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2018 FINANCIAL RESTATEMENTS
AN EIGHTEEN YEAR COMPARISON

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2018 Financial Restatements: An Eighteen Year Comparison

Introduction

Reissuance restatements are disclosed in an 8-K, Item 4.02 because past financial statements can no longer be relied upon and must be reissued. The number of these more severe restatements experienced twelve consecutive years of decline followed by a minor uptick to a total of 119 during 2018. This total is the second lowest since the 8-K disclosure requirement came into effect in August of 2004.

After six years of relative stability, the number of total restatements dropped for four consecutive years to an 18-year low of 516 (while also maintaining low severity) and, in similar fashion, a focus on U.S. accelerated filers also shows a consecutive four-year drop.

The other type of restatement, a revision restatement, is defined as an adjustment contained in a periodic report without a prior 8-K disclosure. Thus, a revision restatement, presumably, does not undermine reliance on past financials and is less disruptive, if at all, to the market. In 2018, revision restatements comprised of 74.3% of the total restatements disclosed, the fifth year in a row with a value above 70%.

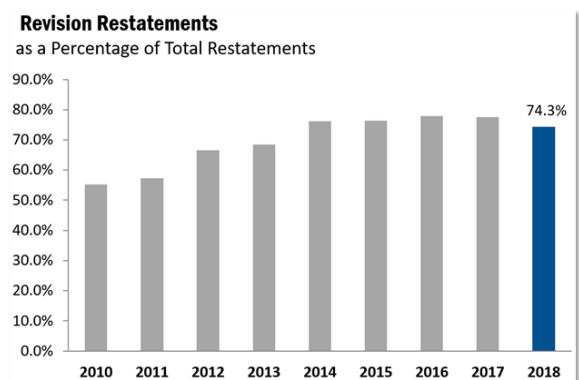
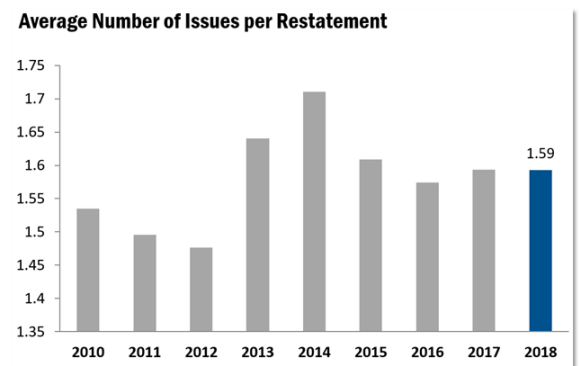
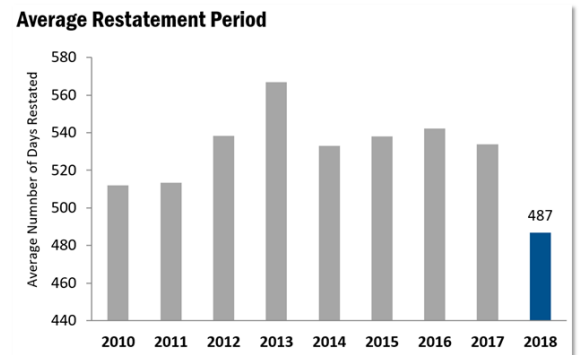
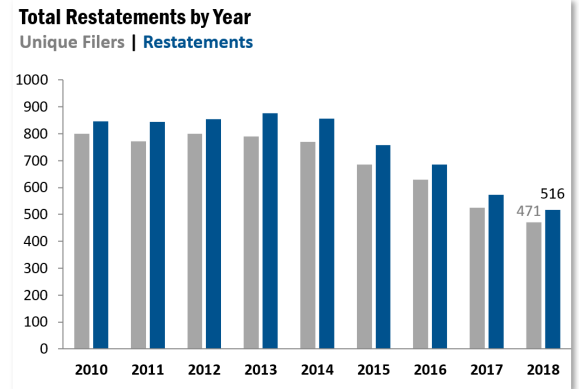
In addition to quantifying the number of restatement disclosures, Audit Analytics also assessed the severity of the restatements filed in 2018 and found their impact remained generally low. Indeed, Audit Analytics found an indication of low severity in every criterion quantified: (1) the negative impact on net income, (2) the average cumulative impact on net income per restatement, (3) the percentage of restatements with no impact on income statements, (4) the average number of days restated, and (5) the average number of issues identified in the restatements.

In 2018, the average number of issues implicated in a restatement was 1.59 issues per restatement. Likewise, the average number of days that were corrected by a financial adjustment (the restatement period) decreased from 534 in 2017 to 487 days in 2018, a value lower than the prior eight years and much lower than the high of 739 days in 2005.

Another indication of a restatement's severity is the time needed to assess and correct the mistatement. In 2018, an average of 6.63 days were needed by public companies to file the restatement, which represents a value much lower than required in three years prior to 2010.

Audit Analytics also identified the largest negative restatement for each year from 2002 to 2018. The dollar value of the highest adjustment in 2018, a \$1.46-billion adjustment by OI S.A. (formerly Brasil Telecom), was an increase over the prior six years, but dramatically lower than the \$6.3 billion and \$5.2 billion adjustments of 2004 and 2005.

Another encouraging finding was revealed in the filer status (e.g., accelerated filer) breakdown of the restatements. Although total restatements from U.S. accelerated filers increased during the four years from 2011 to 2014, to reach a local maximum of 353, that time period was followed by four years of decreases to drop to a total of 171. In addition to the drop in total restatements, the more severe reissuance restatements from U.S. accelerated filers totaled only 34 in 2018, an amount that is second lowest since 2005, when the disclosure requirement came into effect.



Database Overview

The Audit Analytics Financial Restatement dataset includes data from more than 17,000 financial restatements and/or non-reliance filings disclosed by over 9,000 SEC public registrants since January 1, 2001. In addition to the areas identified in the charts contained in this report, the database employs a taxonomy (issue classifications) of more than 40 different accounting error categories (e.g., Cash Flow Statement (FAS 95), Tax (FAS 109), Revenue Recognition, Intangible Assets, etc.). Search results from this level of granularity can be filtered by other demographic data such as industry, financial size, filing designation, location, audit firms, and any number of peer groups. The relational nature of the database allows the researcher to introduce and compare financial restatement search results into other data sets such as accelerated filer status, legal exposures, director and officer changes, auditor changes, auditor fees, internal control reports, and other data populations. This content extension further allows an analyst to identify anomalies and market patterns that would not be readily apparent without performing this layered approach. The analysis included in this Executive Summary is sophisticated, but it does not utilize the full capabilities provided by the database.

Methodology

This report was produced from data searched, categorized, and extracted from the Audit Analytics database. Our restatement dataset covers all filer types (e.g., accelerated filers (“AF”), non-accelerated filers, funds and trusts, new company registrations, foreign registrants, etc.). Restatement records originate from one of two sources: 8-Ks or periodic reports (e.g., 10-Ks, 10-K/As, 10-Qs, 40F, 20F, etc.). Our methodology is designed to create a timeline of the restatement’s history. The timeline frequently begins with a press release or an Item 4.02 disclosure in an 8-K. Generally, we consider such a history of filings to be one restatement. In certain circumstances, however, a company that clearly identified a completely new issue in a subsequent filing is treated as a new restatement. For example, if a company files an 8-K disclosing a revenue recognition problem and the restatement issued in the subsequent 10-K/A provides adjustments for an additional issue (e.g., an adjustment in cash flow in addition to revenue recognition), a separate and distinct restatement is created to track that newly disclosed issue (the cash flow statement (FAS 95) issue). We do not, however, identify the revenue recognition issue in the second restatement so as to avoid duplicating the restatement issues during the process. Generally, the intent is to err on the side of combining new disclosures (such as a change in period or amounts) in restatements unless it is clear that the issues are different. Since we track newly disclosed issues separately, and some companies file more than one restatement during a particular calendar year, the number of restatements we report is greater than the number of unique filers who report them. As a result, we provide both data points (number of unique filers and number of restatements) in our analysis. Since some restatements need not be disclosed in an 8-K, and are thus first presented in a periodic report, our analysts review all periodic reports to identify these types of restatements. In this report, a restatement revealed in a periodic report without a prior disclosure in Item 4.02 of an 8-K is referred to as a revision restatement. Starting in 2013, Audit Analytics augmented its search process by reviewing SEC comment letters from 2005 to present. Most of the restatements discovered by this additional review were restatements in registration statements, such as S-1s.

Population¹

As noted above, the Audit Analytics restatement database contains more than 17,000 financial restatements and/or non-reliance filings disclosed by over 9,000 SEC public registrants since January 1, 2001. While keeping the database current, Audit Analytics also continually reviews and updates the historical population in order to refine the data set. For example, Audit Analytics reviews past restatements filed in close succession by a common registrant to determine if such restatements identified in the database as distinct (as discussed in the Methodology section above) should more appropriately be characterized as a single restatement. Other improvements include the identification of any press releases relevant to a given restatement and the addition of this event to the history of the restatement. Since Audit Analytics begins a restatement’s history at the time of the first announcement, the discovery of an earlier announcement will cause an appropriate shift in the restatement’s history. In addition, Audit Analytics employs a review process designed to identify any instances in which an anticipated restatement announced in an 8-K does not subsequently materialize because the consequences were not as severe as expected. When identified, these orphaned 8-Ks are removed from the database along with their respective history. These ongoing efforts provide the most current and refined population of restatements and non-reliance filings available.

¹ The research is based on a database download of February 25, 2019.

During the research performed for this report, the population described above is further filtered in order to avoid the double counting of restatements when presenting the overall results. First, subsidiaries are removed if the parent also filed a restatement. In addition, interconnected registrants are identified and grouped together if each registrant filed corresponding restatements. For example, an oil drilling entity may create partnerships and individual SEC registrants for each of its oil wells (or other assets/licenses). Under such a scenario, a large number of related partnerships may each file analogous restatements. In order to avoid a skew in the analysis that can result from counting all the equivalent restatements from interconnected registrants, Audit Analytics identified relationships and counted only one member of the group (and its restatement) as a representative of that group.

Terminology and Notice Requirement

Audit Analytics identifies two levels of restatements: reissuance restatements and revision restatements. In short, a reissuance restatement addresses a material error that requires the reissuance of past financial statements. At times, these types of restatements are referred to as “Big R” restatements and, in many cases, are the only type of restatement to garner concern. A revision restatement simply revises an immaterial misstatement. At times, these types of restatements are referred to as “Little r” restatements and typically address a series of immaterial adjustments over time. The distinction is important because the goal of financial reporting is to avoid, when possible, the occurrence of a material error while immaterial changes are considered ongoing adjustments made in the ordinary course of business.

As noted above, a reissuance restatement is a restatement that requires the reissuance of the financial statements. As soon as a company determines that it must reissue its financials, it is required to disclose this information to the public. The disclosure requirement for a reissuance restatement is found in the Sarbanes-Oxley Act of 2002 (“SOX”).

In response to Section 409 of SOX, titled “Real Time Issuer Disclosures,” the SEC identified new reportable items that must be disclosed in an 8-K. This new set of disclosure requirements became effective on August 23, 2004, and applies to companies that file a 10-K as an annual report to the SEC.² One of the new reportable events is the conclusion that a past financial statement should no longer be relied upon. Such an event is to be disclosed in an 8-K under Item 4.02, titled “Non-Reliance on Previously Issued Financial Statements or a Related Audit Report or Completed Interim Review.” Therefore, in most instances, the first disclosure of a past unreliable financial statement should appear in the Item 4.02 of an 8-K filed within four business days of the conclusion. The SEC expects an Item 4.02 to precede the adjustment and will likely review an instance where a 4.02 is filed on the same day as an amended periodic report.³ Such a concurrent event could happen if a restatement could be produced quickly (i.e., correct a clerical error), but a material adjustment requiring an investigation would likely be preceded by an Item 4.02 disclosure.⁴

In contrast, a revision restatement does not require the 8-K disclosure because it concerns immaterial adjustments that do not undermine reliance of past financials. Such a restatement does not require the issuance of new financials and are thus less disruptive, if at all, to the market. In this report, a revision restatement is defined as any restatement revealed in a periodic report or other document without a prior disclosure in Item 4.02 of an 8-K.⁵

² Pursuant to SEC Release 33-8400 the registrants that must provide a disclosure are those “subject to the reporting requirements of Section 13(a) and Section 15(d) of the Exchange Act, other than foreign private issuers that file annual reports on Form 20-F or 40-F” (see <http://www.sec.gov/rules/final/33-8400.htm>). Therefore, the distinction between reissuance restatements and revision restatements does not apply to foreign filers.

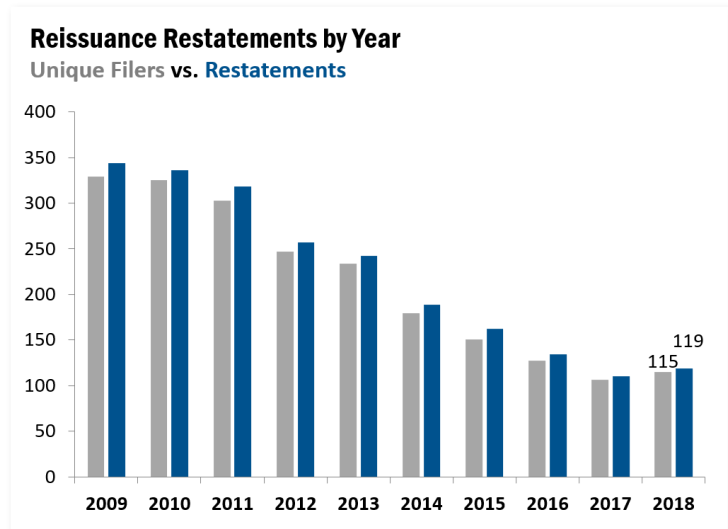
³ See Louise M. Dorsey, Speech by SEC Staff: Remarks Before the 2006 AICPA National Conference on Current SEC and PCAOB Developments, (noting that “the trigger event is the decision that the financial statements are unreliable, not the completion of the restatement process,” and therefore if “a company files a 4.02 8-K on the same day it files an amended periodic report to restate its financial statements, it is highly likely that the staff would question the timing of the 8-K filing.” In such instances, the SEC would expect to find an adjustment that corrected a clerical error or other error that would not require an internal investigation.

⁴ Although the 8-K disclosure rule does not use the word “material,” preparers simplify the discussion by noting that a “Big R” is a material adjustment while a “Little r” is immaterial. The focus on materiality is based on ASC 250 (which includes SAB 99), Accounting Changes and Error Corrections, which, in short, states that previous financials can no longer be relied upon (and thus must be reissued) if the misstatement is material. If the misstatement is immaterial, the misstatement does not undermine reliance on past financials (and thus past financials need not be reissued).

⁵ For example, the first disclosure could be in a quarterly or annual report that provides the adjustment, in an NT filing (a notice of late filing), or in a press release filed in an 8-K.

Executive Summary - Financial Restatements 2001 to 2018

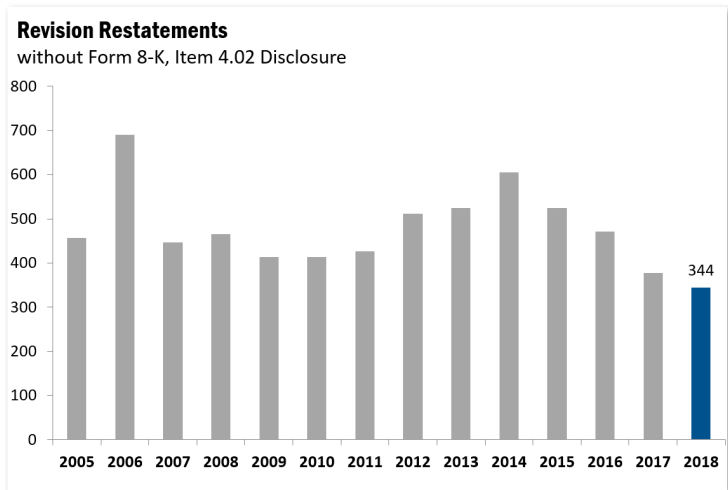
FIGURE 1



1. After twelve consecutive years of decline, the number of reissuance restatements experienced a minor uptick in 2018.

As noted above, the requirement that 10-K filers disclose the determination that past financial statements can no longer be relied upon came into effect in August 2004. Therefore, the first full calendar year of reissuance restatements occurred in 2005, which experienced 973 such disclosures from 899 companies. (See page 11.) During the next year, 876 companies disclosed a total of 949 reissuance restatements. Thereafter, both the total number of companies and total number of disclosures dropped for eleven consecutive years, reaching a low of 110 disclosures by 106 companies in 2017. A minor uptick in 2018 increased the number of disclosures to 119 from 115 companies, numbers that represent the second lowest totals since the disclosure requirement came into effect.

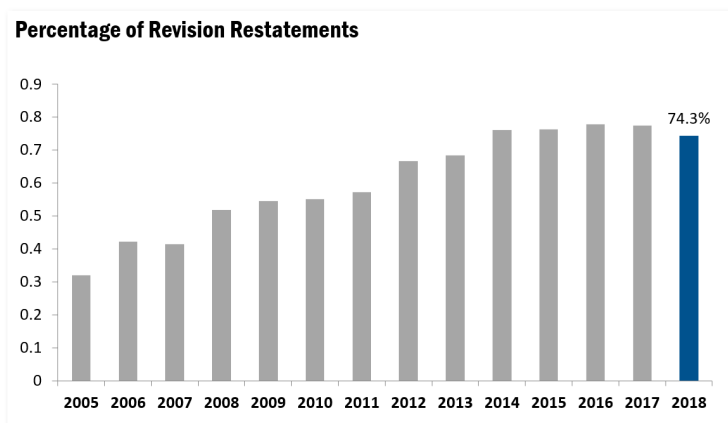
FIGURE 2



2. While the number of revision restatements during 2018 was low, the number represented a high percentage of overall restatements (indicating low severity of entire restatement population).

This report defines a revision restatement as any restatement revealed in a periodic report or other document without a prior disclosure in Item 4.02 of an 8-K. These types of restatements do not undermine reliance on past financial statements and are of minor, if any, concern. As shown in Figure 2, the number of revision restatements for 2018 represents a fourteen-year low of 344, the lowest number since the disclosure requirement came into effect. (See page 12.)

FIGURE 3

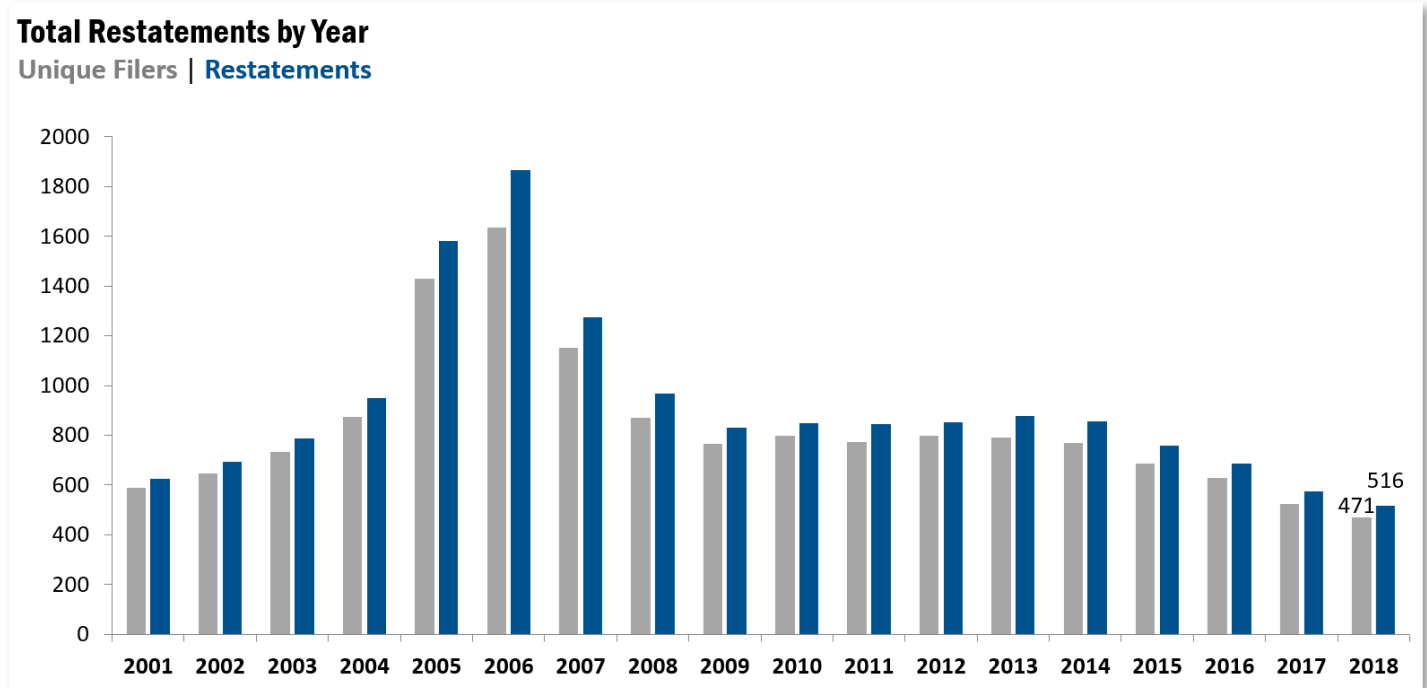


Although this number is low, the percentage of revision restatements is high. When revision restatements are compared to all restatements from 10-K filers, a different perspective is revealed. Figure 3 displays an overall upward trend from 2005 to 2016 with a high of 77.9%. This value dropped to 77.5% (378 out of 488) in 2017 then to 74.3% (344 out of 463) in 2018. Although the percentage dropped the last two years, the 2018 value over 70% shows that a large portion of restatements disclosed in 2018 comprised the less severe type (an indication of low severity of the overall restatement population).

3. After six years of relatively steady restatement totals from 2009 to 2014, the number of total restatement disclosures dropped for four years in a row.

In 2006, the total amount of restatements peaked with 1,868 restatements from 1,637 companies. The 830 disclosures in 2009 was the beginning of a six-year period when the overall number of restatements leveled off and stayed within a range between 830 and 876. This trend, however, ended with four consecutive decreases: 11.67% in 2015, 9.38% in 2016, 16.47% in 2017, and 16.47% in 2018. The total of 516 in 2018 is the lowest amount during the 18 years analyzed. In addition, the total of 516 represents the lowest percentage of restatements since 2006.

FIGURE 4



The second column in Table 1 repeats the “Total Restatement” provided in Figure 4. Next to this column is additional information referred to as the “Denominator Population,” which represents the total number of companies that possibly could have disclosed a restatement during a given year. The determination of the Denominator Population allows for the calculation of a restatement disclosure percentage. As shown in Table 1, the denominator population dropped dramatically from 12,847 companies to 7,755 companies during the 11 years from 2007 to 2017. Therefore, a decrease in the number of restatements from year to year did not necessarily translate into a corresponding decline in percentage. While the number of restatements fell from 1,274 in 2007 to 573 in 2017, the resulting year to year percentage value stayed above 7%. For the first time, however, in 2018, the percentage value dipped below the 7% floor threshold. With a decrease in restatements from 573 in 2017 to 516 in 2018, coupled with an increase in the denominator population from 7,755 companies in 2017 to 7,773 in 2018, the restatement percentage dipped to 6.64%.

TABLE 1

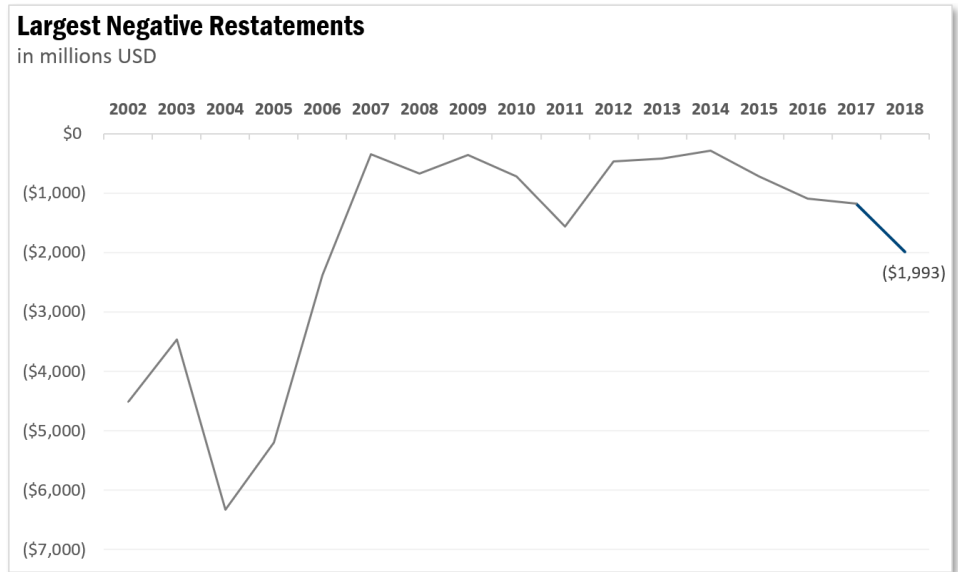
Disclosure Year	Total Restatement Disclosures	Denominator Population	Restatement Percentage
2006	1,868	12,623	14.80%
2007	1,274	12,847	9.92%
2008	968	12,156	7.96%
2009	830	11,252	7.38%
2010	847	10,795	7.85%
2011	845	10,419	8.11%
2012	854	9,842	8.68%
2013	876	9,183	9.54%
2014	857	9,212	9.30%
2015	757	8,878	8.53%
2016	686	8,405	8.16%
2017	573	7,755	7.39%
2018	516	7,773	6.64%

4. Indicators show the restatements disclosed in 2017 were generally low in severity.

a. Negative Impact on Net Income

When looking at net income, both 2004 and 2005 experienced restatements that resulted in very large negative adjustments.⁶ In 2004, Federal National Mortgage Assoc. (Fannie Mae) restated its net income to reflect a negative \$6.335 billion impact and, in 2005, American International Group Inc. (AIG) disclosed a negative \$5.193 billion impact. (See Figure 5 and page 16.) In 2006, the largest adjustment dropped substantially with Navistar International Corporation disclosing a negative \$2.377 billion impact. The next four years experienced adjustments all under one billion dollars: \$341 million by General Electric, \$671 million by TMST, \$357 million by UBS, and \$717 million by Telecom Italia. Calendar year 2011 exceeded the one billion dollar mark with a \$1.557 billion adjustment by China Unicom (Hong Kong) Ltd followed by another four years with negative impacts below one billion dollars: \$459 million by JPMorgan Chase, \$420 million by Quicksilver Resources Inc., \$286 million by Computer Sciences Corp., and \$711 million by Alphabet Inc. (Google’s parent company). The largest adjustment for 2016 increased to a value of \$1.085 billion by ING Groep N.V. followed by Perrigo Company’s \$1.177 billion adjustment in 2017. During 2018, OI S.A. (formerly Brasil Telecom SA) disclosed a \$1.993 billion adjustment.

FIGURE 5



b. Average Cumulative Impact on Net Income per Restatement

One gauge of the severity can be attained by calculating the impact an average restatement had on the net income of companies traded on one of the three major American stock exchanges.⁶ During 2018, the typical restatement had a negative adjustment of about \$12.54 million. (See expanded Table 2 on page 17.) As shown in Table 2, this amount is the second highest average of the 12 years shown, but it is nevertheless historically low.

Similar to the graph above, 2005 and 2006 experienced very high average income adjustments: \$21.3 million in 2005 and \$17.8 million in 2006. These figures provide a stark contrast that highlights the reduction in average adjustment amounts and the relatively low adjustment for 2018. The consequences of the high averages of 2005 and 2006 are further accentuated when coupled with the fact that those years produced the highest number of restatements since 2001 (see Figure 4). Therefore, 2005 and 2006 not only produced restatements that had, on average, historically negative adjustments to net income, but historically high numbers, as well.

TABLE 2

Average Income Adjustment per Restatement by Companies on NYSE, Nasdaq or NYSE MKT (formerly AMEX)	
2005	-\$21,331,433
2006	-\$17,807,709
2007	-\$3,640,142
2008	-\$6,125,967
2009	-\$4,624,605
2010	-\$5,934,222
2011	-\$12,941,142
2012	-\$5,831,183
2013	-\$3,210,297
2014	-\$3,564,717
2015	-\$5,200,144
2016	-\$8,613,390
2017	-\$11,623,359
2018	-\$12,548,221

⁶ This analysis is limited to those companies that were traded on one of the three major American stock exchanges (i.e., Amex (now NYSE MKT LLC), Nasdaq, and NYSE) for the year shown.

c. No Impact on Income Statements

Another indicator of the severity of restatements in a particular year is the percent of restatements that had no impact on the income statement. During 2018, about 53.56% (158 out of 295) of the restatements disclosed had no impact on earnings. (See expanded Table 3 on page 17.) This percentage represents the fifth highest for the 12 years under review and indicates the low severity for 2018. This high percentage, to some degree, is due to cash flow statement errors, which have no impact on the income statement.⁷

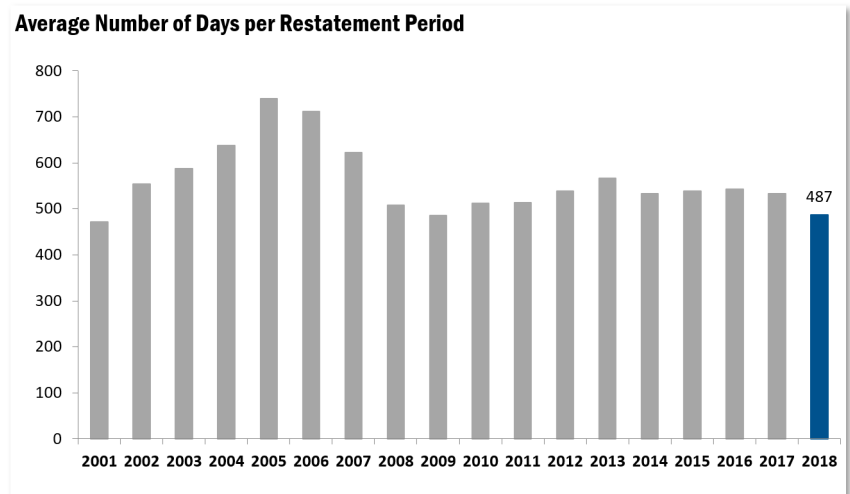
TABLE 3

Percentage of Restatements with No Impact on Income Statement	
2007	36.9%
2008	33.4%
2009	31.0%
2010	39.7%
2011	36.7%
2012	46.9%
2013	52.8%
2014	60.0%
2015	55.2%
2016	59.1%
2017	53.7%
2018	53.6%

d. Average Number of Days Restated

The average number of days that were restated (the restatement period) by an adjustment in a given year peaked in 2005. (See page 18.) In 2005, the average period was 739 days, followed by four consecutive years of decline to a local low point of 486 days in 2009. The next four years drifted higher to reach a value of 567 in 2013. During 2014, however, the number dropped to 533 and remained level with values of 534 and 542 the next three years. During 2018, the value dropped to 487 days, the lowest value since 2009.

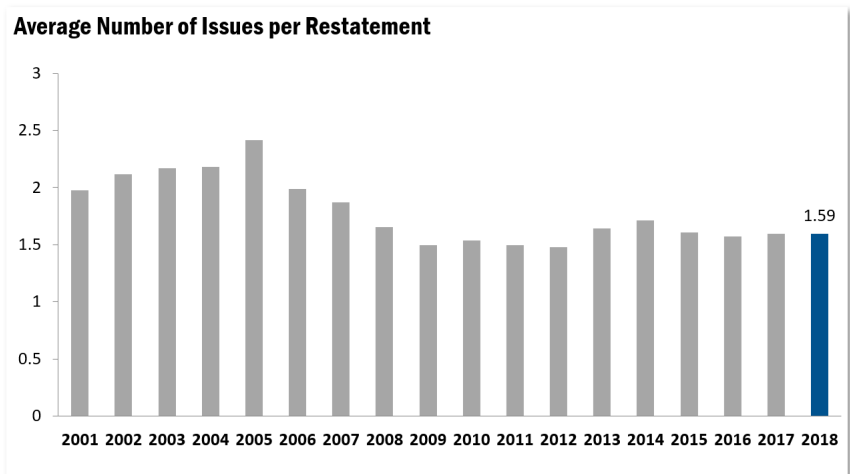
FIGURE 6



e. Average Number of Issues per Restatement

Audit Analytics developed a taxonomy composed of over 40 issues identified in restatement disclosures as a cause for a financial adjustment. The 24 most significant issues and their historical rate of occurrence are tabulated on page 23. Using this pool of 24 issues, we quantify the average number of issues implicated in restatement disclosures during a particular year. A review of these issues since 2001 shows that the average number during 2018 is historically low. (See page 19.)

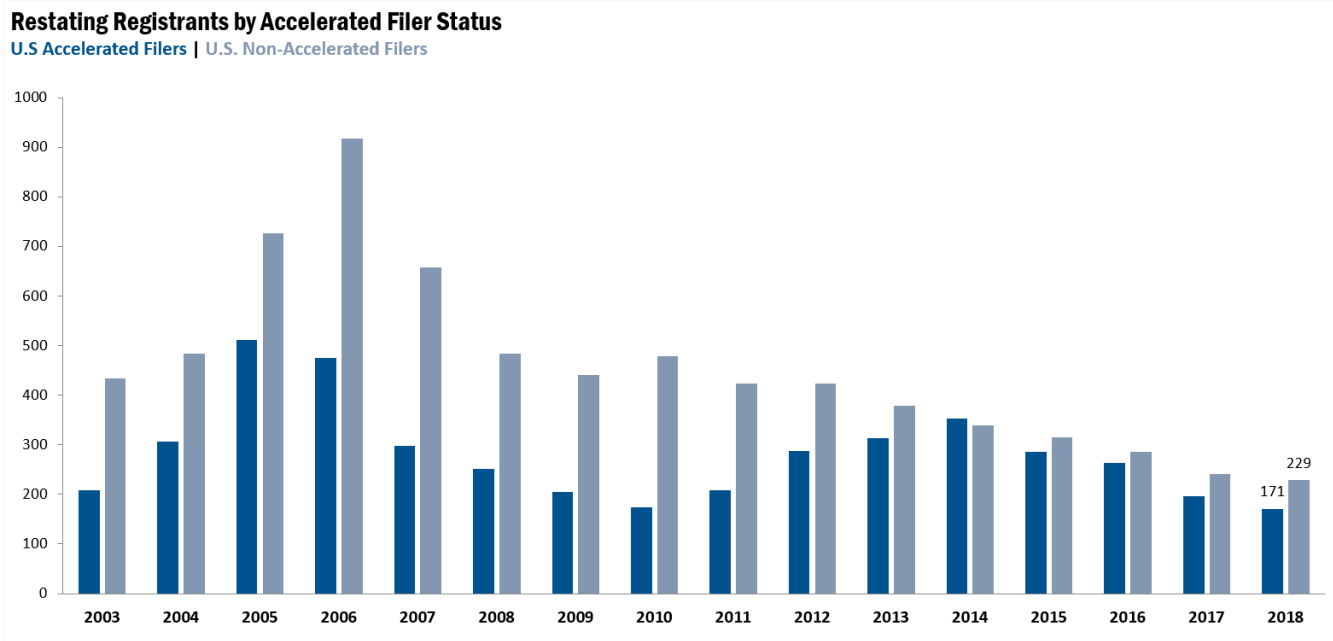
FIGURE 7



⁷ Types of restatements that may have no impact on an income statement include, but are not limited to, those that address (1) certain tax adjustments, (2) cash flow statements, (3) debt reclassification from short to long term, (4) earnings per share adjustments, and (5) redistribution of income from year to year without a net change in income.

5. A restatement population breakdown based on size (accelerated filer status) shows the number of restatements from both categories experienced a drop in 2017.

FIGURE 8

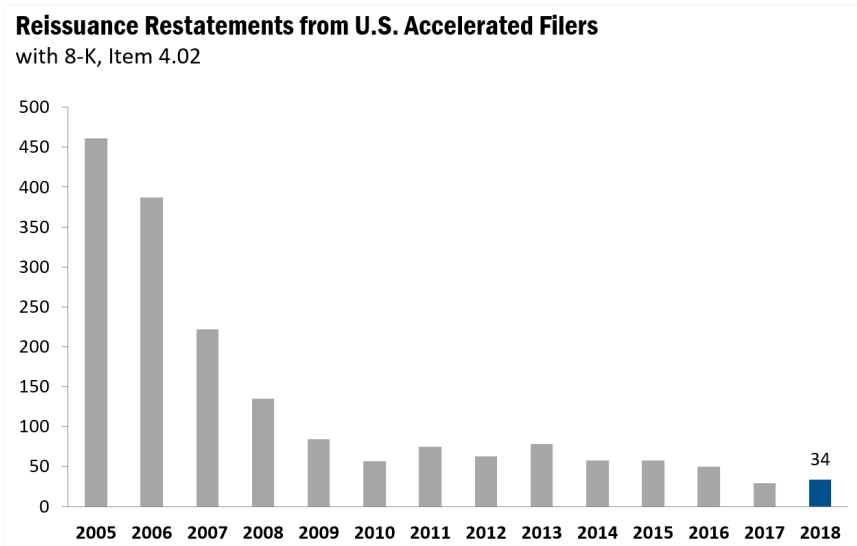


The restatement filer population can be separated into four categories based on size and location: (1) accelerated foreign filer, (2) non-accelerated foreign filer, (3) accelerated U.S. filer, and (4) non-accelerated U.S. filer. (See page 20.) Figure 8 focuses on U.S. companies and shows that the number of restatements from U.S. non-accelerated filers is trending downward since 2006. The total of 229 companies in 2018 represents the lowest for the 16 years presented. In contrast, the number of restatements from U.S. accelerated filers rose from 2010 to 2014, but came down four years thereafter to a total of 171, a number that represents the lowest total for the 16 years presented.

6. In addition to the number of overall restatements, U.S. accelerated filers also experienced a drop in reissuance restatements to the lowest total during the fourteen years under review.

A focus on reissuance restatements, however, does not reveal the same trend. As shown in Figure 9, the number of reissuance restatements disclosed in 2011 by U.S. accelerated filers was 75, followed by a drop to 63 in 2012. (See page 21.) During 2019, U.S. accelerated filers disclosed 78 reissuance restatements, but this number was still below the totals for 2009 and prior. During 2014, the number dropped to 58. Therefore, unlike the number of total restatements disclosed by U.S. accelerated filers from 2011 to 2014, the number of reissuance restatements did not see four years of steady increase. Instead, the numbers were somewhat level during the four-year stretch. Thereafter, in 2015, the number remained the same at 58. During 2016, the amount dropped to 50 followed by a substantial drop to 29. A minor rebound in 2018 brought the number to 34, but this total represents the second lowest number of reissuance restatements since 2005, when the disclosure requirement came into effect.

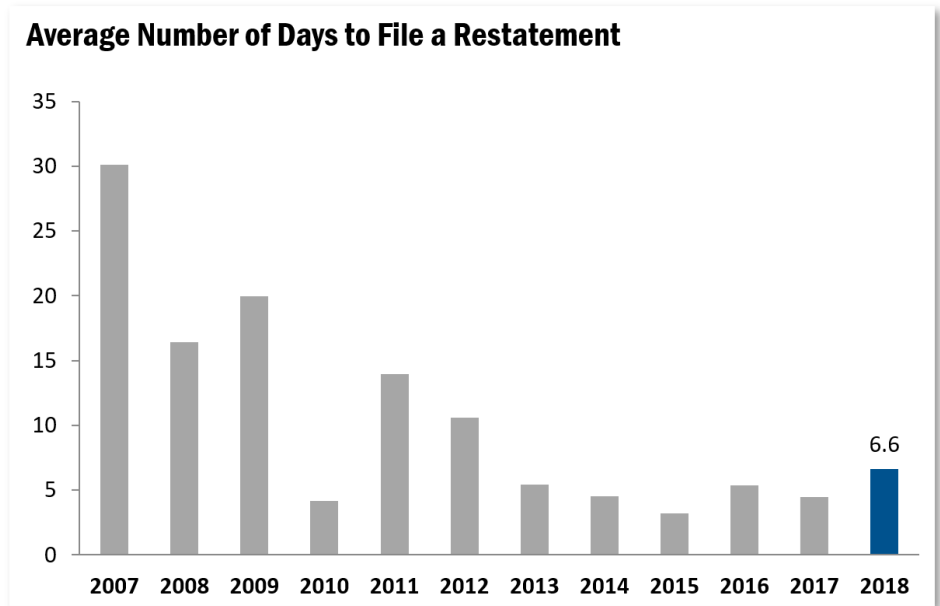
FIGURE 9



7. A review of companies trading on one of the three major U.S. exchanges shows that companies are now, on average, able to file restatements more quickly after the misstatement is disclosed.

Audit Analytics performed a review of the average number of days a registrant needed to file a restatement after the initial disclosure. A review of companies that traded on one of the three major American stock exchanges (NYSE, Nasdaq, or NYSE MKT (formerly Amex)) found that the average duration in 2007 was about 30 days. (See page 22.) The duration dropped dramatically in 2008 to 16.40 days. After an uptick in 2009, the average number of days hit a relatively low point of 4.14 days in 2010. Thereafter, the average time to restate increased to 6.63 days in 2018.⁸ This average duration of 6.63 days is much lower than most durations before 2013.

FIGURE 10



The shorter time periods during the last six years could be caused by a number of factors. In general, the number of days

needed to restate is less for restatements made in response to less complicated errors. As shown in Executive Summary Item 2, the percentage of revision restatements (those without a prior 8-K, Item 4.02 disclosure) represented over 70% of the restatements filed. A high percentage of revision restatements would cause a decrease in the average time period needed to restate. Furthermore, improved internal controls over financial reporting (ICFRs) would allow a company to recalculate and restate financials more quickly after an error is discovered. Improved ICFRs could cut response time notwithstanding the complexity of the restatement at hand.

8. In 2018, after thirteen years as the number one issue, a review of the top seven issues found that problems regarding debt dropped to second highest in prevalence behind revenue recognition.

In 2018, the top seven accounting issues implicated in restatements were as follows:

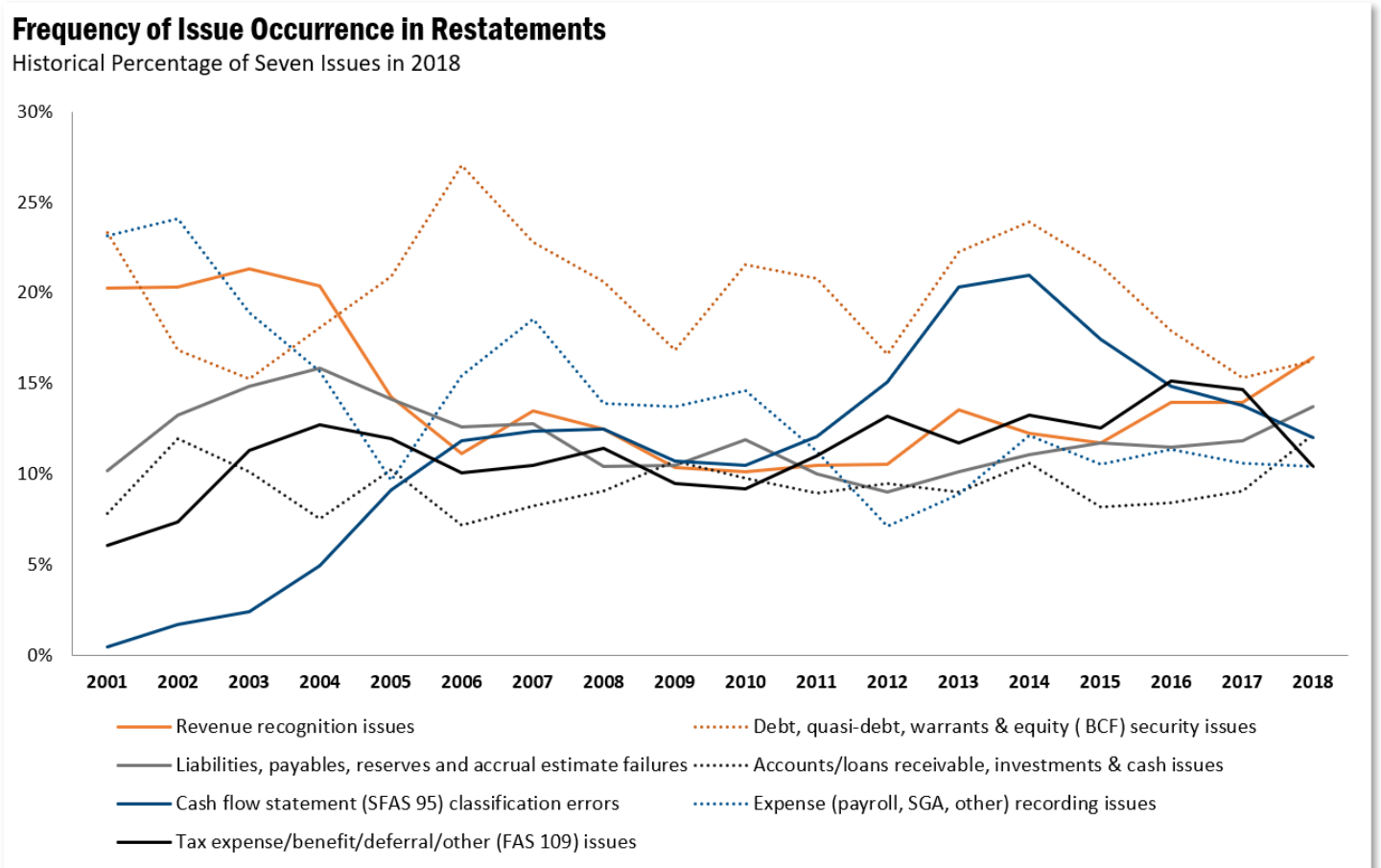
- Revenue Recognition Issues
- Debt, Quasi-Debt, Warrants & Equity (BCF) Security Issues
- Liabilities, Payables, Reserves and Accrual Estimate Failures
- Accounts/Loans Receivable, Investments & Cash Issues
- Cash Flow Statement (SFAS 95)
- Expense (Payroll, SGA, Other) Recording Issues
- Tax Expense, Benefit, Deferral and Other (FAS 109) Issues

(See page 23.)

⁸ This analysis provides results that would increase if performed at a later date because the results do not include restatements disclosed but not yet reissued. A restatement not yet reissued has an increased likelihood of adding a data point with a larger duration than the present average. Audit Analytics, nevertheless, provides this information because each year shown was created in the same manner and thus the years are comparable.

A timeline of the occurrence rate of the top seven issues shown above is provided in the graph below:

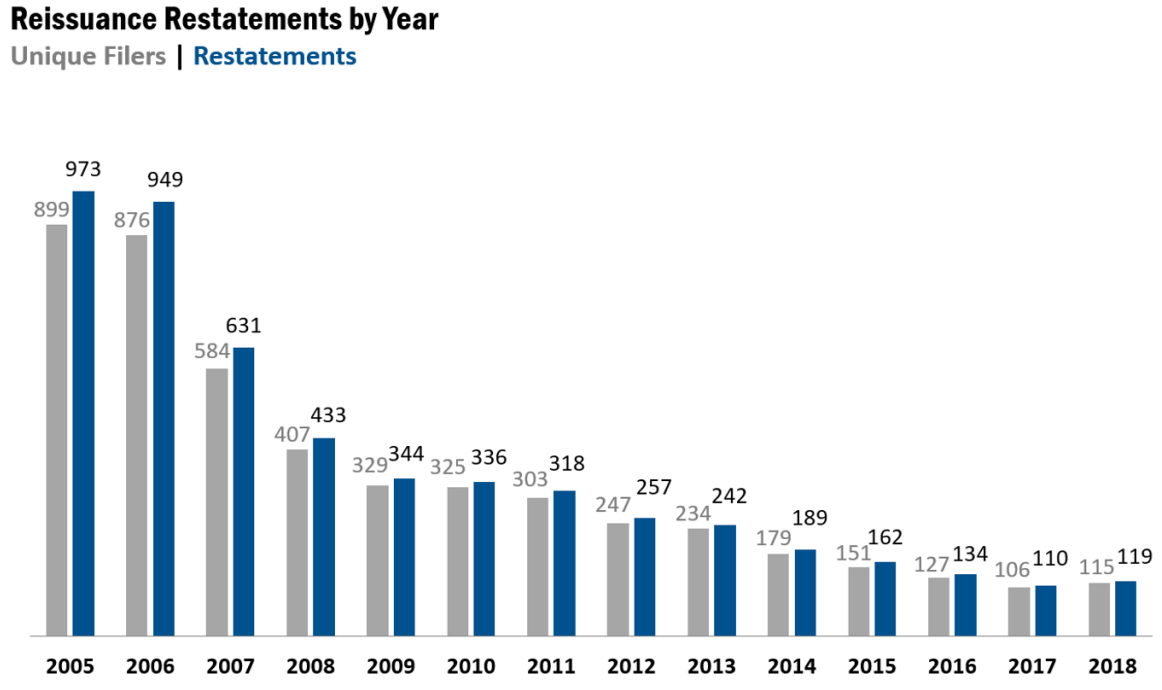
FIGURE 11



As shown in Figure 11, the number one reason for restatements every year during the 13 years from 2005 to 2017 has been issues regarding debt. In 2018, however, it came in a close second to revenue recognition. Another notable trend has been the historical increase in the percentage of restatements that, in part, adjusted the cash flow statement. During 2001, only 0.5% of the restatements concerned cash flow statements. Since then, a rapid upward trend brought cash flow statement restatements up to the second place position in 2011 and a peak of 21.0% in 2014. During 2013 and 2014, a substantial reason for the rise in cash flow restatements was due to the increase in subsidiary guarantor cash flow statement restatements in order to comply with Rule 3-10 of Regulation S-X (frequently in response to SEC comment letters). Such restatements did not affect the consolidated financial statement, only the allocation between parent and subsidiary. The surge in these types of restatements waned in 2015 and this decline, in large part, is the reason for the drop to 12.0% in 2018. This decline is notable because it changed the second place ranking that cash flow restatements held for the years from 2011 to 2015 to a fifth place ranking in 2018. The four categories in 2018 that are more prevalent than cash flow are revenue recognition at 16.5%, debt at 16.3%, liabilities at 13.8%, and accounts/loans receivable at 12.2%. It is interesting to note that all seven issues shown above gravitated to a value of about 13%. The prevalence of the seven categories shown above began to converge after 2015, reaching the smallest spread of only 6% between the high value of 16.5% and the low of 10.5%.

RESTATEMENT ANALYSIS

TOTAL REISSUANCE RESTATEMENTS PER YEAR



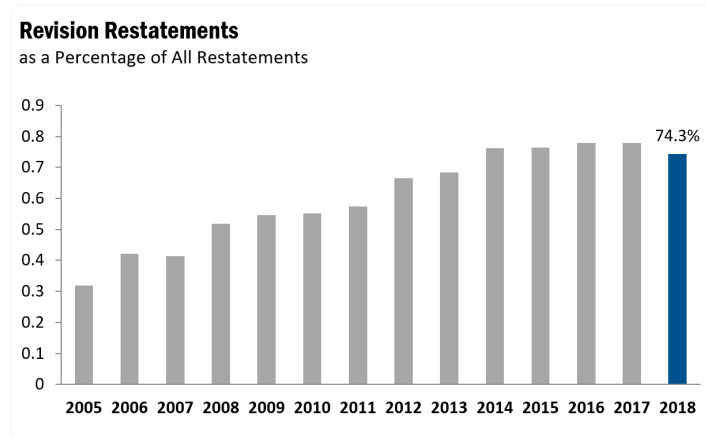
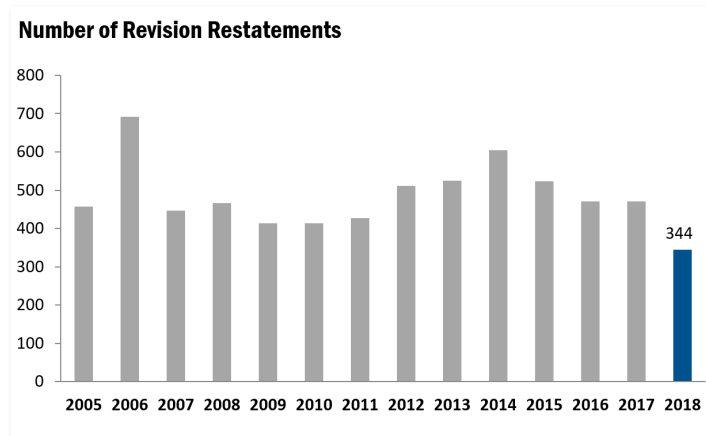
Total Reissuance Restatements by Year			
Disclosure Year	Unique Filers	Restatements	Year-Over-Year Change
2005	899	973	
2006	876	949	-2.5%
2007	584	631	-33.5%
2008	407	433	-31.4%
2009	329	344	-20.6%
2010	325	336	-2.3%
2011	303	318	-5.4%
2012	247	257	-19.2%
2013	234	242	-5.8%
2014	179	189	-21.9%
2015	151	162	-14.3%
2016	127	134	-17.3%
2017	106	110	-17.9%
2018	115	119	8.2%

Notes:

- 1) The research is based on a database download of February 25, 2019.
- 2) In response to Section 409 of the Sarbanes-Oxley Act of 2002, entitled "Real Time Issuer Disclosures," the SEC identified new reportable items that must be disclosed in an 8-K within four business days. This new set of disclosure requirements became effective on August 23, 2004 and applied to all registrants that file 10-Ks for annual reports. One of the new reportable events that triggers a disclosure is the conclusion that a past financial statement should "no longer be relied upon." Such a disclosure must be given in the Item 4.02 of the Form 8-K.
- 3) When a company concludes that it must issue a financial restatement that will undermine reliance on one or more past financial statements, the company must file a disclosure in an 8-K, Item 4.02. Audit Analytics uses the term "Reissuance Restatement" when past reliance is undermined.
- 4) The data counts all restatements when a registrant files multiple restatements.
- 5) The Reissuance Restatements population is filtered in order to avoid the double counting of restatements by assigning one representative for a group of interconnected non-tickered companies that file analogous restatements and by not counting the restatement of a subsidiary if the parent files an analogous restatement. (See Population section on page 2 of report.)

RESTATEMENT ANALYSIS

RESTATEMENTS WITHOUT PRIOR FORM 8-K, ITEM 4.02 DISCLOSURE



Restatements Without Form 8-K, Item 4.02 Disclosure

Disclosure Year	Total Restatements	Total Restatements From 10-K Filers	Restatements from 10-K Filers without An 8-K, Item 4.02	Percentage With No 8-K
2005	1,583	1,430	457	32.0%
2006	1,868	1,640	691	42.1%
2007	1,274	1,077	446	41.4%
2008	968	899	466	51.8%
2009	830	757	413	54.6%
2010	847	750	414	55.2%
2011	845	745	427	57.3%
2012	854	769	512	66.6%
2013	876	767	525	68.4%
2014	857	794	605	76.2%
2015	757	686	524	76.4%
2016	686	605	471	77.9%
2017	573	488	378	77.5%
2018	516	463	344	74.3%

Notes:

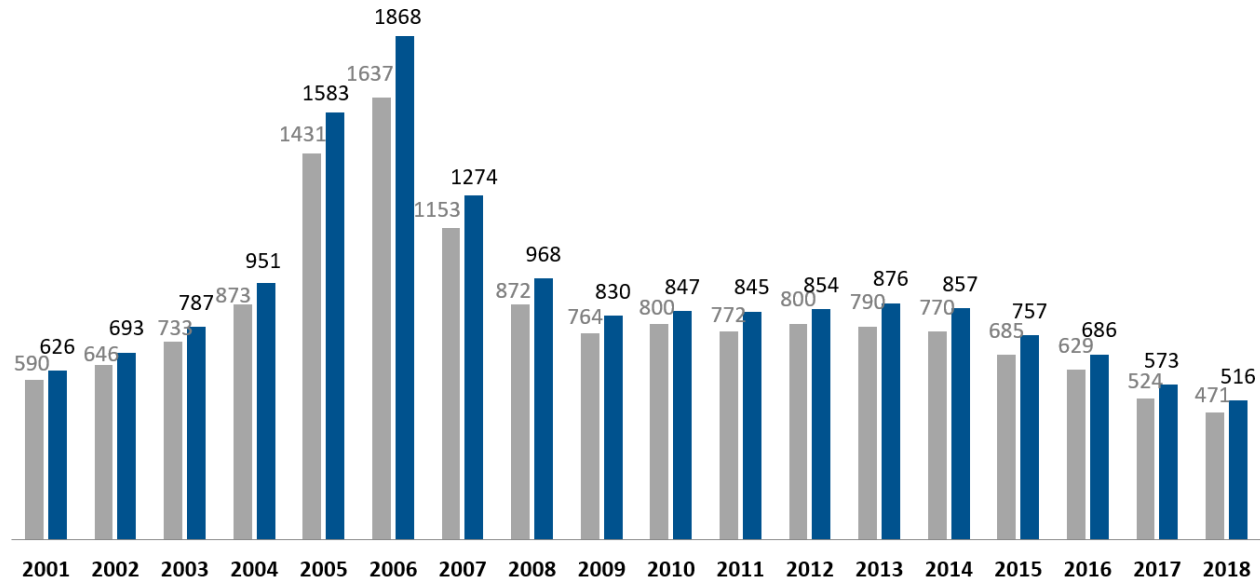
- 1) The research is based on a database download of February 25, 2019.
- 2) In response to Section 409 of the Sarbanes-Oxley Act of 2002, entitled "Real Time Issuer Disclosures," the SEC identified new reportable items that must be disclosed in an 8-K within four business days. This new set of disclosure requirements became effective on August 23, 2004 and applied to all registrants that file 10-Ks for annual reports. One of the new reportable events that triggers a disclosure is the conclusion that a past financial statement should "no longer be relied upon." Such a disclosure must be given in the Item 4.02 of the Form 8-K.
- 3) When a company concludes that it must issue a financial restatement that will undermine reliance on one or more past financial statements, the company must file a disclosure in an 8-K, Item 4.02, but such a disclosure would not be required if a restatement is to make adjustments that do not undermine an investor's reliance on past financials. Audit Analytics uses the term "Revision Restatement" when past reliance is maintained.

RESTATEMENT ANALYSIS

TOTAL RESTATEMENTS (BOTH REISSUANCE & REVISION) PER YEAR

Total Restatements by Year

Unique Filers | Restatements



Total Restatements by Year

Disclosure Year	Unique Filers	Restatements	Growth Rate	Denominator Population	Restatement Percentage
2001	590	626	-	N/A	-
2002	646	693	10.70%	N/A	-
2003	733	787	13.56%	N/A	-
2004	873	951	20.84%	N/A	-
2005	1,431	1,583	66.46%	N/A	-
2006	1,637	1,868	18.00%	12,623	14.80%
2007	1,153	1,274	-31.80%	12,847	9.92%
2008	872	968	-24.02%	12,156	7.96%
2009	764	830	-14.26%	11,252	7.38%
2010	800	847	2.05%	10,795	7.85%
2011	772	845	-0.24%	10,419	8.11%
2012	800	854	1.07%	9,842	8.68%
2013	790	876	2.58%	9,183	9.54%
2014	770	857	-2.17%	9,212	9.30%
2015	685	757	-11.67%	8,878	8.53%
2016	629	686	-9.38%	8,405	8.16%
2017	524	573	-16.47%	7,755	7.39%
2018	471	516	-9.95%	7,773	6.64%

Notes

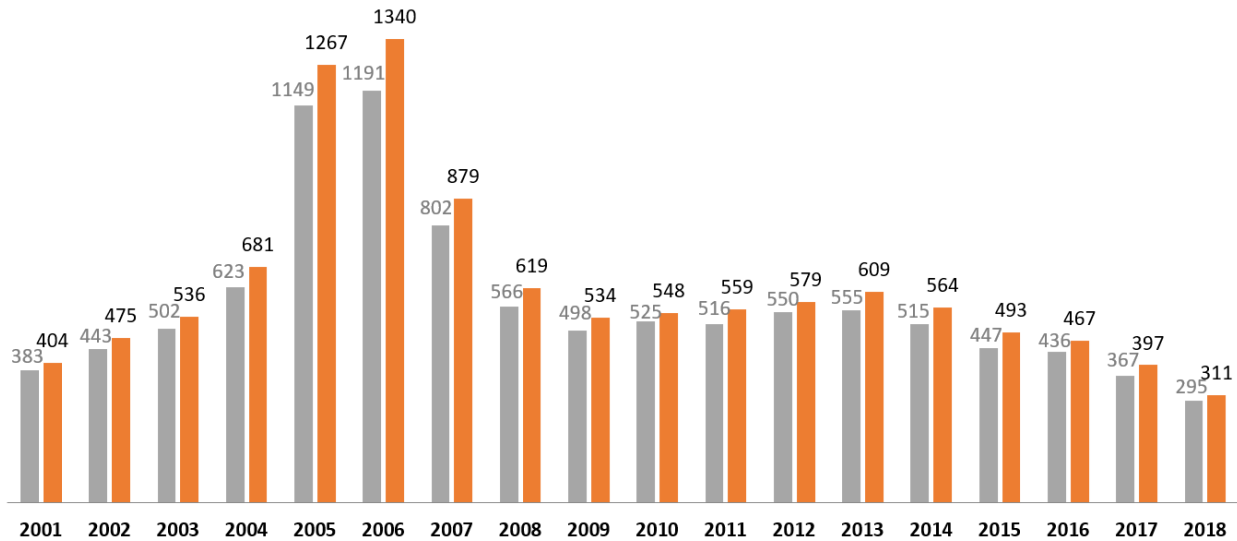
- 1) The research is based on a database download of February 25, 2019.
- 2) The data counts all both Reissuance and Revision Restatements.
- 3) The restatement population is filtered in order to avoid the double counting of restatements by assigning one representative for a group of interconnected non-tickered companies that file analogous restatements and by not counting the restatement of a subsidiary if the parent files an analogous restatement. (See Population section on page 2 of report.)
- 4) The Denominator Population comprises those companies that could possibly have disclosed a restatement for the given year. It does not include funds and trust except for REITs. The initial populations used to create the denominator are from historical snap-shots of the database, which are not available prior to 2006.

RESTATEMENT ANALYSIS

TOTAL ANNUAL RESTATEMENTS ONLY BY YEAR

Annual Restatements

Unique Filers | Annual Restatements



Annual Restatements

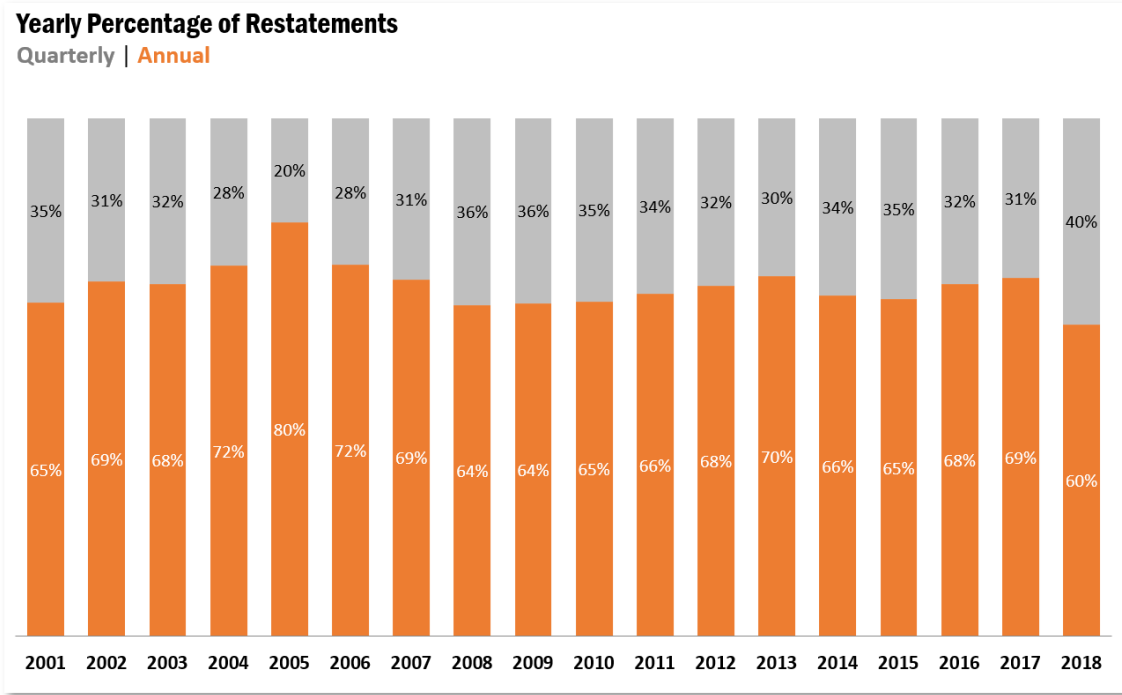
Disclosure Year	Unique Filers	Restatements	Growth Rate
2001	383	404	
2002	443	475	17.6%
2003	502	536	12.8%
2004	623	681	27.1%
2005	1,149	1267	86.0%
2006	1,191	1340	5.8%
2007	802	879	-34.4%
2008	566	619	-29.6%
2009	498	534	-13.7%
2010	525	548	2.6%
2011	516	559	2.0%
2012	550	579	3.6%
2013	555	609	5.2%
2014	515	564	-7.4%
2015	447	493	-12.6%
2016	436	467	-5.3%
2017	367	397	-15.0%
2018	295	311	-21.7%

Notes:

- 1) The research is based on a database download of February 25, 2019.
- 2) The data counts all restatements when a registrant files multiple restatements.
- 3) Annual restatements include all the filings that disclosed affected period of 360 days or more.
- 4) The restatement population is filtered in order to avoid the double counting of restatements by assigning one representative for a group of interconnected non-tickered companies that file analogous restatements and by not counting the restatement of a subsidiary if the parent files an analogous restatement. (See Population section on page 2 of report.)

RESTATEMENT ANALYSIS

YEARLY PERCENTAGE OF QUARTERLY VS. ANNUAL RESTATEMENTS



Percentage of Quarterly vs. Annual Restatements

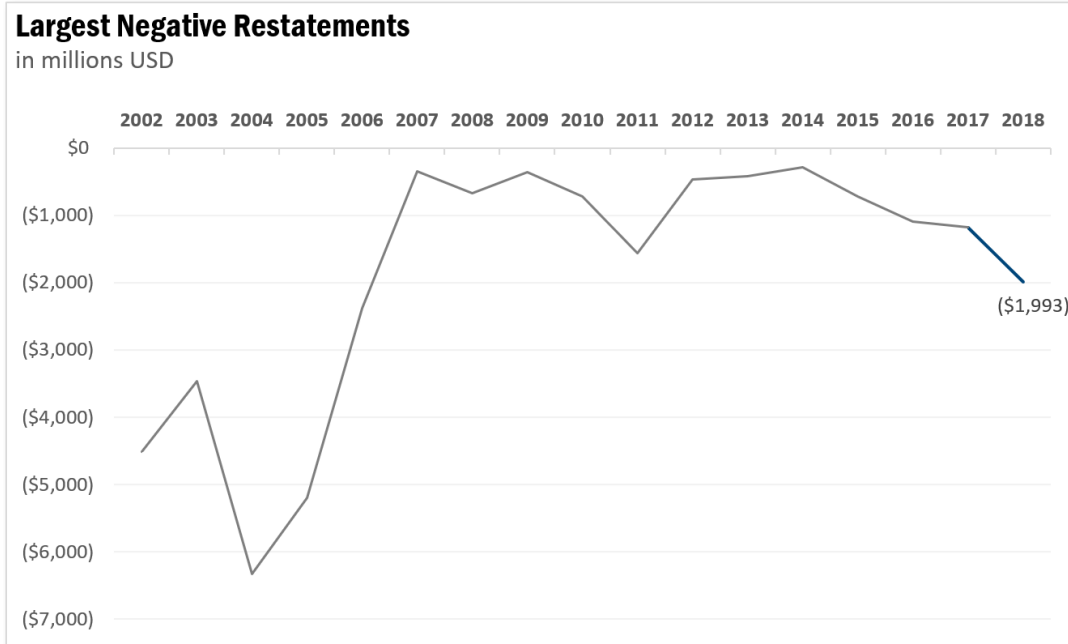
Disclosure Year	Total Restatements	Quarterly Restatements		Annual	
		Total	%	Total	%
2001	626	222	35.5%	404	64.5%
2002	693	218	31.5%	475	68.5%
2003	787	251	31.9%	536	68.1%
2004	951	270	28.4%	681	71.6%
2005	1,583	316	20.0%	1,267	80.0%
2006	1,868	528	28.3%	1,340	71.7%
2007	1,274	395	31.0%	879	69.0%
2008	968	349	36.1%	619	63.9%
2009	830	296	35.7%	534	64.3%
2010	847	299	35.3%	548	64.7%
2011	845	286	33.8%	559	66.2%
2012	854	275	32.2%	579	67.8%
2013	876	267	30.5%	609	69.5%
2014	857	293	34.2%	564	65.8%
2015	757	264	34.9%	493	65.1%
2016	686	219	31.9%	467	68.1%
2017	573	176	30.7%	397	69.3%
2018	516	205	39.7%	311	60.3%

Notes

- 1) The research is based on a database download of February 25, 2019.
- 2) The data counts all restatements when a registrant files multiple restatements.
- 3) Annual restatements include all the filings that disclosed affected period of 360 days or more.
- 4) The % columns are based on a total number of Restatements filed for the particular year (see also, table on page 13: Total Restatements by Year).

RESTATEMENT ANALYSIS

LARGEST NEGATIVE RESTATEMENT BY YEAR



Largest Negative Restatements by Year

Disclosure Year	Company	Market	Impact on Net Income
2002	TYCO INTERNATIONAL LTD	NYSE	(\$4,512,700,000)
2003	HEALTHSOUTH CORP	NYSE	(\$3,465,294,000)
2004	FEDERAL NATIONAL MORTGAGE	NYSE	(\$6,335,000,000)
2005	AMERICAN INTERNATIONAL GROUP INC	NYSE	(\$5,193,000,000)
2006	NAVISTAR INTERNATIONAL CORP	NYSE	(\$2,377,000,000)
2007	GENERAL ELECTRIC CO	NYSE	(\$341,000,000)
2008	TMST, Inc.		(\$670,730,000)
2009	UBS AG	NYSE	(\$357,210,000)
2010	TELECOM ITALIA S P A	NYSE	(\$716,971,200)
2011	CHINA UNICOM (HONG KONG) Ltd	NYSE	(\$1,556,743,500)
2012	JPMORGAN CHASE & CO	NYSE	(\$459,000,000)
2013	QUICKSILVER RESOURCES INC	NYSE	(\$419,880,000)
2014	COMPUTER SCIENCES CORP	NYSE	(\$286,000,000)
2015	ALPHABET	NYSE	(\$711,000,000)
2016	ING GROEP NV	NYSE	(\$1,085,484,400)
2017	PERRIGO CO plc	NYSE	(\$1,177,100,000)
2018	OI S.A. (formerly Brasil Telecom SA)*	OTC	(\$1,992,666,000)

*Amount disclosed was presented in BRL. Converted to USD at an exchange rate of 0.354.

RESTATEMENT ANALYSIS OF COMPANIES LISTED ON NYSE, NASDAQ, OR NYSE MKT (FORMERLY AMEX)

Restatement Breakdown by Market

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
NYSE MKT	41	62	28	33	23	23	18	17	18	15	5
NASDAQ	161	25	130	122	153	196	198	161	173	116	145
NYSE	76	135	76	102	138	188	208	181	155	144	116
OTC	333	251	257	194	74	48	28	25	0	0	145
Not listed	167	157	208	251	325	304	294	279	269	230	60
Total	778	630	699	702	713	759	746	663	615	505	471

Cumulative Impact on Net Income of Publicly Traded Companies

Disclosure Year	Negative Restatements		Positive Restatements		Total Restatements		Average Income Adjustment Per Restatement
	Negative Restatements	Aggregate Negative Dollar Value	Positive Restatements	Aggregate Positive Dollar Value	Total Restatements	Aggregate Dollar Value	
2007	408	-\$3,155,057,234	82	\$1,371,387,861	490	-\$1,783,669,373	-\$3,640,142
2008	242	-\$2,178,565,096	54	\$365,278,885	296	-\$1,813,286,210	-\$6,125,967
2009	195	-\$1,244,458,512	37	\$171,550,251	232	-\$1,072,908,261	-\$4,624,605
2010	193	-\$1,897,623,362	46	\$479,344,342	239	-\$1,418,279,021	-\$5,934,222
2011	209	-\$4,254,251,707	55	\$837,790,171	264	-\$3,416,461,536	-\$12,941,142
2012	277	-\$2,812,012,413	58	\$858,566,185	335	-\$1,953,446,228	-\$5,831,183
2013	371	-\$2,459,912,328	74	\$1,031,330,131	445	-\$1,428,582,197	-\$3,210,297
2014	343	-\$2,242,729,683	97	\$674,254,188	440	-\$1,568,475,495	-\$3,564,717
2015	299	-\$2,749,740,923	96	\$695,683,887	395	-\$2,054,057,036	-\$5,200,144
2016	296	-\$3,897,118,612	76	\$692,937,475	372	-\$3,204,181,137	-\$8,613,390
2017	230	-\$4,383,957,169	83	\$745,845,703	313	-\$3,638,111,466	-\$11,623,359
2018	225	-\$4,387,641,935	70	\$685,916,739	295	-\$3,701,725,196	-\$12,548,221

Restatements with No Impact on Income Statements

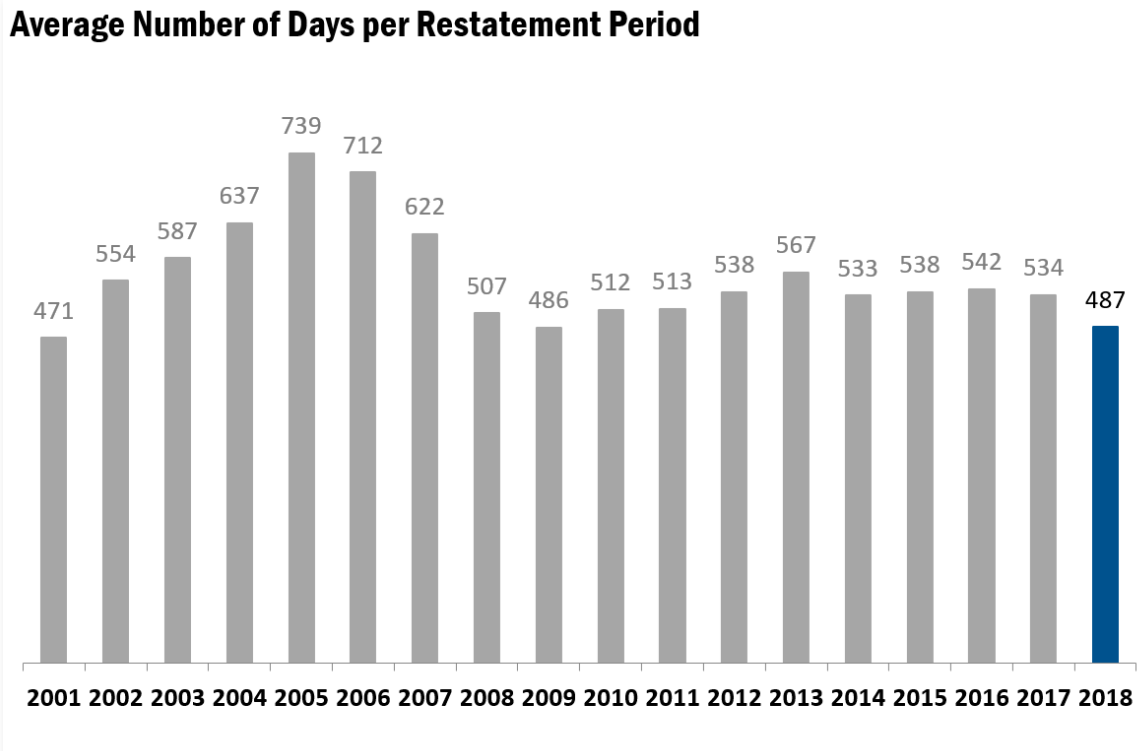
Disclosure Year	Total Restatements	Restatements with No Impact	%
2007	490	181	36.94%
2008	296	99	33.45%
2009	232	72	31.03%
2010	239	95	39.75%
2011	264	97	36.74%
2012	335	157	46.87%
2013	445	235	52.81%
2014	440	264	60.00%
2015	395	218	55.19%
2016	372	220	59.14%
2017	313	168	53.67%
2018	295	158	53.56%

Notes

- 1) The 2018 data is based on a download of February 25, 2019 with prior years from prior reports.
- 2) The three tables above present data of the markets as constituted in the corresponding year.
- 3) In the center table, the cumulative impact on an income statement reported in foreign currency is converted to US dollars historical conversion rate as of the date of the restatement announcement.
- 4) The types of restatements that may have no impact on an income statement include, but are not limited to, restatements addressing (1) certain tax adjustments, (2) cash flow statements, (3) debt reclassification from short term to long term, (4) earning per share adjustments, and (5) redistribution of income from year to year without a net change in income.

RESTATEMENT ANALYSIS

AVERAGE RESTATEMENT PERIOD PER YEAR



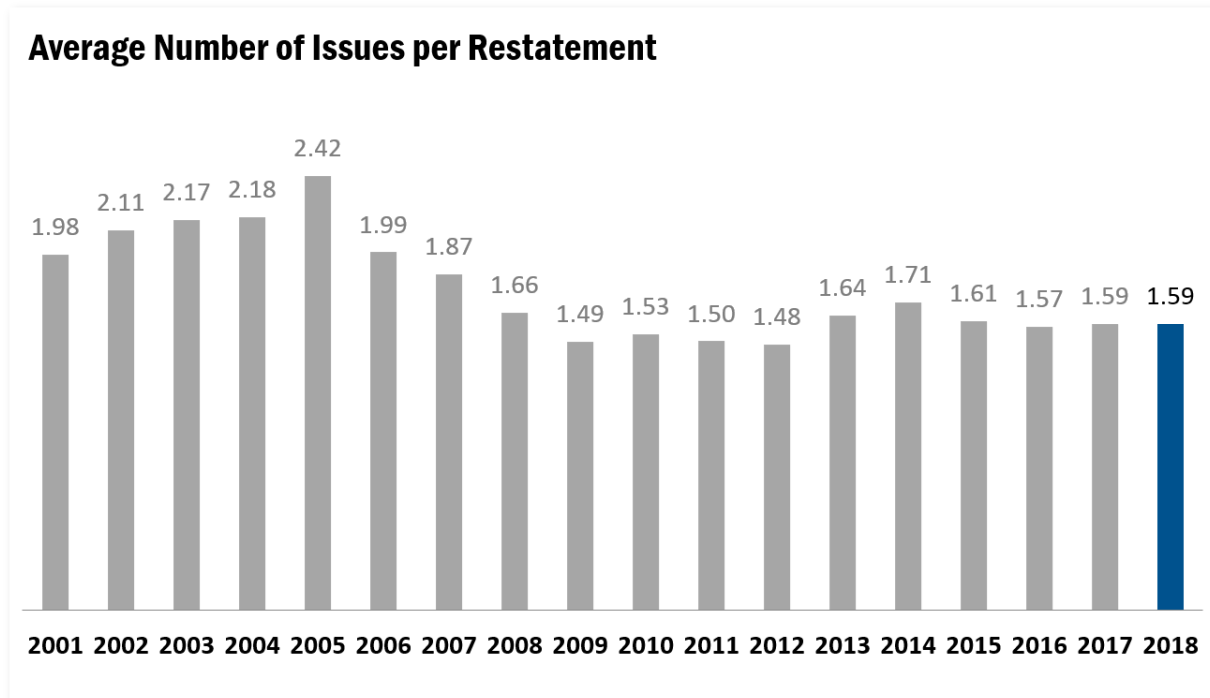
Average Restatement Period			
Disclosure Year	Restatements	Average Number of Days Restated	Days Growth
2001	626	471	
2002	693	554	17.5%
2003	787	587	5.9%
2004	951	637	8.6%
2005	1,583	739	15.9%
2006	1,868	712	-3.7%
2007	1,274	622	-12.6%
2008	968	507	-18.5%
2009	830	486	-4.2%
2010	847	512	5.3%
2011	845	513	0.3%
2012	854	538	4.9%
2013	876	567	5.3%
2014	857	533	-6.0%
2015	757	538	1.0%
2016	686	542	0.8%
2017	573	534	-1.6%
2018	516	487	-8.8%

Notes

- 1) The research is based on a database download of February 25, 2019.
- 2) For detail on the total number of restatements per year, see table on page 13: Total Restatements by Year.
- 3) The Total Days Restated is based on the non-reliance period disclosed by entities in their 8-K filings. The actual restated period may differ from the period disclosed in an 8-K.

RESTATEMENT ISSUES ANALYSIS

AVERAGE NUMBER OF ISSUES PER RESTATEMENT



Average Number of Issues per Restatement

Disclosure Year	Total Issues Restated	Total Restatements	Average # of Issues
2001	1,239	626	1.98
2002	1,465	693	2.11
2003	1,708	787	2.17
2004	2,077	951	2.18
2005	3,827	1,583	2.42
2006	3,719	1,868	1.99
2007	2,381	1,274	1.87
2008	1,603	968	1.66
2009	1,240	830	1.49
2010	1,300	847	1.53
2011	1,264	845	1.50
2012	1,261	854	1.48
2013	1,437	876	1.64
2014	1,466	857	1.71
2015	1,218	757	1.61
2016	1,080	686	1.57
2017	913	573	1.59
2018	822	516	1.59

Notes

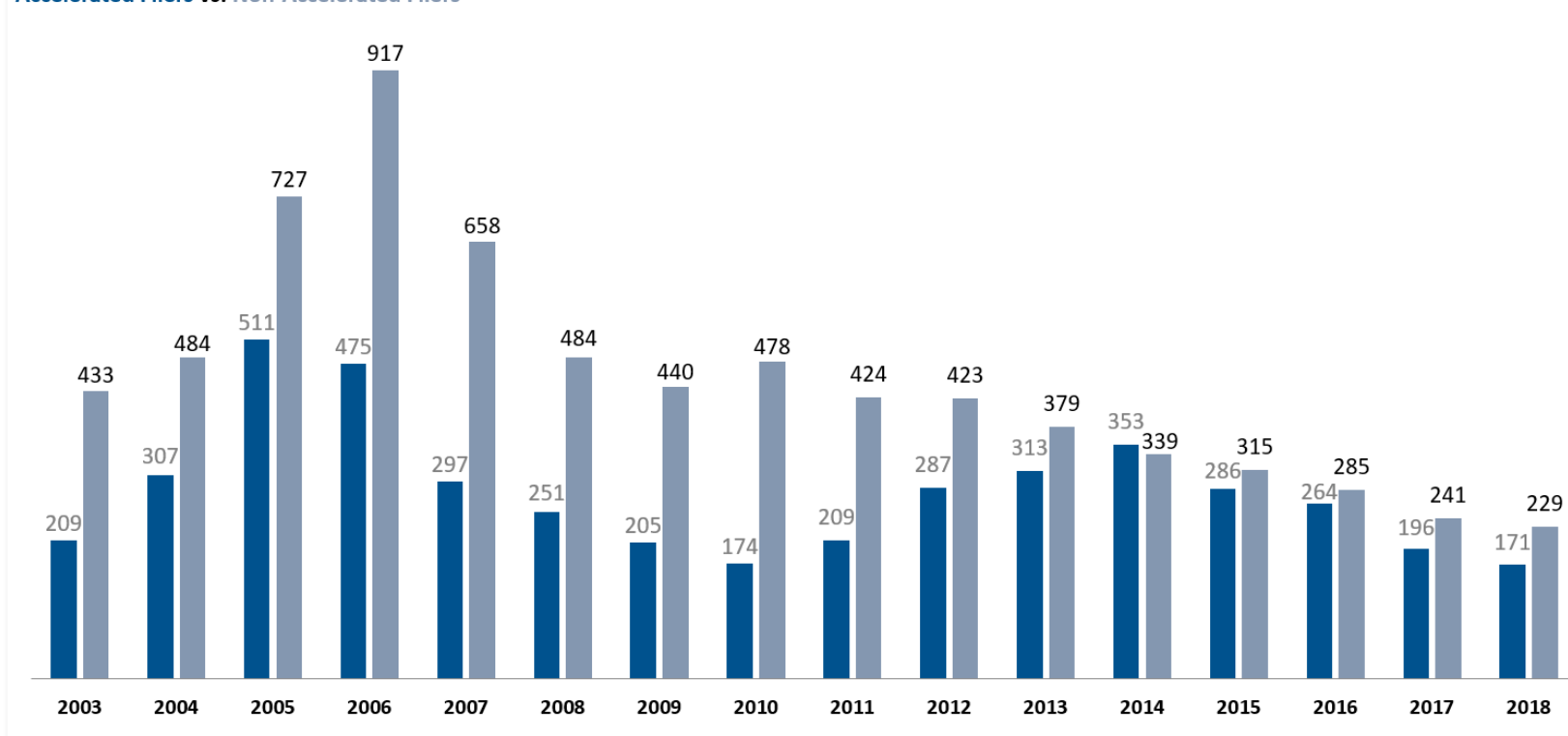
- 1) The research is based on a database download of February 25, 2019.
- 2) This data tracks the occurrence of the 24 issues listed in the table on page 24: Restatement Issue Breakdown by Year. Refer to page 24 and 25 to obtain a breakdown of the total number of issues restated per year.
- 3) For detail on the total number of restatements per year, see table named All Restatements by Year.

RESTATEMENT ANALYSIS

RESTATING REGISTRANTS BY ACCELERATED FILER STATUS

Restating Registrants by Accelerated Filer Status

Accelerated Filers vs. Non-Accelerated Filers



Filer Status	2003		2004		2005		2006		2007		2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%		
Acc. Foreign Filers	8	1.1%	5	0.6%	46	3.2%	55	3.4%	43	3.7%	16	1.8%	17	2.2%	28	3.5%	29	3.8%	21	2.6%	29	3.7%	29	3.8%	24	3.5%	37	7.3%	33	6.5%	27	5.7%
Non-Acc. Foreign Filers	83	11.3%	77	8.8%	147	10.3%	191	11.7%	154	13.3%	121	13.9%	104	13.6%	122	15.2%	111	14.4%	70	8.8%	72	9.1%	52	6.8%	60	8.8%	46	9.1%	52	10.3%	44	9.3%
Acc. U.S. Filers	209	28.4%	306	35.1%	510	35.8%	472	28.9%	300	26.0%	249	28.6%	205	26.9%	173	21.6%	209	27.1%	285	35.8%	310	39.3%	352	45.8%	285	41.7%	264	52.3%	184	36.4%	171	36.3%
Non-Acc. U.S. Filers	435	59.2%	483	55.5%	723	50.7%	913	56.0%	657	56.9%	484	55.6%	437	57.3%	478	59.7%	423	54.8%	420	52.8%	377	47.8%	336	43.7%	314	46.0%	277	54.9%	236	46.7%	229	48.6%
Total Unique Restaters	735		871		1426		1631		1154		870		763		801		772		796		788		769		683		624		505		471	

Notes

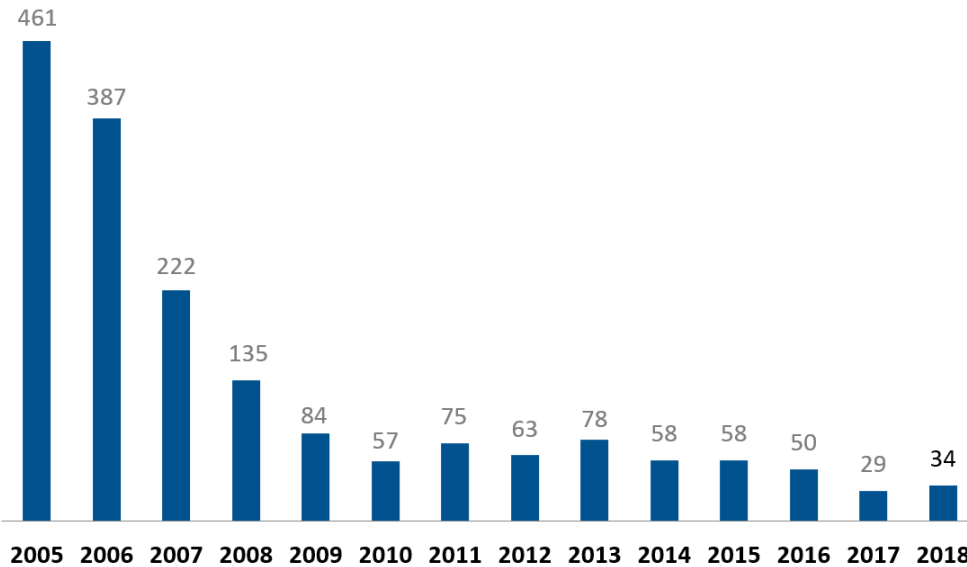
- 1) The research is based on a database download of February 25, 2019.
- 2) The # in this table represents unique companies and the % is based on the Total Unique Restaters for the particular year.
- 3) A registrant's accelerated filer status is determined from the last filing of the relevant year.
- 4) Foreign filers include Canadian registrants.

RESTATEMENTS FROM ACCELERATED FILERS

WITH PRIOR FORM 8-K, ITEM 4.02 DISCLOSURE (PRIOR FINANCIALS COULD NO LONGER BE RELIED UPON)

Reissuance Restatements by Accelerated Filers

Restatements with Form 8-K, Item 4.02 Disclosure



Restatements With Prior Form 8-K, Item 4.02 Disclosure

Disclosure Year	Total Restatements	Total Restatements From 10-K Filers	Restatements from 10-K Accelerated Filers with an 8-K, Item 4.02
2005	1,583	1,430	461
2006	1,868	1,640	387
2007	1,274	1,077	222
2008	968	899	135
2009	830	757	84
2010	847	750	57
2011	845	745	75
2012	854	769	63
2013	876	767	78
2014	857	794	58
2015	757	686	58
2016	686	605	50
2017	573	488	29
2018	516	463	34

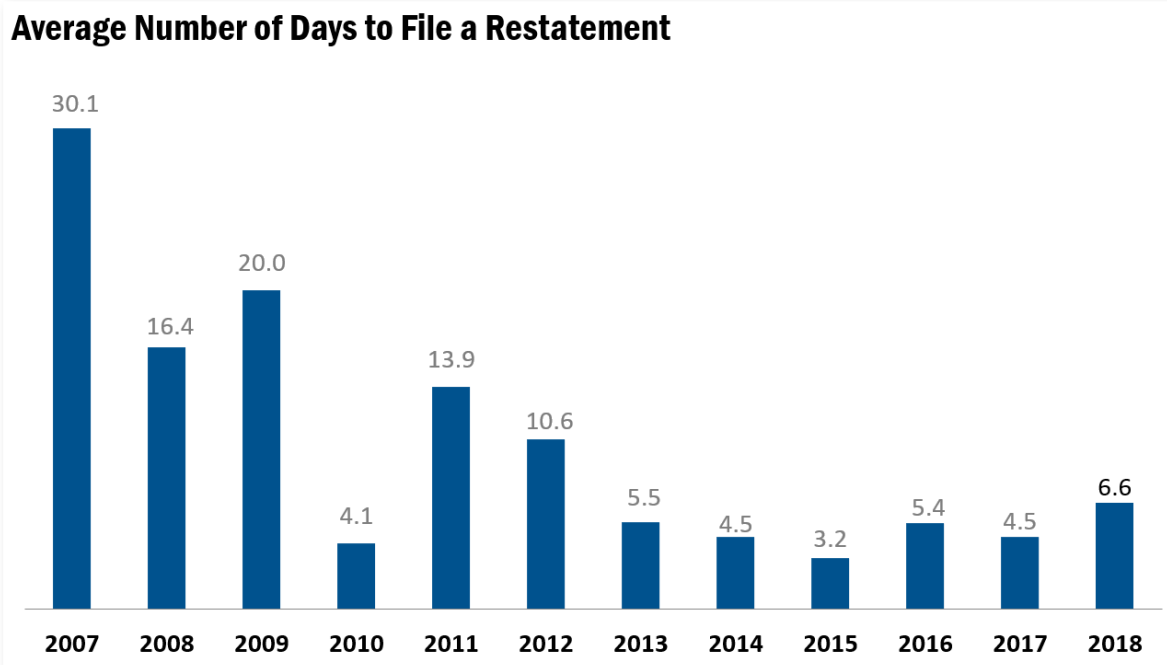
Notes

- 1) The research is based on a database download of February 25, 2019.
- 2) In response to Section 409 of the Sarbanes-Oxley Act of 2002, entitled “Real Time Issuer Disclosures,” the SEC identified new reportable items that must be disclosed in an 8-K within four business days. This new set of disclosure requirements became effective on August 23, 2004 and applied to all registrants that file 10-Ks for annual reports. One of the new reportable events that triggers a disclosure is the conclusion that a past financial statement should “no longer be relied upon.” Such a disclosure must be given in the Item 4.02 of the Form 8-K.
- 3) When a company concludes that it must issue a financial restatement that will undermine reliance on one or more past financial statements, the company must file a disclosure in an 8-K, Item 4.02. Audit Analytics uses the term “Reissuance Restatement” when past reliance is undermined.

RESTATEMENT ANALYSIS

AVERAGE NUMBER OF DAYS TO RESTATE

(A HISTORICAL REVIEW OF COMPANIES TRADED ON THE NYSE, NASDAQ, OR NYSE MKT (FORMERLY AMEX))



Disclosure Year	Days
2007	30.1
2008	16.4
2009	20.0
2010	4.1
2011	13.9
2012	10.6
2013	5.5
2014	4.5
2015	3.2
2016	5.4
2017	4.5
2018	6.6

Notes

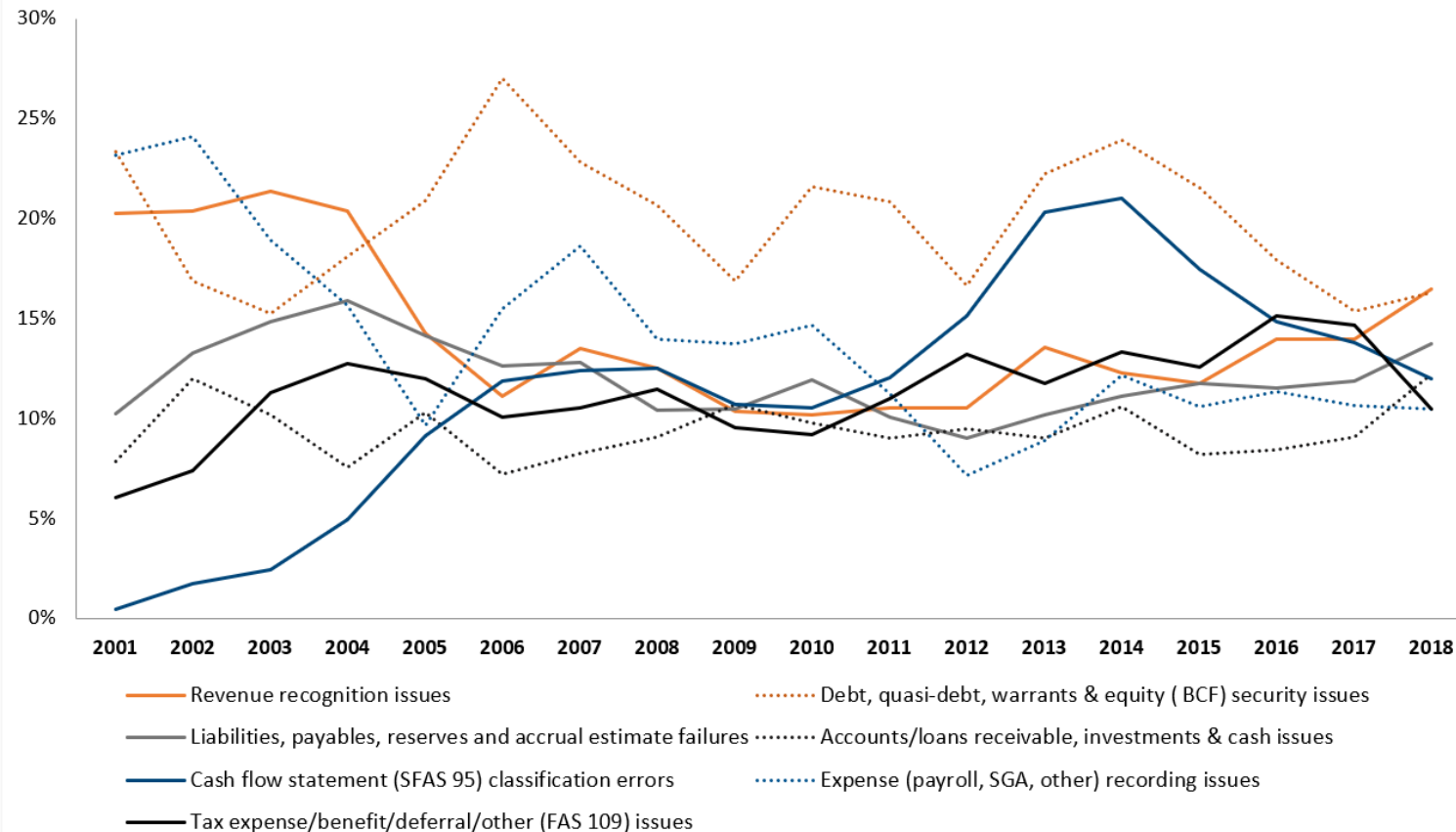
- 1) The research is based on a database download of February 25, 2019.
- 2) The durations above are calculated by applying zero days to any Revision Restatement (a restatement that need not be disclosed in a Form 8-K, Item 4.02).
- 3) This analysis provides results that would increase if performed at a later date because the results do not include restatements disclosed but not yet reissued. A restatement not yet reissued has an increased likelihood of adding a data point with a larger duration than the present average. Audit Analytics, nevertheless, provides this information because each year shown was created in the same manner and thus the years are comparable.

RESTATEMENT ISSUES ANALYSIS

HISTORICAL PERCENTAGE OF TOP SEVEN ISSUES OF 2017

Frequency of Issue Occurrence in Restatements

Historical Percentage of Seven Issues in 2018



Frequency of Issue Occurrence in Restatements - Top Issues in 2018

Accounting Issue Restated	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue Recognition	20.3%	20.3%	21.3%	20.4%	14.3%	11.1%	13.5%	12.5%	10.4%	10.2%	10.5%	10.5%	13.6%	12.3%	11.8%	14.0%	14.0%	16.5%
Debt, Quasi-Debt, Warrants & Equity (BCF) Security	23.3%	16.9%	15.2%	18.1%	20.9%	27.0%	22.8%	20.7%	16.9%	21.6%	20.8%	16.6%	22.3%	23.9%	21.5%	17.9%	15.4%	16.3%
Liabilities, Payables, Reserves and Accrual Estimate Failures	10.2%	13.3%	14.9%	15.9%	14.2%	12.6%	12.8%	10.4%	10.5%	11.9%	10.1%	9.0%	10.2%	11.1%	11.8%	11.5%	11.9%	13.8%
Accounts/Loans Receivable, Investments & Cash	7.8%	12.0%	10.2%	7.6%	10.3%	7.2%	8.2%	9.1%	10.7%	9.8%	9.0%	9.5%	9.0%	10.6%	8.2%	8.5%	9.1%	12.2%
Cash Flow Statement (SFAS 95) Classification Errors	0.5%	1.7%	2.4%	4.9%	9.2%	11.9%	12.4%	12.5%	10.7%	10.5%	12.1%	15.1%	20.3%	21.0%	17.4%	14.9%	13.8%	12.0%
Expense (payroll, SGA, other) Recording	23.2%	24.1%	18.9%	15.7%	9.7%	15.5%	18.6%	13.9%	13.7%	14.6%	11.2%	7.1%	8.9%	12.1%	10.6%	11.4%	10.6%	10.5%
Tax Expense/Benefit/Deferral/Other (FAS 109)	6.1%	7.4%	11.3%	12.7%	12.0%	10.1%	10.5%	11.5%	9.5%	9.2%	11.0%	13.2%	11.8%	13.3%	12.5%	15.2%	14.7%	10.5%

RESTATEMENT ISSUES ANALYSIS

BREAKDOWN BY YEAR

Accounting Issue Restated	2001		2002		2003		2004		2005		2006		2007	
	#	% ³	#	% ³	#	% ³	#	% ³	#	% ³	#	% ³	#	% ³
Revenue Recognition	127	20.3%	141	20.3%	168	21.3%	194	20.4%	226	14.3%	208	11.1%	172	13.5%
Debt, Quasi-Debt, Warrants & Equity (BCF) Security	146	23.3%	117	16.9%	120	15.2%	172	18.1%	331	20.9%	505	27.0%	291	22.8%
Liabilities, Payables, Reserves and Accrual Estimate Failures	64	10.2%	92	13.3%	117	14.9%	151	15.9%	224	14.2%	236	12.6%	163	12.8%
Accounts/Loans Receivable, Investments & Cash	49	7.8%	83	12.0%	80	10.2%	72	7.6%	163	10.3%	135	7.2%	105	8.2%
Cash Flow Statement (SFAS 95) Classification Errors	3	0.5%	12	1.7%	19	2.4%	47	4.9%	145	9.2%	222	11.9%	158	12.4%
Expense (payroll, SGA, other) Recording	145	23.2%	167	24.1%	149	18.9%	149	15.7%	153	9.7%	289	15.5%	237	18.6%
Tax Expense/Benefit/Deferral/Other (FAS 109)	38	6.1%	51	7.4%	89	11.3%	121	12.7%	190	12.0%	188	10.1%	134	10.5%
Inventory, Vendor and/or Cost of Sales	53	8.5%	67	9.7%	74	9.4%	91	9.6%	145	9.2%	134	7.2%	72	5.7%
Deferred, Stock-based and/or Executive Compensation	91	14.5%	95	13.7%	104	13.2%	112	11.8%	202	12.8%	338	18.1%	180	14.1%
Acquisitions, Mergers, Disposals, Re-org Accounting	127	20.3%	102	14.7%	126	16.0%	156	16.4%	246	15.5%	270	14.5%	166	13.0%
Foreign, Related Party, Affiliated, or Subsidiary	59	9.4%	76	11.0%	93	11.8%	114	12.0%	195	12.3%	209	11.2%	121	9.5%
Consolidation Issues incl Fin 46 Variable Interest & off-B/S	44	7.0%	48	6.9%	78	9.9%	96	10.1%	138	8.7%	143	7.7%	55	4.3%
EPS, Ratio and Classification of Income Statement	28	4.5%	35	5.1%	34	4.3%	52	5.5%	91	5.7%	82	4.4%	63	4.9%
Depreciation, Depletion or Amortization errors	29	4.6%	43	6.2%	47	6.0%	73	7.7%	233	14.7%	84	4.5%	53	4.2%
PPE Intangible or Fixed Asset (value/diminution)	69	11.0%	75	10.8%	116	14.7%	132	13.9%	209	13.2%	185	9.9%	94	7.4%
Lease, SFAS 5, Legal, Contingency and Commitment	15	2.4%	43	6.2%	52	6.6%	61	6.4%	282	17.8%	83	4.4%	41	3.2%
Capitalization of Expenditures	26	4.2%	53	7.6%	42	5.3%	57	6.0%	224	14.2%	58	3.1%	50	3.9%
Balance Sheet Classification of Assets	15	2.4%	18	2.6%	28	3.6%	34	3.6%	64	4.0%	52	2.8%	37	2.9%
Debt and/or Equity Classification	27	4.3%	31	4.5%	54	6.9%	59	6.2%	58	3.7%	81	4.3%	52	4.1%
Comprehensive Income	3	0.5%	1	0.1%	4	0.5%	5	0.5%	34	2.1%	15	0.8%	15	1.2%
Gain or Loss Recognition	40	6.4%	43	6.2%	54	6.9%	42	4.4%	87	5.5%	68	3.6%	33	2.6%
Intercompany, Investment in Subs./Affiliate	23	3.7%	35	5.1%	28	3.6%	41	4.3%	87	5.5%	42	2.2%	26	2.0%
Financial Derivatives/Hedging (FAS 133) Accounting	16	2.6%	32	4.6%	13	1.7%	26	2.7%	71	4.5%	66	3.5%	38	3.0%
Pension and Other Post-Retirement Benefit	2	0.3%	5	0.7%	19	2.4%	20	2.1%	29	1.8%	26	1.4%	25	2.0%
Total Issues⁴	1,239		1,465		1,708		2,077		3,827		3,719		2,381	

Notes

- 1) The research is based on a database download of February 25, 2019.
- 2) The data counts all restatements when a registrant files multiple restatements.
- 3) The % columns indicate how many restatements of the particular year affected the listed issue. The percentages are based on a total number of restatements filed: 626 in 2001; 693 in 2002; 787 in 2003; 951 in 2004; 1,583 in 2005; 1,868 in 2006; 1,274 in 2007; 968 in 2008; 830 in 2009; 847 in 2010; 845 in 2011; 854 in 2012; 876 in 2013; 857 in 2014; 757 in 2015, 686 in 2016, 573 in 2017, and 516 in 2018. (See table on page 13: Total Restatements by Year).
- 4) The Total Issues are used for the Average Issues per Restatement graph and table presented on page 19.

RESTATEMENT ISSUES ANALYSIS

BREAKDOWN BY YEAR

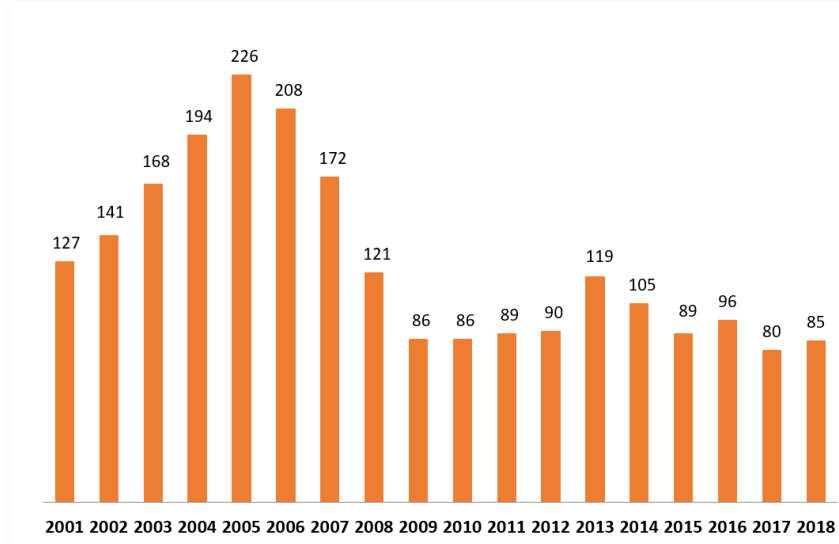
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2008		2009		2010		2011		2012		2013		2014		2015		2016		2017		2018	
#	% ³	#	% ³	#	% ³	#	% ³	#	% ³	#	% ³	#	% ³	#	% ³	#	% ³	#	% ³	#	% ³
121	12.5%	86	10.4%	86	10.2%	89	10.5%	90	10.5%	119	13.6%	105	12.3%	89	11.8%	96	14.0%	80	14.0%	85	16.5%
200	20.7%	140	16.9%	183	21.6%	176	20.8%	142	16.6%	195	22.3%	205	23.9%	163	21.5%	123	17.9%	88	15.4%	84	16.3%
101	10.4%	87	10.5%	101	11.9%	85	10.1%	77	9.0%	89	10.2%	95	11.1%	89	11.8%	79	11.5%	68	11.9%	71	13.8%
88	9.1%	89	10.7%	83	9.8%	76	9.0%	81	9.5%	79	9.0%	91	10.6%	62	8.2%	58	8.5%	52	9.1%	63	12.2%
121	12.5%	89	10.7%	89	10.5%	102	12.1%	129	15.1%	178	20.3%	180	21.0%	132	17.4%	102	14.9%	79	13.8%	62	12.0%
135	13.9%	114	13.7%	124	14.6%	95	11.2%	61	7.1%	78	8.9%	104	12.1%	80	10.6%	78	11.4%	61	10.6%	54	10.5%
111	11.5%	79	9.5%	78	9.2%	93	11.0%	113	13.2%	103	11.8%	114	13.3%	95	12.5%	104	15.2%	84	14.7%	54	10.5%
55	5.7%	47	5.7%	36	4.3%	46	5.4%	49	5.7%	71	8.1%	77	9.0%	60	7.9%	60	8.7%	35	6.1%	53	10.3%
124	12.8%	92	11.1%	95	11.2%	71	8.4%	64	7.5%	62	7.1%	57	6.7%	49	6.5%	39	5.7%	40	7.0%	43	8.3%
113	11.7%	71	8.6%	75	8.9%	86	10.2%	106	12.4%	60	6.8%	56	6.5%	56	7.4%	48	7.0%	52	9.1%	41	7.9%
53	5.5%	60	7.2%	68	8.0%	54	6.4%	72	8.4%	98	11.2%	101	11.8%	87	11.5%	62	9.0%	56	9.8%	40	7.8%
63	6.5%	49	5.9%	53	6.3%	53	6.3%	33	3.9%	61	7.0%	27	3.2%	45	5.9%	40	5.8%	32	5.6%	25	4.8%
42	4.3%	36	4.3%	39	4.6%	35	4.1%	31	3.6%	27	3.1%	34	4.0%	26	3.4%	23	3.4%	24	4.2%	22	4.3%
34	3.5%	24	2.9%	24	2.8%	25	3.0%	22	2.6%	26	3.0%	22	2.6%	21	2.8%	15	2.2%	12	2.1%	21	4.1%
61	6.3%	49	5.9%	63	7.4%	71	8.4%	64	7.5%	50	5.7%	61	7.1%	49	6.5%	51	7.4%	46	8.0%	18	3.5%
18	1.9%	11	1.3%	9	1.1%	11	1.3%	17	2.0%	17	1.9%	14	1.6%	17	2.2%	19	2.8%	18	3.1%	16	3.1%
32	3.3%	31	3.7%	18	2.1%	13	1.5%	21	2.5%	28	3.2%	19	2.2%	14	1.8%	16	2.3%	14	2.4%	14	2.7%
22	2.3%	9	1.1%	12	1.4%	12	1.4%	27	3.2%	25	2.9%	24	2.8%	18	2.4%	14	2.0%	23	4.0%	13	2.5%
23	2.4%	24	2.9%	18	2.1%	16	1.9%	8	0.9%	11	1.3%	19	2.2%	12	1.6%	6	0.9%	9	1.6%	12	2.3%
7	0.7%	4	0.5%	5	0.6%	15	1.8%	9	1.1%	14	1.6%	9	1.1%	7	0.9%	8	1.2%	6	1.0%	8	1.6%
28	2.9%	13	1.6%	15	1.8%	15	1.8%	15	1.8%	10	1.1%	16	1.9%	11	1.5%	11	1.6%	13	2.3%	7	1.4%
20	2.1%	10	1.2%	8	0.9%	8	0.9%	18	2.1%	12	1.4%	17	2.0%	15	2.0%	14	2.0%	11	1.9%	7	1.4%
20	2.1%	20	2.4%	9	1.1%	11	1.3%	6	0.7%	12	1.4%	9	1.1%	14	1.8%	11	1.6%	4	0.7%	6	1.2%
11	1.1%	6	0.7%	9	1.1%	6	0.7%	6	0.7%	12	1.4%	10	1.2%	7	0.9%	3	0.4%	6	1.0%	3	0.6%
1,603		1,240		1,300		1,264		1,261		1,437		1,466		1,218		1,080		913		822	

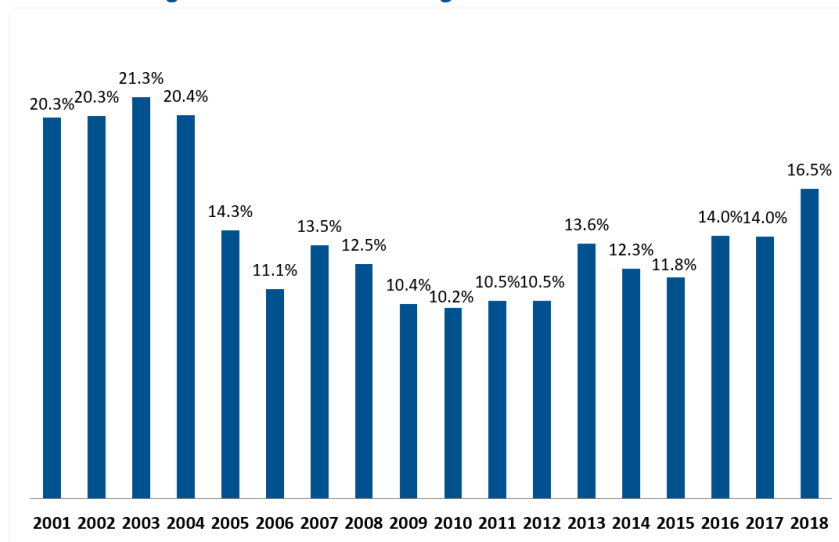
RESTATEMENT ISSUES ANALYSIS

REVENUE RECOGNITION ISSUES

Revenue Recognition



Revenue Recognition Issues as a Percentage of All Restatements



Revenue Recognition Issues

Disclosure Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue Restatements	127	141	168	194	226	208	172	121	86	86	89	90	119	105	89	96	80	85
Total Restatements	626	693	787	951	1,583	1,868	1,274	968	830	847	845	854	876	857	757	686	573	516
% of All Restatements	20.3%	20.3%	21.3%	20.4%	14.3%	11.1%	13.5%	12.5%	10.4%	10.2%	10.5%	10.5%	13.6%	12.3%	11.8%	14.0%	14.0%	16.5%

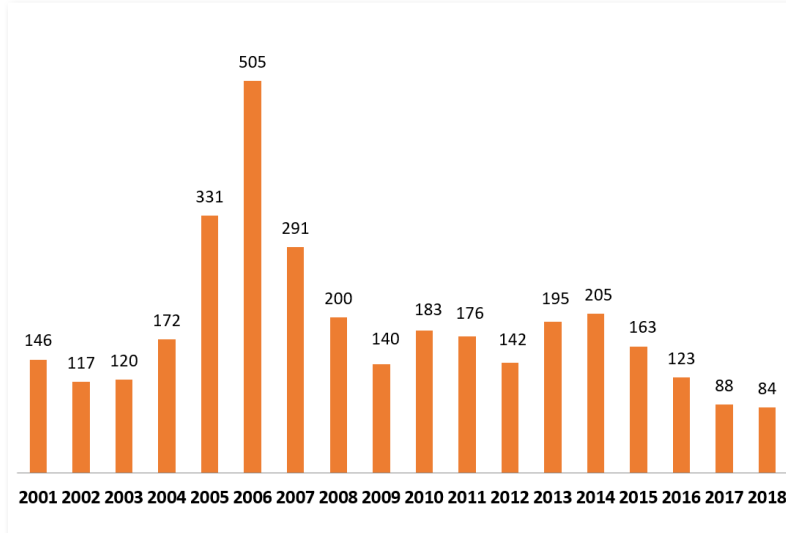
Notes

- 1) The research is based on a database download of February 25, 2019.
- 2) The data counts all restatements when a registrant files multiple restatements.
- 3) The % of All Restatements row is based on a total number of restatements filed for the particular year (see also, table on page 13: Total Restatements by Year).
- 4) Revenue Recognition Issues consists of errors or irregularities in approach, understanding, or calculation associated with the recognition of revenue. Many of these restatements originate from a failure to properly interpret sales contracts for hidden rebate, return, barter or resale clauses. Some of them also relate to the treatment of sales returns, credits and other allowances.

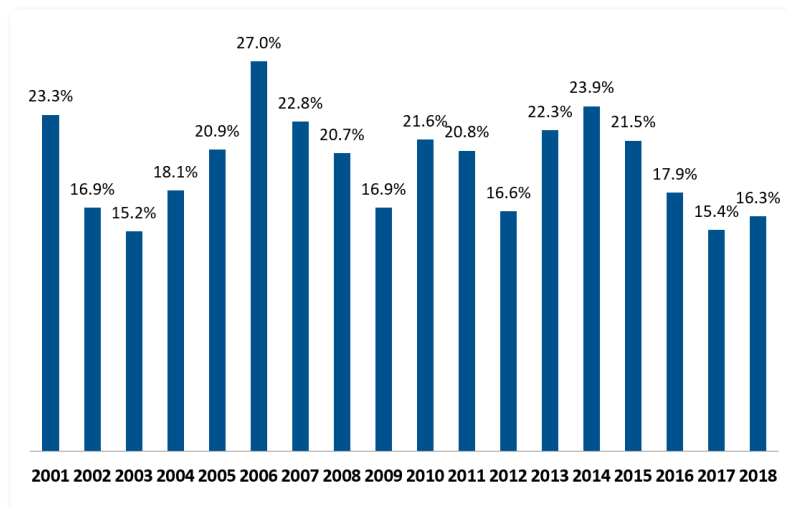
RESTATEMENT ISSUES ANALYSIS

DEBT, QUASI-DEBT, WARRANTS & EQUITY (BCF) SECURITY ISSUES

Debt/Quasi-Debt/Warrants/Equity Accounting



Debt/Quasi-Debt/Warrants/Equity Accounting Issues as a Percentage of All Restatements



Debt/Quasi-Debt/Warrants/Equity Accounting Issues

Disclosure Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Debt Restatements	146	117	120	172	331	505	291	200	140	183	176	142	195	205	163	123	88	84
Total Restatements	626	693	787	951	1,583	1,868	1,274	968	830	847	845	854	876	857	757	686	573	516
% of All Restatements	23.3%	16.9%	15.2%	18.1%	20.9%	27.0%	22.8%	20.7%	16.9%	21.6%	20.8%	16.6%	22.3%	23.9%	21.5%	17.9%	15.4%	16.3%

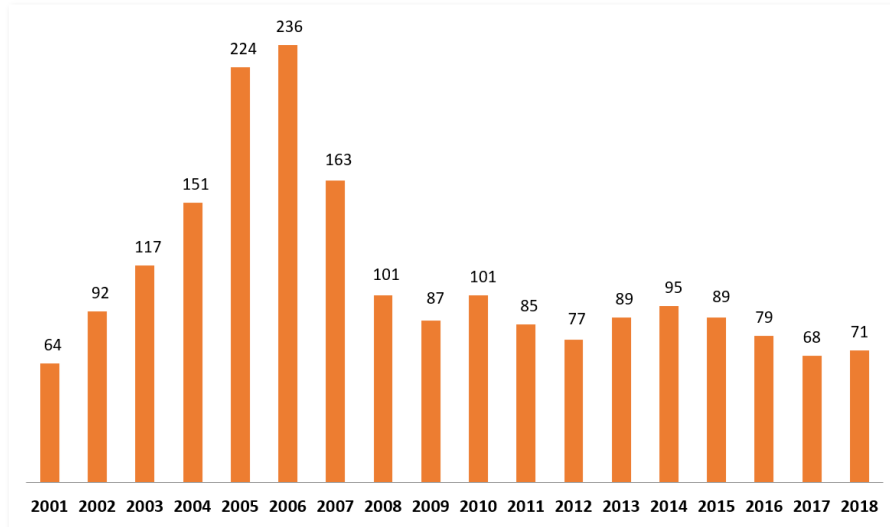
Notes

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- 2) The data counts all restatements when a registrant files multiple restatements.
- 3) The % of All Restatements row are based on a total number of restatements filed for the particular year (see also, table on page 13: Total Restatements by Year).
- 4) Debt, Quasi-Debt, Warrants & Equity (BCF) Security Issues consists of errors or irregularities in approach, theory, or calculation associated with the recording of debt or equity accounts. These restatements will often be about errors made in the calculation of balances arising from debt, equity or quasi-debt/equity instruments with conversion options (including beneficial conversion features -BCF). For example when convertible debt is issued, converted, repurchased, or paid off, the GAAP requirements can be challenging. In addition, certain debt instruments can be erroneously valued. Often FAS 123 (financial derivative) requirements are at issue.

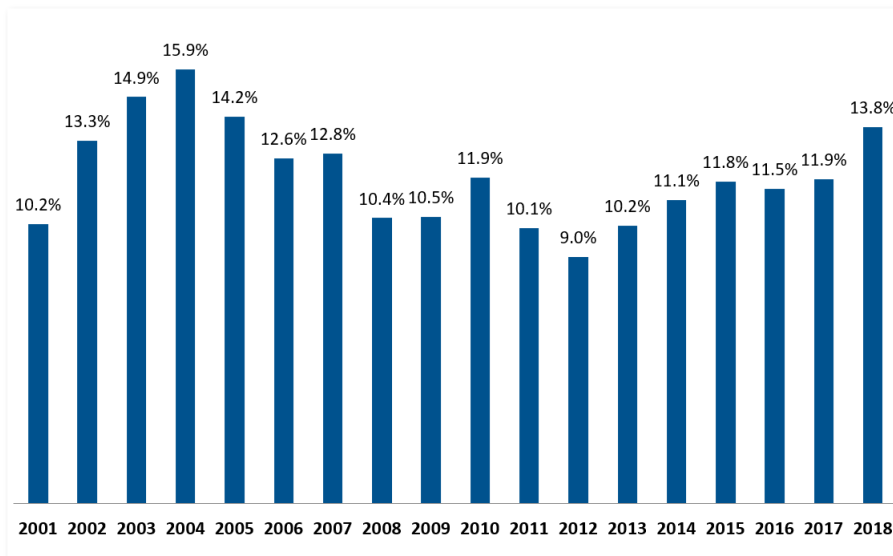
RESTATEMENT ISSUES ANALYSIS

LIABILITIES, PAYABLES, RESERVES AND ACCRUAL ESTIMATE FAILURES

Liabilities/Payables/Reserves/Accrual Estimate Failures



Liabilities/Payables/Reserves/Accrual Estimate Failures Issues as a Percentage of All Restatements



Liabilities/Payables/Reserves/Accrual Estimate Failures Issues

Disclosure Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Liabilities Restatements	64	92	117	151	224	236	163	101	87	101	85	77	89	95	89	79	68	71
Total Restatements	626	693	787	951	1,583	1,868	1,274	968	830	847	845	854	876	857	757	686	573	516
% of All Restatements	10.2%	13.3%	14.9%	15.9%	14.2%	12.6%	12.8%	10.4%	10.5%	11.9%	10.1%	9.0%	10.2%	11.1%	11.8%	11.5%	11.9%	13.8%

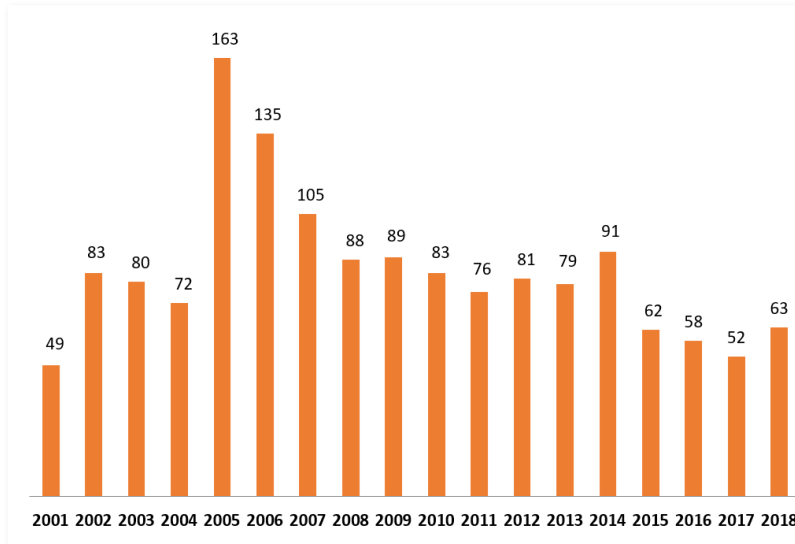
Notes

- 1) The research is based on a database download of February 25, 2019.
- 2) The data counts all restatements when a registrant files multiple restatements.
- 3) The % of All Restatements row are based on a total number of restatements filed for the particular year (see also, table on page 13: Total Restatements by Year).
- 4) Liabilities, Payables, Reserves and Accrual Estimate Failures consist of errors, irregularities, or omissions associated with the accrual or identification of liabilities on the balance sheet. These could range from failures to record pension obligations, to problems with establishing the correct amount of liabilities for leases, and capital leases. This category could also include failures to record deferred revenue obligations or normal accruals.

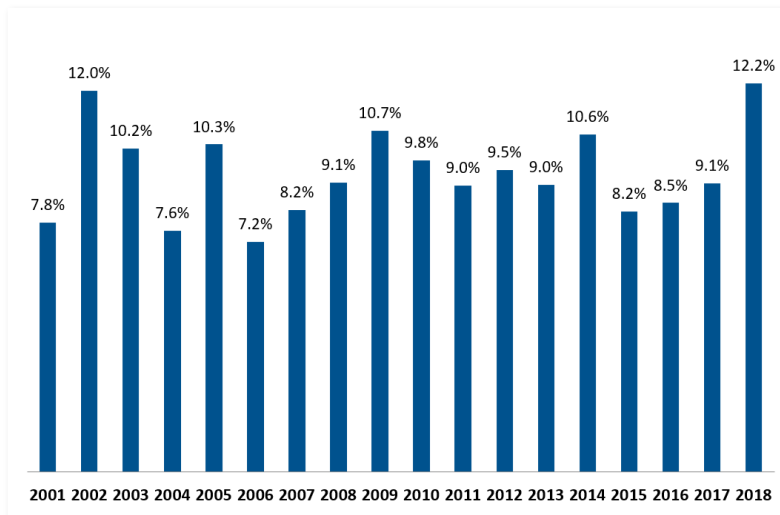
RESTATEMENT ISSUES ANALYSIS

ACCOUNTS/LOANS RECEIVABLE, INVESTMENTS & CASH ISSUES

Accounts/Loans Receivable, Investments & Cash



Accounts/Loans Receivable, Investments & Cash Issues as a Percentage of All Restatements



Accounts/Loans Receivable, Investments & Cash Issues

Disclosure Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Accounts/Loans Receivable	49	83	80	72	163	135	105	88	89	83	76	81	79	91	62	58	52	63
Total Restatements	626	693	787	951	1,583	1,868	1,274	968	830	847	845	854	876	857	757	686	573	516
% of All Restatements	7.8%	12.0%	10.2%	7.6%	10.3%	7.2%	8.2%	9.1%	10.7%	9.8%	9.0%	9.5%	9.0%	10.6%	8.2%	8.5%	9.1%	12.2%

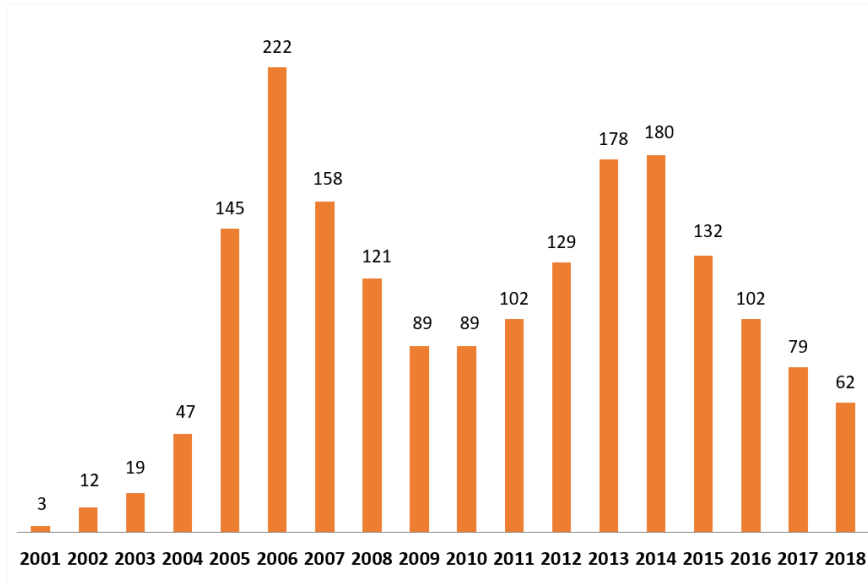
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- 3) The % of All Restatements row is based on a total number of restatements filed for the particular year (see also, table on page 13: Total Restatements by Year).
- 4) Accounts/Loans Receivable, Investments & Cash Issues consist of errors or irregularities in approach, theory, or calculations with respect to cash, accounts receivable, loans collectible, investments, allowance for uncollectibles, notes receivables, and/or related reserves. These mistakes often manifest themselves in balance sheet and income statement errors or misclassifications. Based on GAAP rules, changes in estimates, such as allowances for bad debts, should not be reflected as a restatement but should be recorded in the period in which such change is identified.

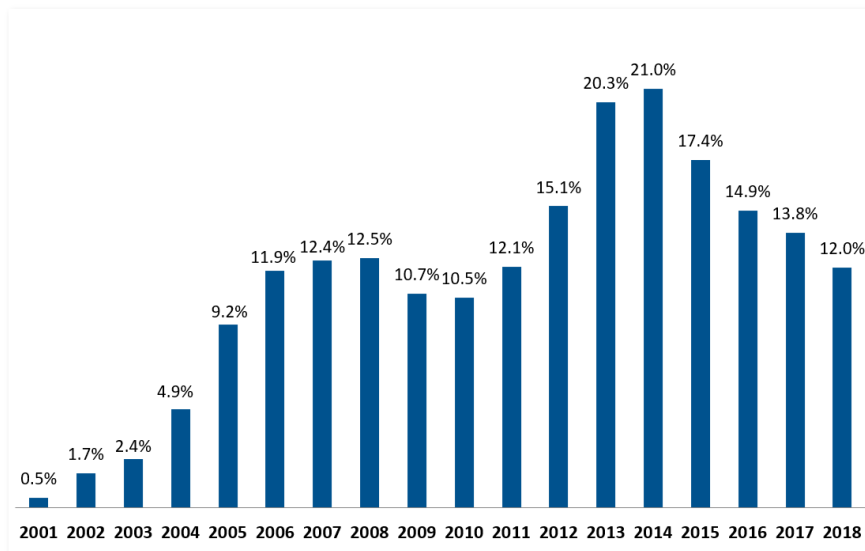
RESTATEMENT ISSUES ANALYSIS

CASH FLOW STATEMENT (SFAS 95) CLASSIFICATION ERRORS

Cash Flow Statement (SFAS 95) Classification Errors



Cash Flow Statement (SFAS 95) Classification Errors as a Percentage of All Restatements



Cash Flow Statement (SFAS 95) Classification Errors

Disclosure Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash Flow Restatement	3	12	19	47	145	222	158	121	89	89	102	129	178	180	132	102	79	62
Total Restatements	626	693	787	951	1,583	1,868	1,274	968	830	847	845	854	876	857	757	686	573	516
% of All Restatements	0.5%	1.7%	2.4%	4.9%	9.2%	11.9%	12.4%	12.5%	10.7%	10.5%	12.1%	15.1%	20.3%	21.0%	17.4%	14.9%	13.8%	12.0%

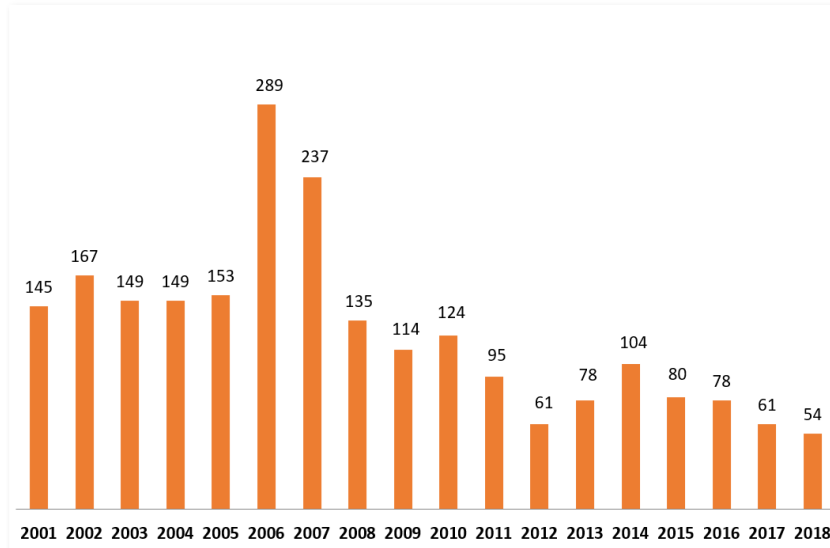
Notes

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- 2) The data counts all restatements when a registrant files multiple restatements.
- 3) The % of All Restatements row is based on a total number of restatements filed for the particular year (see also, table on page 13: Total Restatements by Year).
- 4) Cash Flow Statement Issues consist of errors or irregularities in approach, theory, or calculation that manifested themselves in cash flow statements (FAS 95) that are not consistent with GAAP. These misclassifications can affect cash flow from operations, financing, non-cash and other investments.

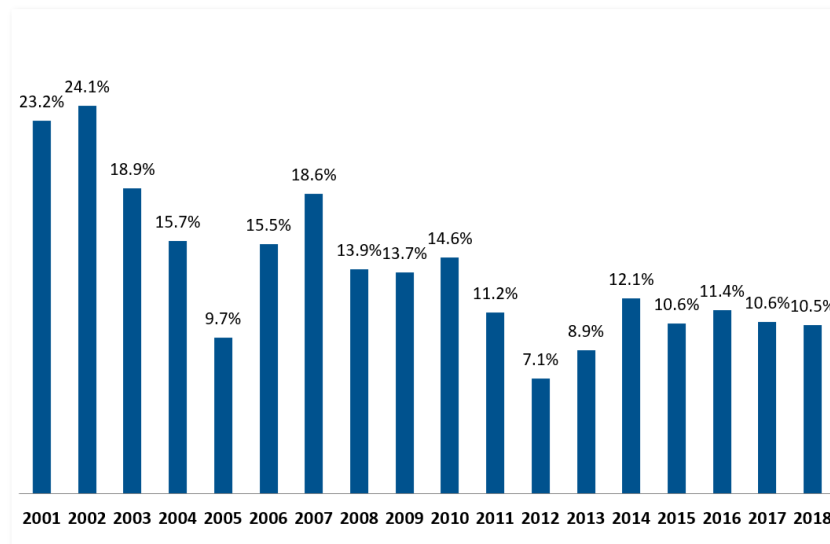
RESTATEMENT ISSUES ANALYSIS

EXPENSE (PAYROLL, SGA, OTHER) RECORDING ISSUES

Expense (Payroll, SGA, Other) Recording



Expense Recording Issues as a Percentage of All Restatements



Expense (Payroll, SGA, Other) Recording Issues

Disclosure Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Expense Restatements	145	167	149	149	153	289	237	135	114	124	95	61	78	104	80	78	61	54
Total Restatements	626	693	787	951	1,583	1,868	1,274	968	830	847	845	854	876	857	757	686	573	516
% of All Restatements	23.2%	24.1%	18.9%	15.7%	9.7%	15.5%	18.6%	13.9%	13.7%	14.6%	11.2%	7.1%	8.9%	12.1%	10.6%	11.4%	10.6%	10.5%

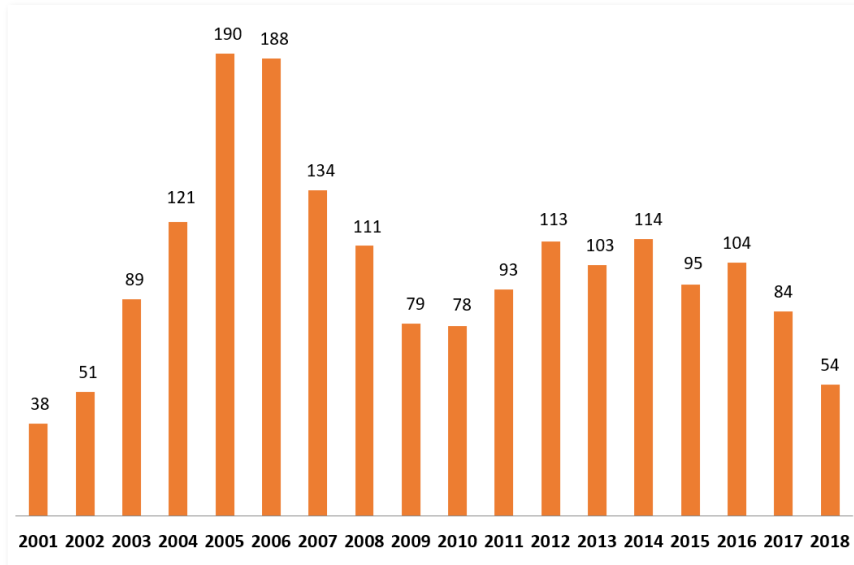
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- 4) Expense (Payroll, SGA, Other) Recording Issues consists of errors or irregularities in approach, theory or calculation associated with the expensing of assets or understatement of liabilities. These issues can arise from any number of areas including failure to record certain expenses, reconcile certain accounts, or record certain payables on a timely basis. Also issues with payroll expenses or SGA expenses are identified with this category.

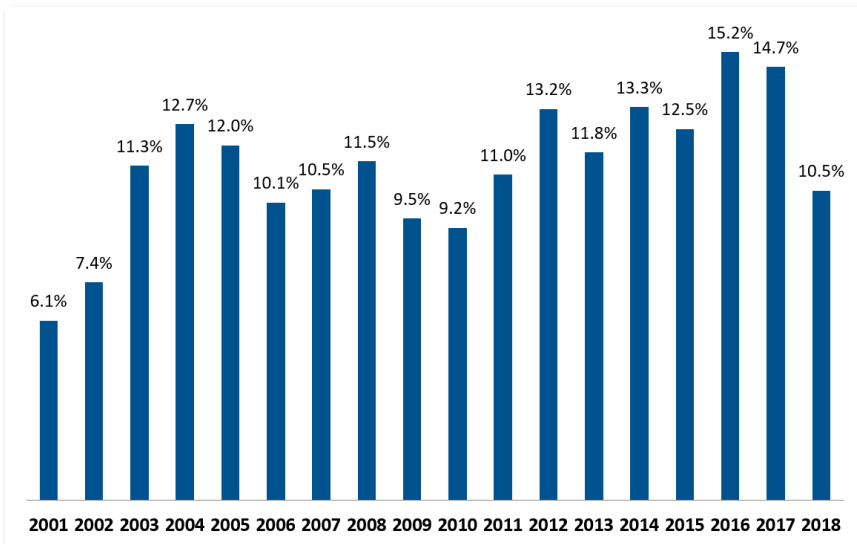
RESTATEMENT ISSUES ANALYSIS

TAX EXPENSE/BENEFIT/DEFERRAL/OTHER (FAS 109) ISSUES

Tax Expense/Benefit/Deferral/ Other (FAS 109)



Tax Expense/Benefit/Deferral/ Other (FAS 109) Issues as a Percentage of All Restatements



Tax Expense/Benefit/Deferral/ Other (FAS 109) Issues

Disclosure Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Tax/Expense Restatement	38	51	89	121	190	188	134	111	79	78	93	113	103	114	95	104	84	54
Total Restatements	626	693	787	951	1,583	1,868	1,274	968	830	847	845	854	876	857	757	686	573	516
% of All Restatements	6.1%	7.4%	11.3%	12.7%	12.0%	10.1%	10.5%	11.5%	9.5%	9.2%	11.0%	13.2%	11.8%	13.3%	12.5%	15.2%	14.7%	10.5%

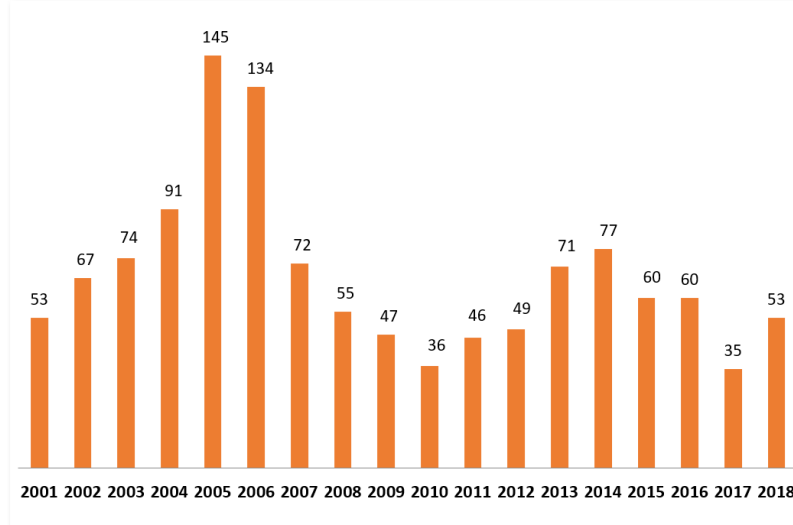
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- 4) Tax Expense/Benefit/Deferral/Other (FAS 109) Issues consist of errors or irregularities in approach, understanding, or calculation associated with various forms of tax obligations or benefits. Many of these restatements relate to foreign tax, specialty taxes or tax planning issues. Some deal with failures to identify appropriate differences between tax and book adjustments.

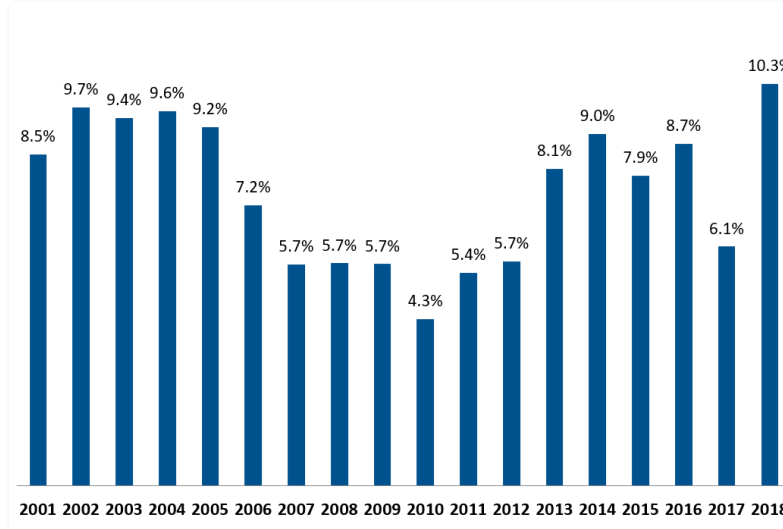
RESTATEMENT ISSUES ANALYSIS

INVENTORY, VENDOR, COST OF SALES ISSUES

Inventory, Vendor, Cost of Sales



Inventory, Vendor, Cost of Sales Issues as a Percentage of All Restatements



Inventory, Vendor, Cost of Sales Issues

Disclosure Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Inventory Issues	53	67	74	91	145	134	72	55	47	36	46	49	71	77	60	60	35	53
Total Restatements	626	693	787	951	1,583	1,868	1,274	968	830	847	845	854	876	857	757	686	573	516
% of All Restatements	8.5%	9.7%	9.4%	9.6%	9.2%	7.2%	5.7%	5.7%	5.7%	4.3%	5.4%	5.7%	8.1%	9.0%	7.9%	8.7%	6.1%	10.3%

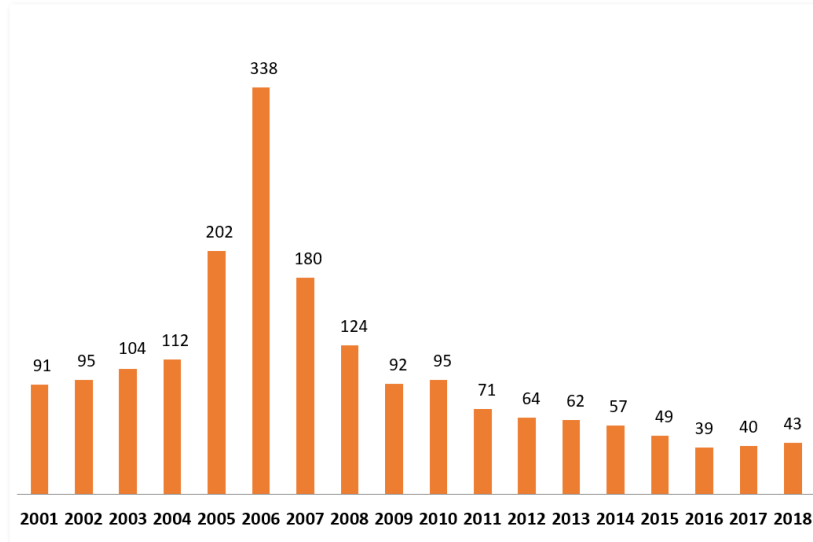
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- 4) Inventory, Vendor, Cost of Sales Issues consist of errors or irregularities in approach, theory or calculation associated with transactions affecting inventory, vendor relationships (including rebates) and/or cost of sales. Such errors primarily are related to the capitalization of activities in inventory or the calculation of balances at year end.

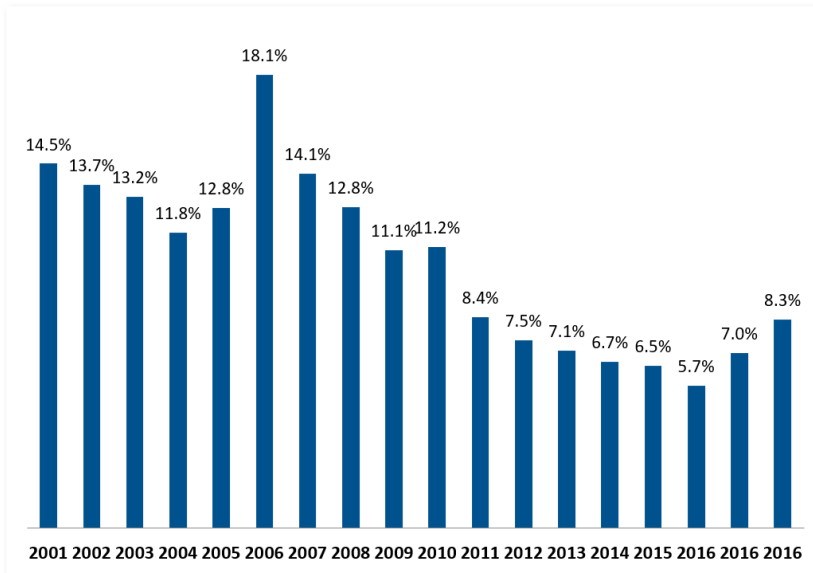
RESTATEMENT ISSUES ANALYSIS

DEFERRED STOCK-BASED AND/OR EXECUTIVE COMPENSATION ISSUES

Deferred, Stock-Based and/or Executive Compensation



Deferred, Stock-Based and/or Executive Comp. Issues as a Percentage of All Restatements



Deferred, Stock-Based and/or Executive Compensation Issues

Disclosure Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Deferred Comp. Issues	91	95	104	112	202	338	180	124	92	95	71	64	62	57	49	39	40	43
Total Restatements	626	693	787	951	1,583	1,868	1,274	968	830	847	845	854	876	857	757	686	573	516
% of All Restatements	14.5%	13.7%	13.2%	11.8%	12.8%	18.1%	14.1%	12.8%	11.1%	11.2%	8.4%	7.5%	7.1%	6.7%	6.5%	5.7%	7.0%	8.3%

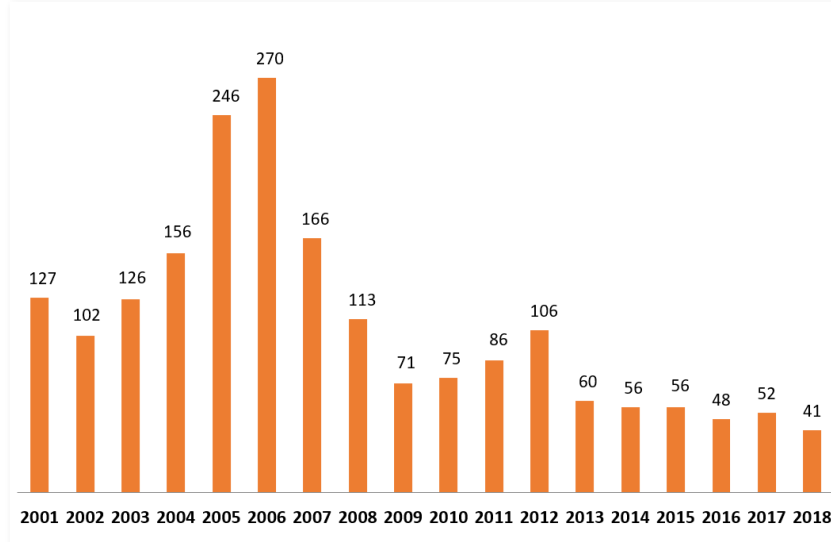
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- 4) Deferred Stock-Based and/or Executive Compensation Issues consists of errors or irregularities in approach, theory or calculation associated with the recording of deferred, stock based or executive compensation. The majority of these errors are associated with the valuation of options or similar derivative securities or rights granted to key executives. This category can also include restatements associated with the new FASB dealing with expensing of certain employee options as compensation expense in financial statements. A sub-category (FAS 123) has been created to capture only these issues.

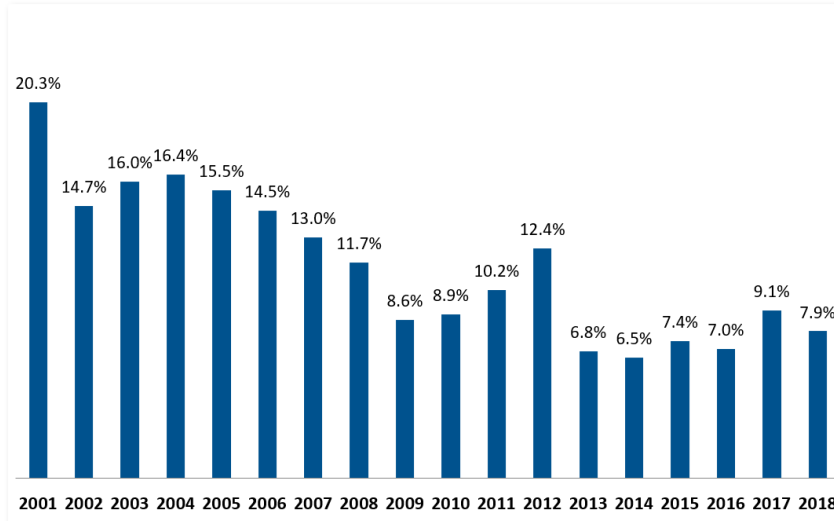
RESTATEMENT ISSUES ANALYSIS

ACQUISITIONS, MERGERS, DISPOSALS, RE-ORGANIZING ACCOUNTING ISSUES

Acquisitions, Mergers, Disposals, and/or Reorganization Accounting



Acquisitions, Mergers, Disposals, and/or Reorg. Acct. Issues as a Percentage of All Restatements



Acquisitions, Mergers, Disposals, and/or Reorganization Accounting Issues

Disclosure Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Acquisitions Restatements	127	102	126	156	246	270	166	113	71	75	86	106	60	56	56	48	52	41
Total Restatements	626	693	787	951	1,583	1,868	1,274	968	830	847	845	854	876	857	757	686	573	516
% of All Restatements	20.3%	14.7%	16.0%	16.4%	15.5%	14.5%	13.0%	11.7%	8.6%	8.9%	10.2%	12.4%	6.8%	6.5%	7.4%	7.0%	9.1%	7.9%

Notes

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3) The % of All Restatements row is based on a total number of restatements filed for the particular year (see also, table on page 13: Total Restatements by Year).

4) Acquisitions, Mergers, Disposals, Re-Organization Accounting Issues consists of errors or irregularities in approach, theory or calculation associated with transactions affecting inventory, vendor relationships (including rebates) and/or cost of sales. Such errors primarily are related to the capitalization of activities in inventory or the calculation of balances at year end.

RESTATEMENT ANALYSIS

TOP 25 LARGEST RESTATEMENTS DISCLOSED IN 2018

Top 25 Largest Restatements Disclosed in 2018

Company	Disclosure Date	Restated Period Begin	Restated Period Ended	Impact on Net Income
OI S.A. - In Judicial Reorganization [OIBRQ]*	2018-05-01	2015-01-01	2015-03-31	(\$1,992,666,000)
Garrett Motion Inc. [GTX]	2018-08-23	2013-01-01	2018-03-31	(\$1,010,000,000)
HONEYWELL INTERNATIONAL INC [HON]	2018-10-19	2017-01-01	2017-12-31	(\$774,000,000)
METLIFE INC [MET]	2018-01-29	2013-01-01	2017-09-30	\$286,000,000
CHS INC [CHSCP]	2018-10-26	2013-09-01	2018-05-31	(\$244,039,000)
Bausch Health Companies Inc. [BHC]	2018-08-07	2018-01-01	2018-03-31	\$112,000,000
Medtronic plc [MDT]	2018-06-22	2013-05-01	2017-04-29	(\$86,000,000)
Avangrid, Inc. [AGR]	2018-03-02	2013-01-01	2016-12-31	\$86,000,000
NEWMONT MINING CORP /DE/ [NEM]	2018-04-26	2017-01-01	2017-12-31	(\$74,000,000)
ACETO CORP [ACET]	2018-09-13	2017-07-01	2018-03-31	(\$71,350,000)
TEMPUR SEALY INTERNATIONAL, INC. [TPX]	2018-02-22	2013-01-01	2016-12-31	(\$47,700,000)
UMPQUA HOLDINGS CORP [UMPOQ]	2018-08-09	2014-01-01	2017-12-31	(\$45,419,000)
Sorrento Therapeutics, Inc. [SRNE]	2018-02-27	2017-01-01	2017-09-30	(\$36,020,000)
National CineMedia, Inc. [NCMI]	2018-03-12	2016-01-01	2016-12-29	(\$35,400,000)
Bison Merger Sub I, LLC	2018-05-10	2015-01-01	2017-12-31	(\$28,048,000)
CYPRESS SEMICONDUCTOR CORP /DE/ [CY]	2018-02-26	2015-01-01	2017-09-30	\$27,342,000
NET 1 UEPS TECHNOLOGIES INC [UEPS]	2018-11-08	2017-07-01	2018-06-30	\$25,199,000
Canopy Growth Corp [CGC]	2018-05-16	2016-04-01	2017-03-31	\$24,986,000
ORMAT TECHNOLOGIES, INC. [ORA]	2018-05-11	2013-01-01	2017-12-31	(\$24,367,000)
FTD Companies, Inc. [FTD]	2018-02-26	2017-01-01	2017-09-30	(\$23,000,000)
HECLA MINING CO/DE/ [HL]	2018-11-09	2003-01-01	2017-12-31	(\$22,605,000)
ULTIMATE SOFTWARE GROUP INC [ULTI]	2018-02-06	2013-01-01	2017-09-30	(\$18,813,000)
GOLD FIELDS LTD [GFI]	2018-04-04	2013-01-01	2016-12-31	(\$18,300,000)
MYRIAD GENETICS INC [MYGN]	2018-08-21	2014-07-01	2018-03-31	(\$16,400,000)
EXP World Holdings, Inc. [EXPI]	2018-04-03	2014-01-01	2017-09-30	\$15,797,388

*Amount disclosed was presented in BRL. Converted to USD at an exchange rate of 0.354.

Contact us for a complete list of restatements disclosed in 2018.
Call us at 508-476-7007 or email at info@auditanalytics.com.

FINANCIAL RESTATEMENT ISSUES

DEFINITIONS

Accounts/Loans Receivable, Investments & Cash Issues

Consists of errors or irregularities in approach, theory or calculations with respect to cash, accounts receivable, loans collectible, investments, allowance for uncollectibles, notes receivables and/or related reserves. These mistakes often manifest themselves in balance sheet and income statement errors or misclassifications. Based on GAAP rules, changes in estimates, such as allowances for bad debts, should not be reflected as a restatement but should be recorded in the period in which such change is identified.

Acquisitions, Mergers, Disposal, Reorganization Accounting Issues

Consists primarily of errors or irregularities in approach, theory or calculation associated with mergers, acquisitions, disposals, reorganizations, or discontinued operation accounting issues. The restatements in this area can be varied but they all deal with a company's failure to properly record an acquisition (such as valuation issues) or a failure to properly record a disposal (such as discontinued operations) or reorganization (such as in bankruptcy). It can also include failures to properly revalue assets and liabilities associated with fresh start rules.

Balance Sheet Classification of Assets Issues

Consists of errors or irregularities in approach, theory or calculation associated with how assets were classified on the balance sheet. This can include how assets were classified as short term/long term, how they were described or whether they should have been netted against some other liability.

Capitalization of Expenditures Issues

Consists of errors or irregularities in approach, theory or calculation associated with the capitalization of expenditures. These can include expenditures capitalized related to leases, inventory, construction, intangible assets, R&D, product development and other purposes.

Cash Flow Statement (FAS 95) Classification Errors Issues

Consists of errors or irregularities in approach, theory or calculation that manifested themselves in cash flow statements that are not consistent with GAAP. These misclassifications can affect cash flow from operations, financing, non-cash and other investments. (FAS 95 classification errors)

Comprehensive Income Issues

Made up of errors or irregularities related to misstatements of comprehensive income or accumulated income. These most commonly would include misstatements of pensions, foreign currency or derivatives.

Consolidation Issues, Including Fin 46 Variable Interest & Off-Balance Sheet

Consists of errors or irregularities in approach, theory or calculation with respect to the consolidation of subsidiaries including variable interest entities and off balance sheet arrangements. This can include mistakes in how joint ventures, off balance sheet entities or minority interests are recorded or manifested. It can also include issues associated with foreign currency translations of foreign affiliates.

Debt and/or Equity Classification Issues

Consists mainly of errors or irregularities in approach, theory or calculation associated with the proper classification of a debt instrument as short term or long term. Issues associated with determining the correct treatment can require an in depth understanding of the contractual nature of the debt instruments. These errors can also include differences misclassifications between debt and equity accounts.

FINANCIAL RESTATEMENT ISSUES

DEFINITIONS

Debt, Quasi-debt, Warrants, Equity (BCF) Issues

Consists of errors or irregularities in approach, theory or calculation associated with the recording of debt or equity accounts. These restatements will often be about errors made in the calculation of balances arising from debt, equity or quasi-debt/equity instruments with conversion options (including beneficial conversion features- BCF). For example when convertible debt is issued, converted, repurchased or paid off, the GAAP requirements can be challenging. In addition, certain debt instruments can be erroneously valued. Often FAS 123 (financial derivative) requirements are at issue.

Deferred, Stock-Based or Executive Compensation Issues

Consists of errors or irregularities in approach, theory or calculation associated with the recording of deferred, stock based or executive compensation. The majority of these errors are associated with the valuation of options or similar derivative securities or rights granted to key executives. This category can also include restatements associated with the new FASB dealing with expensing of certain employee options as compensation expense in financial statements. A sub-category (FAS 123) has been created to capture only these issues.

Depreciation, Depletion or Amortization Errors

Consists of errors or irregularities in approach, theory or calculation associated with depreciation of assets, amortization of assets and/ or amortization of debt premiums or discounts. A significant number of these items can be attributed to the recalculation of depreciation associated with revised leasehold improvements associated with the revised lease accounting rules.

EPS, Ratio and Classification of Income Statement Issues

Consists primarily of errors, omissions or irregularities associated with a registrant's disclosure of financial/operational ratios or margins and earnings per share calculation issues. Also included are circumstances where income statement items are misclassified, often between CGS and SGA.

Expense (Payroll, SGA, Other) Recording Issues

Consists of errors or irregularities in approach, theory or calculation associated with the expensing of assets or understatement of liabilities. These issues can arise from any number areas including failure to record certain expenses, reconcile certain accounts or record certain payables on a timely basis. Also issues with payroll expenses or SGA expenses are identified with this category.

Financial Derivatives, Hedging (FAS 133) Accounting Issues

Consists of errors or irregularities in approach, theory or calculation of derivative instruments. These can include the valuation of financial instruments such as hedges on currency swings, interest rate swaps, purchases of foreign goods, guarantees on future sales and many other examples.

Foreign Related Party, Affiliated, or Subsidiary Issues

Consists primarily of errors, omissions or irregularities associated with disclosures about related, alliance, affiliated and/or subsidiary entities.

Gain or Loss Recognition Issues

Consists of errors or irregularities in approach, theory or calculation with respect to the recording of gains or losses from the sales of assets, interests, entities or liabilities. Mistakes in these areas often result from problems with calculating the appropriate basis for items that were sold or the proper sales amount when such amounts are of the nature of barter.

FINANCIAL RESTATEMENT ISSUES

DEFINITIONS

Intercompany, Investment in Subsidiary/Affiliate Issues

Consists primarily of errors or irregularities in approach, theory or calculation related to intercompany or affiliate balances, investment valuations or transactions. It is often the case that problems arise when intercompany balances are not recognized or that income figures are manipulated at the affiliate (foreign or US) levels.

Inventory, Vendor, Cost of Sales Issues

Consists of errors or irregularities in approach, theory or calculation associated with transactions affecting inventory, vendor relationships (including rebates) and/or cost of sales. Such errors primarily are related to the capitalization of activities in inventory or the calculation of balances at year end.

Lease, Legal, FAS 5 Contingency and Commitment Issues

Consists primarily of errors, omissions or irregularities associated with FAS 5 type contingencies and commitments. This description also deals with issues associated with the disclosure or accrual of legal exposures by registrants and issues associated with incorrectly identifying historical contractual lease terms. These terms can include treatment of “rent holidays”, tenant allowances and other such items.

Liabilities, Payables, Reserves and Accrual Failures

Consists of errors, irregularities or omissions associated with the accrual or identification of liabilities on the balance sheet. These could range from failures to record pension obligations, to problems with establishing the correct amount of liabilities for leases, and capital leases. These categories could also include failures to record deferred revenue obligations or normal accruals.

Pension Issues

Includes liability and other issues related to pensions.

PPE, Intangible, Fixed Asset Issues

Consists of identifiable errors or irregularities either in calculation, approach or theory that have taken place in the recording of assets, goodwill, intangible or contra liabilities that are required to be valued or assessed for diminution in value on a periodic basis. Examples include: intangible assets, goodwill, buildings, securities, investments, lease-hold improvements, etc. This description also covers misreporting of fixed assets.

Revenue Recognition Issues

Consists of errors or irregularities in approach, understanding or calculation associated with the recognition of revenue. Many of these restatements originate from a failure to properly interpret sales contracts for hidden rebate, return, barter or resale clauses. Some of them also relate to the treatment of sales returns, credits and other allowances.

Tax Expense/Benefit/Deferral/Other (FAS 109) Issues

Consists of errors or irregularities in approach, understanding or calculation associated with various forms of tax obligations or benefits. Many of these restatements relate to foreign tax, specialty taxes or tax planning issues. Some deal with failures to identify appropriate differences between tax and book adjustments.

AUDIT, REGULATORY AND DISCLOSURE INTELLIGENCE

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- Track Section 404 internal control disclosures and Section 302 disclosure controls.

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- Know who is auditing whom, their fees, auditor changes, auditor opinions and more.

Financial Restatements

- Identify company restatements by type, auditor and peer group. Analyze by date, period and specific issue.

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- Search all federal litigation by auditor, company and litigation type. Know who is representing whom.

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- An extensive collection of analyzed SEC Comment Letters back to 2004 and indexed according to a taxonomy of over 2,800 issues, rules, and regulations.

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Director & Officer Changes	Shareholder Activism
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Auditor Engagements
Audit Fees
Audit Opinions
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