29)

By Industry

- Core filings against companies in the **Technology** and Communications sectors combined increased to 50 in 2018, up 56 percent from 2017. (page 33)
- The **Consumer Non-Cyclical** sector again had the greatest number of filings, even after declining to 68 in 2018 from 85 in 2017. Within this sector, filings against biotechnology, pharmaceutical, and healthcare companies also decreased. (pages 33–34)

By Circuit

- There were 71 and 69 core filings in the **Second** and **Ninth Circuits**, respectively. Ninth Circuit core filings were at historically high levels. (page 35)
- The number of core filings decreased in the **Third Circuit** to 26 in 2018 from 35 in 2017. **Seventh Circuit** core filings increased to 13 from four. (page 35)

M&A Filings

- Federal filings of class actions involving M&A transactions with Section 14 claims but no Rule 10b-5, Section 11, or Section 12(2) claims decreased to 182 from 198. (page 5)
- The Second and Third Circuits accounted for nearly half of all M&A filings in 2018, as each circuit experienced the highest number since this report began separately recording them in 2009. (page 14)
- M&A filings had a much higher rate of dismissal (86 percent) than core federal filings (47 percent) from 2009 to 2017. (page 15)

Filings by Lead Plaintiff

For 2018 filings, individuals were appointed lead plaintiff more often than institutional investors, a pattern that has persisted since 2013. (page 18)

Appointment of Plaintiff Lead Counsel

• The growth in core filings over the last six years has coincided with the activity of three plaintiff law firms that have increasingly been involved in securities class actions. (page 36)

New Developments

- U.S. Supreme Court decision in *Cyan Inc. v. Beaver County Employees Retirement Fund* (pages 4, 19–23)
- Initial coin offerings (ICOs): SEC v. Blockvest LLC et al. (page 38)
- Negligence standard in M&A filings: *Varjabedian v. Emulex Corp. et al.* (page 38)
- Administrative law judge appointments: U.S. Supreme Court decision in *Lucia v. Securities and Exchange Commission* (page 38)

Featured: Annual Rank of Filing Intensity

Filing activity continued unabated in 2018. On several dimensions, the last three years—particularly 2017 and 2018—have been more active than any previous year. The heightened levels of filings have occurred despite a lack of financial market turbulence that often accompanied substantial filing activity in prior years.

The total number of filings in 2018 was the second-highest on record after 2017. Filings against companies with large market capitalizations surged to near record highs. The combination of numerous filings and the frequency of filings involving larger companies led to higher amounts of market capitalization losses in dispute.

The 2. Annual Kank of Measurements of Federal Filing Intensity			
	2016	2017	2018
Number of Total Filings	3rd	1st	2nd
Core Filings	10th	7th	5th
M&A Filings	3rd	1st	2nd
Size of Core Filings			
Disclosure Dollar Loss	12th	9th	1st
Maximum Dollar Loss	5th	12th	3rd
Percentage of U.S. Exchange-Listed Companies Sued			
Total Filings	3rd	2nd	1st
Core Filings	3rd	2nd	1st
Percentage of S&P 500 Companies Subject to Core Filings	5th	7th	2nd

Figure 2: Annual Rank of Measurements of Federal Filing Intensity

Note: Rankings cover 1997 through 2018 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. Core filings are those excluding M&A claims. See Appendix 1.

Featured: State Court 1933 Act Filings

Securities class action filings with Securities Act of 1933 (1933 Act) claims have increased in state courts. Many of these filings have parallel federal court proceedings. Beginning with this report, 1933 Act filings in state courts other than California are also presented.

- From 2010 through 2018, plaintiffs filed at least 108 1933 Act cases in state courts (state 1933 Act filings). (page 19)
- Although the number of state 1933 Act filings in 2018 increased substantially relative to 2017, the total MDL of state 1933 Act filings remained relatively flat. (page 20)
- The changes seen in 2018 compared to previous years coincided with the U.S. Supreme Court's ruling in March 2018 in Cyan Inc. v. Beaver County Employees Retirement Fund.

Figure 3: State Court 1933 Act Class Action Filings Summary

About 43 percent of all state 1933 Act filings in 2018 had a parallel action in federal court. (pages 21–22)

Among the 17 state 1933 Act filings in 2018 without a parallel action in federal court, 10 were in California state courts, five were in New York state courts, and two were in other state courts.

State filings involving 1933 Act claims increased sharply compared to 2017.

		í.	
	Average 2010–2017	2017	2018
State Court 1933 Act Class Action Filings			
Filings in State Courts Only	4	2	17
California	4	1	10
All Other States	0	1	7
Parallel Filings in State and Federal Courts	6	14	13
Total	10	16	30
Maximum Dollar Loss of State Court 1933 Act Filings			
MDL of Filings in State Courts Only	\$7.7	\$1.8	\$5.9
California	\$7.5	\$0.1	\$4.1
All Other States	\$0.2	\$1.7	\$1.8
MDL of Filings in State and Federal Courts	\$6.5	\$22.6	\$17.8
Total MDL	\$14.2	\$24.3	\$23.7

Note:

(Dollars in Billions)

1. Filings in state courts may have parallel cases filed in federal courts. When parallel cases are filed in different years, the earlier filing is reflected in the figure above.

2. For 2018 filings, 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.

Number of Federal Filings

- Plaintiffs filed 403 new federal securities class actions last year, making 2018 the second-largest year on record, trailing only 2017.
- The number of filings in 2018 was 99 percent higher than the 1997–2017 average.
- The 182 M&A filings in 2018 were the second-largest number since 2009 (when this report began separately identifying these filings).
- Core filings—those excluding M&A filings—were the highest since 2008, when filings surged due to the volatility in U.S. and global financial markets.
- The growth in core filings over the last six years has coincided with the activity of three plaintiff law firms that have increasingly been involved in securities class actions. See additional discussion at page 36.

The number of federal filings remained significantly above pre-2016 levels.

Figure 4: Class Action Filings Index[®] (CAF Index[®]) Annual Number of Class Action Filings 2004–2018



Note: There were two cases in 2011 that were both an M&A filing and a Chinese reverse merger filing. These filings were classified as M&A filings in order to avoid double counting.

- Total filing activity decreased by 2 percent in the second half of 2018 compared to the first half.
- The pace of both M&A and core filings was comparable in the first and second halves of the year.
- ICO or cryptocurrency filings first appeared in the second half of 2017. There were nine such filings in 2018 with eight in the first half of the year and only one in the second half.

The number of M&A filings continued to be significantly higher than in the years prior to 2017.

Figure 5: Class Action Filings Index[®] (CAF Index[®]) Semiannual Number of Class Action Filings 2009–2018



09 H1 09 H2 10 H1 10 H2 11 H1 11 H2 12 H1 12 H2 13 H1 13 H2 14 H1 14 H2 15 H1 15 H2 16 H1 16 H2 17 H1 17 H2 18 H1 18 H2

Note: There were two cases in 2011 that were both an M&A filing and a Chinese reverse merger filing. These filings were classified as M&A filings in order to avoid double counting.

Market Capitalization Losses

Disclosure Dollar Loss Index[®] (DDL Index[®])

This index measures the aggregate DDL for all 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. See the Glossary for additional discussion on market capitalization losses and DDL.

The DDL Index reached record levels in 2018.

- The DDL Index reached a record \$330 billion in 2018, 174 percent above the 1997–2017 average.
- The dramatic increase in DDL was driven by mega filings, which accounted for 64 percent of the DDL Index in 2018 compared with 36 percent in 2017.
- Both average and median DDL per filing in 2018 were also the highest on record. See Appendix 1.

Figure 6: Disclosure Dollar Loss Index[®] (DDL Index[®]) 2004–2018

(Dollars in Billions)



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Note:

1. See Appendix 1 for the average and median values of DDL.

2. Figures may not sum due to rounding.

Maximum Dollar Loss Index[®] (MDL Index[®])

This index measures the aggregate MDL for all 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. See the Glossary for additional discussion on market capitalization losses and MDL.

• The MDL Index reached over \$1.3 trillion in 2018, surpassing 2008 to become the third-largest year on record. Relative to 2017, the MDL Index increased by 152 percent.

Figure 7: Maximum Dollar Loss Index[®] (MDL Index[®])

The increase in MDL was driven by mega filings, which increased to 27 in 2018, compared to 14 in 2017. In addition, the stock market decline in the latter part of the year magnified market value losses over class periods for many filings.

The MDL Index eclipsed \$1 trillion for the first time since 2002.



Note:

2004-2018

1. See Appendix 1 for the average and median values of MDL.

2. Figures may not sum due to rounding.

- The typical (i.e., median) percentage stock price drop at the end of the class periods has generally been decreasing since 2012 and reached one of its lowest levels in 2018.
- This trend coincided with more filings by the three plaintiff law firms discussed on page 36.
- At the same time, the median DDL increased dramatically in 2018, indicating that typical issuers had larger market capitalization prior to the drops at the ends of their class periods.

Median DDL was the highest on record in 2018 while the median value of DDL as a percentage of predisclosure market capitalization was one of the lowest on record.



Note: For more information, see Appendix 1.

Classification of Complaints

- Section 11 claims decreased in federal courts as a portion of filing activity moved to state courts.
- Section 12(2) claims increased from 4 percent of federal filings in 2017 to 10 percent in 2018.
- Allegations of internal control weaknesses increased from 14 percent of core filings to 18 percent.
- Core filings involving restatements have declined for the last four years.

Rule 10b-5 claims were asserted in 86 percent of core filings in 2018, down from 92 percent in 2017.

Figure 9: Allegations Box Score—Core Filings

		Percentage of Filings ¹							
	2014	2015	2016	2017	2018				
Allegations in Core Filings ²									
Rule 10b-5 Claims	93%	92%	94%	93%	86%				
Section 11 Claims	15%	16%	12%	12%	10%				
Section 12(2) Claims	7%	9%	6%	4%	10%				
Misrepresentations in Financial Documents	95%	99%	99%	100%	95%				
False Forward-Looking Statements	51%	53%	45%	46%	48%				
Trading by Company Insiders	16%	16%	10%	3%	5%				
GAAP Violations ³	39%	38%	30%	22%	23%				
Announced Restatement ⁴	19%	12%	10%	6%	5%				
Internal Control Weaknesses ⁵	26%	26%	21%	14%	18%				
Announced Internal Control Weaknesses ⁶	11%	11%	7%	7%	7%				
Underwriter Defendant	12%	12%	7%	8%	8%				
Auditor Defendant	1%	1%	2%	0%	0%				

Note:

1. The percentages do not add to 100 percent because complaints may include multiple allegations.

2. Core filings are all federal securities class actions excluding those defined as M&A filings.

3. First identified complaint (FIC) includes allegations of GAAP violations. In some cases, plaintiff(s) may not have expressly referenced GAAP; however, the allegations, if true, would represent GAAP violations.

4. FIC includes allegations of GAAP 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.

U.S. Exchange-Listed Companies

The percentages below are calculated as the unique number of companies listed on the NYSE or Nasdaq subject to federal securities fraud class actions in a given year divided by the unique number of companies listed on the NYSE or Nasdaq.

- The likelihood that U.S. exchange-listed companies were subject to core filings increased for a sixth consecutive year, from 2.6 percent in 2012 to 4.5 percent in 2018.
- Approximately one in 22 companies listed on U.S. exchanges was the subject of a core filing in 2018. See Appendix 1 for litigation likelihood over a longer time frame.

 Including M&A filings, a record 8.4 percent of U.S. exchange-listed companies were subject to filings in 2018, slightly above the rate in 2017.

The likelihood of core filings targeting U.S. exchange-listed companies surpassed the previous record set in 2017.

Figure 10: Percentage of U.S. Exchange-Listed Companies Subject to Filings 2004–2018



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

1. Percentages are calculated by dividing the count of issuers listed on the NYSE or Nasdaq subject to filings by the number of companies listed on the NYSE or Nasdaq as of the beginning of the year.

2. Listed companies were identified by taking the count of listed securities at the beginning of each year and accounting for cross-listed companies or companies with more than one security traded on a given exchange. Securities were counted if they were classified as common stock or American Depository Receipts (ADRs) and listed on the NYSE or Nasdaq.

3. Percentages may not sum due to rounding.

Heat Maps: S&P 500 Securities Litigation[™]

The Heat Maps illustrate 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 two questions for each sector:

- (1) What percentage of these companies were subject to new securities class actions in federal court during each calendar year?
- (2) What percentage of the total market capitalization of these companies was subject to new securities class actions in federal courts during each calendar year?

The likelihood of an S&P 500 company being sued was the highest since 2002.

- Of the companies in the S&P 500 at the beginning of 2018, approximately one in about 11 companies (9.4 percent) was a defendant in a core filing during the year.
- The Consumer Staples and Industrials sectors were more active in 2018 than in the previous 17 years.
- Core filings activity in the Telecommunications/ Information Tech sector increased for the fourth consecutive year.

25%+

• The percentage of companies in the Consumer Discretionary sector subject to core filings (10 percent) was double the 2001–2017 average.

	Average 2001–2017	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Consumer Discretionary	5.0%	3.8%	5.1%	3.8%	4.9%	8.4%	1.2%	0.0%	3.6%	8.5%	10.0%
Consumer Staples	2.9%	4.9%	0.0%	2.4%	2.4%	0.0%	0.0%	5.0%	2.6%	2.7%	11.8%
Energy/Materials	1.5%	1.5%	4.3%	0.0%	2.7%	0.0%	1.3%	0.0%	4.5%	3.3%	1.8%
Financials/Real Estate	8.1%	10.7%	10.3%	1.2%	3.7%	0.0%	1.2%	1.2%	6.9%	3.3%	
Health Care	8.3%	3.7%	13.5%	2.0%	1.9%	5.7%	0.0%	1.9%	17.9%		16.1%
Industrials	3.5%	6.9%	0.0%	1.7%	1.6%	0.0%	4.7%	0.0%	6.1%		
Telecommunications/ Information Tech	6.0%	1.2%	2.4%	7.1%	3.8%	9.1%	0.0%	4.2%	6.8%		
Utilities	5.2%	0.0%	0.0%	2.9%		0.0%	0.0%	3.4%	3.4%	7.1%	7.1%
All S&P 500 Companies	5.2%	4.4%	4.8%	2.8%	3.0%	3.4%	1.2%	1.6%	6.6%	6.4%	9.4%

Figure 11: Heat Maps of S&P 500 Securities Litigation™ Percentage of Companies Subject to Core Filings

Note:

1. The chart 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. See Appendix 2A for additional detail.

4. In August 2016, GICS added a new industry sector, Real Estate. This analysis begins using the Real Estate industry sector in 2017.

- The total market capitalization of S&P 500 companies subject to core filings more than doubled from 6.1 percent in 2017 to 14.9 percent in 2018. This represents the highest percentage since 2008.
- While the percentage of companies in the Health Care sector subject to core filings nearly doubled relative to 2017, the percentage of market capitalization subject to core filings increased more than ninefold.
- Nearly 20 percent of the market capitalization of each of the Industrials and Telecommunications/Information Tech sectors was subject to core filings.

The percentages of market capitalizations subject to core filings in four of the eight sectors were more than double their historical averages.

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	Average 2001–2017	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Consumer Discretionary	5.3%	1.9%	4.9%	4.6%	1.6%	4.4%	2.5%	0.0%	2.8%	8.2%	4.7%
Consumer Staples	3.1%	3.9%	0.0%	0.8%	14.0%	0.0%	0.0%	1.9%	1.0%	6.7%	15.2%
Energy/Materials	3.0%	0.8%	5.2%	0.0%	0.9%	0.0%	0.2%	0.0%	19.8%	2.3%	1.4%
Financials/Real Estate	15.5%	31.2%	31.1%	6.9%	11.0%	0.0%	0.3%	3.0%		1.5%	12.5%
Health Care		1.7%	32.7%	0.7%	0.8%	4.4%	0.0%	3.1%		2.7%	26.3%
Industrials	7.2%	23.2%	0.0%	2.1%	1.2%	0.0%	1.7%	0.0%	8.7%	22.3%	19.4%
Telecommunications/ Information Tech	8.2%	0.3%	5.9%	13.4%	2.2%	16.6%	0.0%	7.0%	12.3%	4.4%	19.4%
Utilities	5.9%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	3.7%	4.4%	9.6%	6.5%
All S&P 500 Companies	8.2%	7.7%	11.1%	5.0%	4.3%	4.7%	0.6%	2.8%	10.0%	6.1%	14.9%

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

egend 0% 0–5% 5–15% 15–25% 25%+

Note:

1. The chart 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. See Appendix 2B for additional detail.

4. In August 2016, GICS added a new industry sector, Real Estate. This analysis begins using the Real Estate industry sector in 2017.

M&A Filings by 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 merger objection lawsuits from state to federal courts.

M&A filings in the Second and Third Circuits continued to increase, while M&A filings in other circuits declined.

- The number of M&A filings in each of the Second and Third Circuits was the highest since this report began recording them separately in 2009.
- The Second and Third Circuits accounted for nearly half of all M&A filings in 2018.

• The Fourth Circuit exhibited nearly a threefold decline in M&A filings in 2018, following a more than fourfold increase between 2016 and 2017.

Figure 13: Annual M&A Filings by Circuit 2009–2018



Note:

1. See http://courts.delaware.gov/opinions/download.aspx?ID=235370.

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

Status of M&A Filings

- There were 446 M&A filings between 2009 and 2017, compared to 1,456 core filings. See Figure 4.
- M&A filings were dismissed at higher rates and resolved more quickly than core filings.
- M&A filings exhibited settlement rates 26 percentage points fewer than core filings.

Figure 14: Status of M&A Filings Compared to Core Federal Filings

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



Note:

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

2. The 2018 filing cohort is excluded since a large percentage of cases are ongoing.

3. For more information, see Appendix 3.

Status of Securities Class Action Filings

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This analysis examines whether filing outcomes have changed over time and compares the outcomes of filing cohort groups. As each cohort ages, a larger percentage of filings are resolved—whether through dismissal, settlement, remand, or trial verdict outcome.

The dismissal rate for the 2015 filings cohort is the highest on record, despite the fact that 12 percent of the cases are continuing.

- From 1997 to 2017, 50 percent of filings settled, 43 percent were dismissed, less than 1 percent were remanded, and 6 percent are continuing. Overall, less than 1 percent of filings have reached a trial verdict.
- More recent cohorts have too many ongoing cases to determine their ultimate dismissal rates. However, the 2016 cohort will end up having a dismissal rate of at least 45 percent, more than the 1997–2017 historical average.



Timing of Dismissals

Given the length of time that may exist between the filing of a class action and its outcome, it may not be possible to immediately determine whether trends in dismissal rates observed in earlier annual cohort years will persist in later annual cohorts. This analysis looks at dismissal trends within the first several years of the filing of a class action to gain insight on recent dismissal rates.

The percentage of cases dismissed in the first year for the 2017 cohort was the highest on record.

- While the percentage of cases dismissed within three years of filing had generally increased for filing cohorts prior to 2013, it decreased for 2014 cohort filings before increasing again for 2015 cohort filings.
- With the benefit of a full observational history, the filings in the 2015 cohort were dismissed at the highest rate on record within the first three years.
- Early indications of the first-year dismissal rate for the 2018 cohort put it on par with 2017 and greater than the 2015 and 2016 cohorts.



1. Percentage of cases in each category is calculated as the number of cases that were dismissed within one, two, or three years of the filing date divided by the total number of cases filed each year.

2. The outlined portions of the stacked bars for years 2016 through 2018 indicate the percentage of cases dismissed through the end of 2018. The outlined portions of these stacked bars therefore present only partial-year observed resolution activity, whereas their counterparts in earlier years show an entire year.

3. For more information, see Appendix 4.

Filings by Lead Plaintiff

This analysis examines how frequently individual or institutional investors were appointed as lead plaintiff in core filings.

- From 1997 to 2003, while individuals were appointed as lead plaintiff more often than institutional investors in core filings, the difference narrowed.
- From 2004 to 2012, institutional investors were as or more likely to be appointed lead plaintiff than were individuals.
- Starting in 2013, individuals were appointed as lead plaintiff more often than institutional investors. This suggests a shift in litigation strategies by some plaintiff law firms.

• Individuals were exclusively appointed as lead plaintiff in nearly 60 percent of the filings in 2017 and 2018.

Individuals have been appointed as lead plaintiff more than institutional investors in each of the last six years.

Figure 17: Percentage of Federal Class Action Filings by Lead Plaintiff—Core Filings 1997–2018



Note:

1. Multiple plaintiffs can be designated as co-leads on a single case. This table separates percentages for which a case had only individuals as the lead/co-leads, institutional investors or investor groups as the lead/co-leads, or both individuals and institutional investors as the co-leads.

2. Cases may not have lead plaintiff data due to dismissal or settlement before a lead plaintiff is appointed or because the cases have not yet reached the stage when a lead plaintiff can be identified.

3. Lead plaintiff data are available for over 90 percent of core filings for each year from 1997 to 2017. Lead plaintiff data are available for 60 percent of 2018 core filings.

New: 1933 Act Cases Filed in State Courts

For the first time, this report includes data for 1933 Act filings in state courts other than California. The figure below illustrates all the filings currently in the dataset, even as additional class actions filed in previous years continue to be identified.

- In 2018, 16 class actions alleging violations of the 1933 Act were filed in California state courts, 13 were filed in New York state courts, and four were filed in other state courts. These filings may include Section 11, Section 12, and Section 15 claims, but do not include Rule 10b-5 claims.
- Filings in New York state courts appear to have markedly increased in 2018 as a result of the *Cyan* decision. All 13 1933 Act filings in New York were filed after the U.S. Supreme Court's ruling in March. Five of these did not have parallel federal filings.
- The other state filings in 2018 were in Florida, Georgia, Nevada, and Tennessee.

1933 Act filing activity accelerated in 2018, largely because of filings in New York state courts.





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

Note:

1. Other contains filings in Alabama, Arizona, Colorado, Florida, Georgia, Iowa, Massachusetts, Michigan, Nevada, New Hampshire, Oregon, Pennsylvania, Tennessee, Texas, Washington, and West Virginia.

2. California state filings in 2018 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.

New: 1933 Act Cases Filed in State Courts—Size of Filings

- In 2018, MDL for state 1933 Act filings increased to \$24.9 billion, close to double the 2010–2017 average.
- Relative to 2017, MDL for all state 1933 Act filings only increased by 8 percent despite the 154 percent increase in the number of filings.

Figure 19: Maximum Dollar Loss (MDL) of State 1933 Act Filings 2010–2018

(Dollars in Millions)



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

Note: California state filings in 2018 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. MDL calculations include all shares outstanding and not only shares traceable to offering materials. Therefore, these calculations overstate potential damages.

Non-California state 1933 Act filings were 66 percent of the MDL in 2018.

New: Comparison of Federal Section 11 Filings with State 1933 Act Filings—Preand Post-*Cyan*

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.

- In 2018, the combined number of federal Section 11 filings and state 1933 Act filings was 41. This comprised 13 parallel filings, 17 state-only filings, and 11 federal-only filings.
- Overall, these filings in federal and state courts increased by 52 percent compared to 2017 due to the rise in state filing activity.
- The uptick in state actions following the *Cyan* decision indicates a change in approach by plaintiffs, but more data are needed to evaluate the potential trend.

State 1933 Act filings have increased since the Cyan *decision.*



Figure 20: Pre- and Post-*Cyan* Quarterly Federal Section 11 and State 1933 Act Filings 2015–2018

2015 Q1 2015 Q2 2015 Q3 2015 Q4 2016 Q1 2016 Q2 2016 Q3 2016 Q4 2017 Q1 2017 Q2 2017 Q3 2017 Q4 2018 Q1 2018 Q2 2018 Q3 2018 Q4

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

1. The federal Section 11 filings displayed may include Rule 10b-5 claims, but state 1933 Act filings will not.

2. Section 11 filings in federal courts may include parallel (or related) cases filed in state courts. When these cases are filed in different quarters, the earliest filing is counted. If filings against the same company are brought in different states in addition to a filing brought in federal court, the parallel filing is counted as a unique case and the state-only filing is treated as a unique case. Filings against the same company brought in different states without a parallel filing brought in federal court are counted as unique state filings.

3. California state filings in 2018 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.

Combined Federal and State Filing Activity—Highlighting Federal Section 11 and State 1933 Act Filings

This figure below is a combined measure of class action filing activity in federal and state courts (both California and other state courts). It highlights Section 11 claims in federal courts and 1933 Act claims in state courts and the extent to which parallel actions were filed.

Combined federal Section 11 and state 1933 Act filings peaked in 2018.

- In 2018, the combined number of federal filings, state 1933 Act filings, and M&A filings was 420-the highest on record.
- Of the federal Section 11 and state 1933 Act filings, there were 11 federal-only filings and 17 state-only filings in 2018, respectively the lowest and the highest since 2010.
- There were 55 percent more state-only filings than federal-only filings in 2018.

Figure 21: Federal Section 11 and State 1933 Act Class Action Filings by Venue 2010-2018



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

1. The federal Section 11 data displayed may contain Rule 10b-5 claims, but state Section 11 data do not.

2. Section 11 filings in federal courts may include parallel (or related) cases filed in state courts. When these cases are filed in different years, the earliest filing is counted. If filings against the same company are brought in different states in addition to a filing brought in federal court, the parallel filing is counted as a unique case and the state-only filing is treated as a unique case. Filings against the same company brought in different states without a parallel filing brought in federal court are counted as unique state filings.

3. California state filings in 2018 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.

Tota

Section 11 Cases Filed in State Courts— Case Status

This analysis compares the outcomes of state Section 11 filings to federal filings that assert Section 11 claims but no Rule 10b-5 claims.

A smaller portion of Section 11–only cases in 2010–2017 were dismissed in state courts compared to federal courts.

- A higher percentage of state Section 11 filings are continuing compared to Section 11–only federal filings.
- Only 33 percent of state Section 11 filings were dismissed in 2010–2017 compared to 48 percent of Section 11–only federal filings.





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

1. See Appendix 5 for more detail.

2. The 2018 filing cohort is excluded since a large percentage of cases are ongoing.

3. If a matter is remanded from federal court to a state court, it is recorded in the state court column based on its state court disposition. Alternatively, if a matter is removed from a state court to federal court, it is recorded in the federal court column based on its federal court disposition.

IPO Activity and Federal Section 11 and State 1933 Act Filings

- IPO activity increased 25 percent from 2017 to 2018.
- With 134 IPOs, 2018 was above the 2001–2011 average of 99 IPOs per year, but remained well below the 1997–2000 average of 403 IPOs per year.
- Heavier IPO activity appears to be correlated with increased levels of federal Section 11 and state 1933 Act filings in the ensuing years.

IPO activity has trended up since 2016, but remained below 2013–2014 levels.

It appears likely that Section 11 filing activity will increase in 2019 relative to 2018 due to the combination of new state venues post-*Cyan* and the deferred effects of increased IPO activity in 2017 and 2018.

Figure 23: Number of IPOs on Major U.S. Exchanges and Number of Filings of Federal Section 11 and State 1933 Act Claims 2010–2018



Source: Jay R. Ritter, "Initial Public Offerings: Updated Statistics," University of Florida, December 31, 2018 Note:

1. These data exclude the following IPOs: those with an offer price of less than \$5, American Depository Receipts (ADRs), unit offers, closed-end funds, real estate investment trusts (REITs), natural resource limited partnerships, small best efforts offers, banks and S&Ls, and stocks not listed in the Center for Research in Security Prices (CRSP) database.

2. The number of federal Section 11 and state 1933 Act cases is displayed. In 2018, the Securities Class Action Clearinghouse began tracking 1933 Act filings in California state courts with Section 11 or Section 12 claims, as well as filings in other state courts with Section 11 claims. The federal Section 11 cases displayed may include Rule 10b-5 claims, but state 1933 Act filings do not.

IPO Litigation Likelihood

This analysis compares the cumulative litigation exposure of IPOs to federal core filings since the 2008 credit crisis (postcrisis: 2009–2017) with two other groups of IPOs—those prior to the credit crisis (pre-crisis: 2001–2008) and those prior to the dot-com collapse (early period: 1996–2000). 1933 Act filings that are exclusively in the state courts have not yet been incorporated into this analysis.

• Post-crisis IPOs have faced higher litigation exposure than the prior periods in the first few years after an IPO—for example, 19.5 percent of post-crisis IPOs have been subject to a federal core filing within four years of the IPO, compared to 14.5 percent for the pre-crisis cohort and 12.6 percent for the early period cohort. IPOs from 2009 through 2017 have been subject to litigation at a higher rate than earlier cohorts within the first few years after the IPO.

For each IPO grouping, the incremental litigation exposure generally decreased with each year after the IPO. See Appendix 6 for incremental exposure litigation values.

Figure 24: Likelihood of Litigation against Recent IPOs—Core Filings 2009–2017 IPOs versus Prior-Period IPOs



Source: Jay R. Ritter, "Founding Dates for Firms Going Public in the U.S. during 1975–2017," University of Florida, January 2018; Center for Research in Security Prices (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 eight to 10 years after the IPO due to limited data for cohorts with an IPO date toward the end of this period.

Filing Lag

This analysis reviews the number of days between the end of the class period and the filing date of the securities class action.

- The median filing lag in 2018 remained low at 11 days.
- For the last four years, the median lag has fluctuated between 11 and 12 days.
- Class actions filed more than 11 days after the end of the class period had a median MDL more than twice as large as those filed within 11 days of the end of the class period.

For the past six years, the annual median filing lag has been below the historical average.

Figure 25: Annual Median Lag between Class Period End Date and Filing Date—Core Filings 2009–2018



Note: This analysis also excludes filings with only Section 11 claims and ICO- or cryptocurrency-related filings because there is often no specified end of the class period.

Non-U.S. Filings

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

- The number of filings against non-U.S. issuers decreased to 47 in 2018, still nearly double the 1997–2017 average of 24.
- As a percentage of total filings, filings against non-U.S. issuers reverted back to 2016 levels.

• Filings against Asian companies increased from 6 percent of all core filings in 2017 to 9 percent in 2018, making them the most common targets of non-U.S. filings.

Filings against non-U.S. companies decreased for the first time since 2013.



Figure 26: Annual Number of Class Action Filings by Location of Headquarters—Core Filings 2009–2018

- The number of filings against European companies remained at a level more than twice the 1997-2017 average despite decreasing by 19 percent from 2017 to 2018.
- ٠ Of the 17 filings against European companies, six were against firms headquartered in Ireland and four were against firms headquartered in the United Kingdom.
- Of the 19 filings against Asian firms, 15 involved • Chinese firms and three involved Singaporean companies.
- Of the 19 filings in Asia, five were against firms in the Technology sector, accounting for roughly 23 percent of filings in that sector. See page 33.
- For the first time since 2012, companies headquartered ٠ in Israel were not subject to a class action.

_____ Filings against Asian firms rose to 19the most since 2011. _____



Figure 27: Non-U.S. Filings by Location of Headquarters—Core Filings

Non-U.S. Company Litigation Likelihood

This analysis examines the incidence of non-U.S. filings relative to the likelihood of S&P 500 companies or U.S. exchange-listed companies being the subject of a class action.

The percentage of S&P 500 companies sued in 2018 was 9.4 percent, making them subject to filings at nearly double the rate of non-U.S. companies. The percentage of non-U.S. companies subject to core filings has increased steadily each year since 2013. This percentage increased from 4.6 percent to 4.8 percent from 2017 to 2018.

Over the last five years, the likelihood of a non-U.S. company being sued has increased faster than the increase experienced by all U.S. exchange-listed companies.

Figure 28: Percentage of Companies Sued by Listing Category or Domicile—Core Filings 2004–2018



Source: Center for Research in Security Prices (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 Filings

Mega DDL filings have a disclosure dollar loss (DDL) of at least \$5 billion. Mega MDL filings have a maximum dollar loss (MDL) of at least \$10 billion. MDL and DDL are only measured for core filings.

- Seventeen mega DDL filings accounted for \$212 billion of DDL in 2018.
- Mega DDL in 2018 accounted for 64 percent of total DDL, well above the 1997–2017 average of 52 percent.
- There were 27 mega MDL filings in 2018 with a total MDL of \$963 billion, a dramatic increase from 2017.

Mega MDL, as a percentage of total MDL, increased by 24 percentage points from 2017 and is above the 1997–2017 average of 70 percent.

Mega DDL and MDL increased both in terms of the number of filings and dollar amounts.

Figure 29: Mega Filings

(Dollars in Billions)

	Average 1997–2017	2016	2017	2018
Mega Disclosure Dollar Loss (DDL) Filings ¹				
Mega DDL Filings	5	5	7	17
DDL	\$63	\$33	\$47	\$212
Percentage of Total DDL	52%	31%	36%	64%
Mega Maximum Dollar Loss (MDL) Filings ²				
Mega MDL Filings	13	21	14	27
MDL	\$421	\$533	\$253	\$963
Percentage of Total MDL	70%	66%	49%	73%

Note:

1. Mega DDL filings have a disclosure dollar loss of at least \$5 billion.

2. Mega MDL filings have a maximum dollar loss of at least \$10 billion.

3. See Appendix 1 for total DDL values.

Distribution of DDL Values

The figure below compares the distribution of DDL attributable to filings of a given size in 2018 with the historical distribution of DDL.

- Mega DDL accounted for 9 percent of the total number of filings with DDL values and 64 percent of DDL in 2018.
- The number of mega DDL filings in 2018 was more than double the 2017 figure and more than triple the historical average.
- Midsize DDL filings (filings with DDL greater than \$500 million but less than or equal to \$5 billion) accounted for 35 percent of filings with DDL values in 2018, well above the 1997–2017 average of 19 percent.

Mega and larger DDL filings were an outsized portion of filings in 2018.



Figure 30: Distribution of Filings Based on DDL Size
Distribution of MDL Values

The figure below compares the distribution of MDL attributable to filings of a given size in 2018 with the historical distribution of MDL.

- In 2018, mega MDL filings represented 14 percent of the total number of filings with MDL values and 73 percent of total MDL.
- The number of mega MDL filings increased from 14 in 2017 to 27 in 2018, while the number of filings with MDL less than \$1 billion decreased.
- In 2018, the percentage of MDL filings greater than \$2 billion but less than or equal to \$4 billion was 13 percent, compared to the 1997–2017 historical average of 8 percent.

While the number of mega MDL filings nearly doubled in 2018, the distribution of MDL filings overall aligned more closely with the historical average, compared to DDL filings.





1997–2017 Average

2018

Industry

This analysis includes both the large capitalization companies of the S&P 500 as well as smaller companies.

- The 28 core filings in the Communications sector were the most since 2007, and the 29 core filings in the Consumer Cyclical sector were the most since 2005.
- Core filings against companies in the Financial sector decreased from 22 to 19 from 2016 to 2018. However, the DDL of these filings increased from \$20 billion to \$25 billion over the same period, which is 34 percent above the 1997–2017 average. See Appendix 7.
- From 2017 to 2018, both the total MDL and DDL of filings in the Consumer Non-Cyclical sector more than doubled, despite having fewer filings. See Appendix 7.

Filings in the Consumer Non-Cyclical Sector—which includes biotechnology, pharmaceuticals, and healthcare decreased after two years of heavy filing activity.

Figure 32: Filings by Industry—Core Filings

 • Financial
 • Consumer Non-Cyclical
 • Industrial
 • Technology
 • Consumer Cyclical
 • Communications
 • Energy
 • Basic Materials
 • Utilities

 2018
 19
 68
 20
 22
 29
 28
 7
 8
 3

 2017
 20
 85
 26
 14
 22
 18
 9
 11
 2

 2016
 22
 85
 16
 15
 16
 9
 8
 8

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% Note:

1. Filings with missing sector information or infrequently used sectors may be excluded. For more information, see Appendix 7.

2. Sectors are based on the Bloomberg Industry Classification System.

Average 1997–2017

100%

Sector Comparison: Consumer Non-Cyclical Versus Technology and Communications

- Filings against companies in the Consumer Non-Cyclical, Technology, and Communications sectors were responsible for 54 percent of all core filings from 1997 to 2017.
- Historically, filings in the Consumer Non-Cyclical sector were as numerous as filings in the Technology and Communications sectors combined.
- In 2016 and 2017, Consumer Non-Cyclical filings were disproportionately high compared to Technology and Communications filings. In 2018, the recent differences in filing activity diminished.

Despite a decline, filings against biotechnology, pharmaceutical, and healthcare companies remained well above the historical average.

Figure 33: Sector Comparison: Consumer Non-Cyclical Versus Technology and Communications—Core Filings



Note:

1. Sectors and subsectors are based on the Bloomberg Industry Classification System.

2. The "Other" category is a grouping primarily encompassing the Agriculture, Beverage, Commercial Services, and Food subsectors.

Circuit

- The Second and Ninth Circuits combined made up 63 percent of all core filings in 2018, higher than the 1997–2017 average of 53 percent.
- Core filings in the Third Circuit decreased from the record high of 35 in 2017 to 26 filings in 2018, but remained higher than the 1997–2017 average of 16.
- Core filings in the Seventh Circuit increased by 225 percent to 13 filings, the highest number of filings in that circuit in the past 10 years.
- Core filings in the Ninth Circuit increased by 53 percent to 69 filings.
- The total MDL for the Ninth Circuit increased from \$114 billion in 2017 to \$489 billion in 2018, more than three times the 1997–2017 average. See Appendix 8.

Core filings in the Ninth Circuit were the highest on record.

Figure 34: Filings by Circuit—Core Filings



Note: For more information, see Appendix 8.

🛢 1st Circuit 🛢 2nd Circuit 🗧 3rd Circuit 📕 4th Circuit 🛢 5th Circuit 🛢 6th Circuit 🛢 7th Circuit 🛢 8th Circuit 🛢 9th Circuit 🔳 10th Circuit 🔳 11th Circuit 🔳 D.C.

Appointment of Plaintiff Lead Counsel

This analysis focuses on three law firms—The Rosen Law Firm, Pomerantz LLP, and Glancy Prongay & Murray LLP. While these three law firms have been responsible for the majority of first identified complaints in each cohort since 2014, their rate of appointment as lead or co-lead counsel has been lower.

- The percentage of cases for which these firms were appointed lead counsel remained essentially unchanged from 2016 to 2017.
- With the exception of 2008, these firms were typically appointed lead counsel for smaller cases (i.e., their share of filings exceeded their share of total MDL and DDL).
- These firms have been largely responsible for the declining median filing lag discussed on page 26 and for the increasing frequency of the appointment of individuals, rather than institutional investors, as lead plaintiff discussed on page 18.

From 2008 to 2017, three plaintiff law firms were increasingly appointed lead or co-lead plaintiff counsel in smallerthan-average-sized cases.

Figure 35: Frequency of Three Law Firms' Appointment as Lead or Co-lead Plaintiff Counsel—Core Filings 2008–2018



Frequency of these firms as the course of Record on the First identified complaint											
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of Core Filings	22	23	26	35	40	66	83	104	122	127	119
% of Total Core Filings	10%	15%	19%	24%	29%	43%	54%	60%	66%	59%	54%

Note:

1. This analysis considers law firms that were appointed lead or co-lead counsel by the court. For filings in which the case was resolved prior to the appointment of lead counsel, the coursel listed on the first identified complaint (FIC) are considered the lead counsel.

2. Two percent of filings in 2016, 3 percent of filings in 2017, and 40 percent of filings in 2018 have not yet had lead counsel appointed.

3. The counts in the table include circumstances when the FIC includes one or any of these law firms, regardless of whether other plaintiff counsel are also listed on the complaint.

New: Case Status by Lead Plaintiff Counsel

This analysis examines the case outcomes for filings in which The Rosen Law Firm, Pomerantz LLP, and Glancy Prongay & Murray LLP were appointed lead or co-lead counsel. The outcomes for these filings are compared with filings in which other plaintiff law firms are the lead counsel.

Class actions filed in 2016 and 2017 in which these three plaintiff law firms were appointed lead or co-lead counsel have preliminarily exhibited higher dismissal rates than other plaintiff law firms.

- From 2013 through 2017, these three firms have had 51 percent of their class actions dismissed compared to 43 percent for all other 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.



Figure 36: Case Status by Plaintiff Law Firm Appointed Lead or Co-Lead Counsel—Core Filings 2013–2017

Note:

1. This analysis considers law firms that were appointed lead or co-lead counsel by the court. For filings in which the case was resolved prior to the appointment of lead counsel, the counsel listed on the first identified complaint (FIC) are considered the lead counsel.

appointment of lead coursel, the coursel listed of the first dentified complaint (FiC) are considered the lead coursel.

2. Two percent of filings in 2016 and 3 percent of filings in 2017 have not yet had lead counsel appointed. These filings are not included in this analysis. 3. Percentages may not sum to 100 percent due to rounding.

New Developments

Initial Coin Offerings

The cryptocurrency and ICO markets emerged and grew rapidly in 2017, and began to cool down in 2018. This led to an increase in the number of class actions involving ICOs in 2018, concentrated in the first half of the year.

The Securities Class Action Clearinghouse identified nine ICO- or cryptocurrency-related filings in 2018, compared to five in 2017. Eight of the nine filings were in the first half of 2018. Some of these filings included Section 10(b), Section 12, and/or Section 5 claims.

The issue of whether or which federal laws govern ICOs has been litigated throughout the year.

In September 2018, a federal judge in New York ruled that a criminal case could proceed on the basis that the jury would decide if the ICO at issue was a security subject to federal criminal law. Later that month, a Massachusetts federal judge ruled that the U.S. Commodity Futures Trading Commission (CFTC) had authority to prosecute fraud involving virtual currencies.

SEC v. Blockvest LLC et al. addressed the question of whether the tokens offered during an ICO were unregistered securities. The Ninth Circuit on November 27, 2018, denied the SEC's preliminary injunction bid aimed at halting the ICO and ruled that the SEC had failed to demonstrate that the tokens were securities. This ruling marked the first court decision against the SEC's allegations that a token is a security.

Negligence Standard in M&A Claims

Varjabedian v. Emulex Corp. et al. addressed the question of whether investors must prove that the company intentionally engaged in wrongdoing when it misled shareholders or that they only needed to show that the company was being negligent to assert M&A claims under Section 14.

The case is now before the U.S. Supreme Court after an opinion split between the Ninth Circuit (which found that investors only need to show negligence rather than wrongdoing) and past rulings from five other circuits (which considered that claims under Section 14 must allege intent).

Administrative Law Judge Appointments

Lucia v. Securities and Exchange Commission was argued before the U.S. Supreme Court on April 23, 2018, and decided on June 21, 2018. At issue was the question of whether the administrative law judges (ALJs) of the SEC are Officers of the United States within the meaning of the Appointments Clause.

The Court ruled that ALJs are Officers of the United States subject to the Appointments Clause. This ruling answered the constitutional question raised by *Lucia* related to SEC ALJs, but left open the issue of how other cases adjudicated by improperly appointed ALJs should be handled in the future. In response, the SEC in August 2018 issued an order reappointing all ALJs and allowing new hearings before different ALJs for respondents in more than 120 matters.

See Cornerstone Research, SEC Enforcement Activity: Public Companies and Subsidiaries—Fiscal Year 2018 Update, for more information.

Glossary

Chinese reverse merger (CRM) filing is a securities class action against a China-headquartered company listed on a U.S. exchange as a result of a reverse merger with a public shell company. See Cornerstone Research, *Investigations and Litigation Related to Chinese Reverse Merger Companies*.

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

Class Action Filings Non-U.S. Index tracks the number of filings against non-U.S. issuers (companies headquartered outside the United States) relative to total filings, excluding M&A filings.

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

Core filings are all federal securities class actions excluding those defined as M&A filings.

Disclosure Dollar Loss Index[®] (DDL Index[®]) measures the aggregate DDL for all 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.

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 (FIC) 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. 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 two questions for each sector: (1) What percentage of these companies were subject to new securities class actions in federal court during each calendar year? (2) What percentage of the total market capitalization of these companies was subject to new securities class actions in federal courts 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 plead 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 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 that have Section 14 claims, but no Rule 10b-5, Section 11, or Section 12(2) claims, and involve merger and acquisition transactions.

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: Filings Basic Metrics

			Disc	losure Dollar	Loss	Maximum Dollar Loss			U.S.	U.S. Exchange-Listed Firms: Core Filings		
Year	Class 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	223	223	\$221	\$1,516	\$208	\$816	\$5,591	\$1,077	5,339	169	3.2%	
2009	165	158	\$84	\$830	\$138	\$550	\$5,447	\$1,066	5,042	119	2.4%	
2010	175	135	\$73	\$691	\$146	\$474	\$4,515	\$598	4,764	107	2.2%	
2011	188	145	\$115	\$855	\$92	\$522	\$3,894	\$431	4,660	126	2.7%	
2012	151	138	\$97	\$767	\$151	\$404	\$3,183	\$659	4,529	116	2.6%	
2013	165	152	\$104	\$750	\$153	\$278	\$2,011	\$532	4,411	137	3.1%	
2014	168	155	\$56	\$384	\$168	\$213	\$1,460	\$528	4,416	142	3.2%	
2015	207	173	\$118	\$702	\$145	\$387	\$2,305	\$502	4,578	164	3.6%	
2016	271	186	\$107	\$603	\$195	\$804	\$4,541	\$1,155	4,593	176	3.8%	
2017	412	214	\$131	\$667	\$148	\$521	\$2,657	\$658	4,411	187	4.2%	
2018	403	221	\$330		\$327	\$1,311	\$6,590	\$1,144	4,406	197		
Average (1997– 2017)	203	182	\$120	\$758	\$130	\$602	\$3,782	\$659	5,721	164	2.9%	

Note:

1. 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, ICO filings, and other filings where calculations of MDL and DDL are non-obvious.

2. The number and percentage of U.S. exchange-listed firms sued are based on core filings.

Annendix 2A · S&F	2 500 Securities Litigation	on—Percentage of S&P 5	00 Companies Sub	iect to Core Filings
Appendix 2A. Jai	Juo Jecunites Lingatio	n reitentage of John J	oo companies sub	ject to core rinings

Year	Consumer Discretionary	Consumer Staples	Energy / Materials	Financials / Real Estate	Health Care	Industrials	Telecom / 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%	10.7%	3.7%	6.9%	1.2%	0.0%	4.4%
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%	2.9%	2.8%
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%
Average 2001–2017	5.0%	2.9%	1.5%	8.1%	8.3%	3.5%	6.0%	5.2%	5.2%

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

Year	Consumer Discretionary	Consumer Staples	Energy / Materials	Financials / Real Estate	Health Care	Industrials	Telecom / 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%	31.2%	1.7%	23.2%	0.3%	0.0%	7.7%
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%	0.6%	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%
Average 2001–2017	5.3%	3.1%	3.0%	15.5%	11.4%	7.2%	8.2%	5.9%	8.2%

Note: Average figures are calculated as the sum of the market capitalization subject to core filings in a given sector from 2001–2017, divided by the sum of market capitalization in that sector from 2001–2017.

Appendix 3: M&A Filings Overview

		M&A Case Status					
Year	M&A Filings	Dismissed	Settled	Remanded	Continuing		
2009	7	5	2	0	0		
2010	40	34	6	0	0		
2011	43	40	3	0	0		
2012	13	9	4	0	0		
2013	13	7	6	0	0		
2014	13	10	3	0	0		
2015	34	26	7	0	1		
2016	85	67	12	0	6		
2017	198	187	3	1	7		
2018	182	125			56		
Average							
Average (2009– 2017)	50	43	5	0	2		

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 2018.

Appendix 4: Case Status by Year—Core Filings

		In the Firs	t Year		In the Second Year				In the Third Year				
Filing Year	Settled	Dismissed	Trial	Total Resolved	Settled	Dismissed	Trial	Total Resolved	Settled	Dismissed	Trial	Total Resolved within Three Years	
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%	7.9%	0.0%	8.7%	16.1%	12.0%	0.0%	36.8%	16.1%	8.3%	0.0%	61.2%	
1999	0.5%	7.2%	0.0%	7.7%	11.0%	11.5%	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%	18.3%	5.0%	0.0%	53.9%	
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%	20.3%	0.0%	40.7%	17.6%	8.8%	0.0%	67.0%	
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%	13.6%	0.0%	28.8%	17.5%	14.1%	0.0%	60.5%	
2008	0.0%	13.0%	0.0%	13.0%	3.6%	18.4%	0.0%	35.0%	9.9%	11.2%	0.0%	56.1%	
2009	0.0%	10.1%	0.0%	10.1%	4.4%	19.6%	0.0%	34.2%	8.2%	6.3%	0.0%	48.7%	
2010	1.5%	11.1%	0.0%	12.6%	7.4%	15.6%	0.0%	35.6%	3.7%	14.8%	0.0%	54.1%	
2011	0.0%	11.7%	0.0%	11.7%	2.8%	15.9%	0.0%	30.3%	18.6%	12.4%	0.0%	61.4%	
2012	0.7%	12.3%	0.0%	13.0%	4.3%	22.5%	0.0%	39.9%	8.7%	10.1%	0.0%	58.7%	
2013	0.0%	17.1%	0.0%	17.1%	5.3%	19.7%	0.0%	42.1%	9.2%	9.9%	0.0%	61.2%	
2014	0.6%	7.7%	0.0%	8.4%	5.2%	18.7%	0.0%	32.3%	9.7%	9.7%	0.0%	51.6%	
2015	0.0%	13.9%	0.0%	13.9%	2.3%	22.0%	0.0%	38.2%	15.6%	12.1%	0.0%	65.9%	
2016	0.0%	12.9%	0.0%	12.9%	6.5%	22.0%	0.0%	41.4%	14.0%	9.7%	0.0%	65.1%	
2017	0.5%	20.6%	0.0%	21.0%	8.9%	13.6%	0.0%	43.5%	-	-	-	-	
2018	0.0%	10.4%	0.0%	10.4%	-	-	-	-	-	-	-	-	

Note: Percentages may not sum due to rounding. Percentages below the dashed lines indicate cohorts for which data are not complete.

••	0					0				
	1933 A	ct Filings in Sta	ate Courts	Status of 193	3 Act Filings i	n State Courts	Status of Federal Section 11–Only Filings			
Year	California	New York	Other	Ongoing	Settled	Dismissed	Ongoing	Settled	Dismissed	
2010	1	0	0	0	1	0	0	8	9	
2011	3	0	0	0	1	2	0	4	5	
2012	5	0	2	0	3	3	0	6	3	
2013	1	0	0	0	1	0	0	2	5	
2014	5	0	1	0	5	1	1	4	4	
2015	15	0	2	0	10	6	0	4	5	
2016	19	0	8	8	9	8	1	2	2	
2017	7	0	6	8	1	3	5	2	3	
2018	16	13	4	31	0	0	13	0	1	
Average (2010–2017)	7	0	2	2	4	3	1	4	5	

Appendix 5: 1933 Act Filings in State Courts and Federal Section 11–Only Filings Overview

Note: If a matter is remanded from federal court to a state court, it is recorded in the state court column based on its state court disposition. Alternatively, if a matter is removed from a state court to federal court, it is recorded in the federal court column based on its federal court disposition.

Appendix 6: Litigation Ex	posure for IPOs in the Given	Periods—Core Filings

	C	umulative Exposu	re	Incremental Exposure				
Years Since IPO	2009–2017	2001-2008	1996-2000	2009-2017	2001-2008	1996-2000		
1	6.5%	5.4%	2.2%	6.5%	5.4%	2.2%		
2	11.9%	9.0%	6.6%	5.4%	3.6%	4.4%		
3	16.0%	11.9%	9.7%	4.2%	2.8%	3.2%		
4	19.5%	14.5%	12.6%	3.5%	2.6%	2.9%		
5	22.1%	16.4%	16.2%	2.6%	1.9%	3.6%		
6	23.3%	18.4%	18.6%	1.3%	2.0%	2.4%		
7	24.4%	20.7%	21.2%	1.1%	2.2%	2.6%		
8	-	23.1%	23.6%	-	2.4%	2.4%		
9	-	24.7%	26.2%	-	1.7%	2.6%		
10	-	27.1%	28.1%	-	2.3%	1.8%		

Note:

1. The post-crisis IPO cumulative litigation exposure is not presented for eight to 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 have not yet been incorporated into this analysis. 2. Cumulative litigation exposure correcting for survivorship bias is calculated using the following formula:

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

number of companies sued in year i

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

Appendix 7: Filings by Industry—Core Filings

(Dollars in Billions)

	Class Action Filings				Di	isclosure [Dollar Loss		Maximum Dollar Loss			
Industry	Average 1997– 2017	2016	2017	2018	Average 1997– 2017	2016	2017	2018	Average 1997– 2017	2016	2017	2018
Financial	32	22	20	19	\$19	\$20	\$14	\$25	\$110	\$169	\$48	\$138
Consumer Non-Cyclical	49	85	85	68	\$36	\$38	\$42	\$104	\$136	\$326	\$165	\$435
Industrial	17	16	26	20	\$12	\$18	\$26	\$28	\$39	\$77	\$85	\$240
Technology	23	15	14	22	\$17	\$12	\$8	\$65	\$77	\$33	\$58	\$150
Consumer Cyclical	20	16	22	29	\$9	\$5	\$15	\$28	\$50	\$41	\$84	\$120
Communications	27	9	18	28	\$21	\$1	\$13	\$65	\$146	\$49	\$37	\$166
Energy	7	8	9	7	\$4	\$11	\$5	\$1	\$23	\$56	\$20	\$4
Basic Materials	5	8	11	8	\$2	\$2	\$7	\$10	\$14	\$51	\$17	\$33
Utilities	3	1	2	3	\$1	\$0	\$1	\$3	\$8	\$2	\$8	\$25
Unknown/ Unclassified	1	6	7	17	\$0	\$0	\$0	\$0	\$0	\$1	\$0	\$2
Total	182	186	214	221	\$120	\$107	\$131	\$330	\$602	\$804	\$521	\$1,311

Note: Figures may not sum due to rounding.

Appendix 8: Filings by Circuit—Core Filings

	(Class Actio	on Filings		Disclosure Dollar Loss				Maximum Dollar Loss			
Circuit	Average 1997–2017	2016	2017	2018	Average 1997–2017	2016	2017	2018	Average 1997–2017	2016	2017	2018
1st	9	8	10	6	\$8	\$3	\$1	\$3	\$21	\$7	\$6	\$18
2nd	49	59	75	71	\$40	\$16	\$46	\$88	\$216	\$247	\$161	\$494
3rd	16	17	35	26	\$16	\$7	\$27	\$44	\$61	\$44	\$106	\$190
4th	6	4	7	3	\$2	\$2	\$5	\$3	\$12	\$3	\$17	\$11
5th	11	8	8	11	\$7	\$11	\$4	\$3	\$37	\$55	\$16	\$11
6th	8	8	7	4	\$7	\$6	\$4	\$6	\$27	\$24	\$36	\$19
7th	8	7	4	13	\$7	\$15	\$3	\$11	\$27	\$62	\$20	\$50
8th	6	2	1	3	\$3	\$2	\$0	\$2	\$13	\$13	\$0	\$7
9th	47	61	45	69	\$22	\$43	\$31	\$162	\$151	\$331	\$114	\$489
10th	6	5	7	6	\$3	\$0	\$2	\$2	\$13	\$11	\$14	\$9
11th	14	7	14	9	\$5	\$2	\$8	\$5	\$22	\$6	\$20	\$14
D.C.	1	0	1	0	\$1	\$0	\$0	\$0	\$3	\$0	\$11	\$0
Total	182	186	214	221	\$120	\$107	\$131	\$330	\$602	\$804	\$521	\$1,311

Note: Figures may not sum due to rounding.

Appendix 9: Filings by Exchange Listing—Core Filings

	Average (1997–2017)		2017		2018	
	NYSE/Amex	Nasdaq	NYSE	Nasdaq	NYSE	Nasdaq
Class Action Filings	83	104	159	223	158	216
Core Filings	74	92	81	111	88	111
Disclosure Dollar Loss						
DDL Total (\$ Billions)	\$84	\$36	\$84	\$46	\$168	\$152
Average (\$ Millions)	\$1,227	\$407	\$1,053	\$424	\$1,972	\$1,418
Median (\$ Millions)	\$258	\$97	\$387	\$105	\$587	\$285
Maximum Dollar Loss						
MDL Total (\$ Billions)	\$403	\$197	\$324	\$196	\$814	\$458
Average (\$ Millions)	\$5,959	\$2,167	\$4,054	\$1,794	\$9,580	\$4,284
Median (\$ Millions)	\$1,302	\$451	\$1,528	\$415	\$2,226	\$901

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 Stanford Law School Securities Class Action Clearinghouse, in collaboration with Cornerstone Research, has identified 5,188 federal securities class action filings between January 1, 1996, and December 31, 2018 (securities.stanford.edu). The analysis in this report is based on data identified by Stanford as of January 11, 2019.

- The sample used in this report includes federal filings that typically allege violations of the Securities Act of 1933 Section 11, the Securities Exchange Act of 1934 Section 10b, Section 12(a) (registration requirements), or Section 14(a) (proxy solicitation requirements).
- 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 108 state class action filings in state courts from January 1, 2010, to December 31, 2018, have also been identified.

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