

White Paper on Characteristics of Emerging Growth Companies

as of May 15, 2017¹

Hannah Crabtree, CPA
Senior Analyst
Office of Economic and Risk Analysis
Public Company Accounting Oversight Board

Harsha Samaraweera
Senior Manager
Office of Economic and Risk Analysis
Public Company Accounting Oversight Board

¹ This white paper was prepared by PCAOB staff and provides general information about certain characteristics of emerging growth companies. This white paper benefited from significant contributions by Elena Bozhkova and Karen Wiedemann (Office of the Chief Auditor) and Jennifer Williams (Office of the General Counsel) as well as helpful comments on presentation and review by Nicole Funari and Andres Vinelli (Office of Economic and Risk Analysis). The views expressed herein are those of the authors and do not necessarily reflect the views of the Board, individual Board members, or PCAOB staff.

SUMMARY

This white paper provides general information about certain characteristics of emerging growth companies ("EGCs"). The information is derived from the most recent available U.S. Securities and Exchange Commission ("SEC") filings and data from third-party vendors through May 15, 2017, the most recent measurement date.

The white paper includes the following key observations as of May 15, 2017:

- There were 1,862 companies that identified themselves as EGCs in at least one SEC filing since 2012 and have filed audited financial statements with the SEC in the 18 months preceding the measurement date ("EGC filers").²
- There were 758 EGC filers (or 41%) that have common equity securities listed on a U.S. national securities exchange ("exchange-listed"). These EGC filers represented 16% of the 4,780 exchange-listed companies and approximately 1% of total market capitalization of exchange-listed companies.
- Many EGC filers that were not exchange-listed had limited operations. Approximately 52% of the non-listed EGC filers reported zero revenue in their most recent filing with audited financial statements and 23% of non-listed EGCs that filed periodic reports disclosed that they were shell companies.
- Approximately 49% of EGC filers, including 73% of those that were not exchange-listed, received an explanatory paragraph in their most recent audit report expressing substantial doubt about the company's ability to continue as a going concern.
- Among the 1,862 EGC filers, 1,355 provided a management report on internal control over financial reporting in their most recent annual filing. Of those 1,355 companies, approximately 46% reported material weaknesses.
- 243 companies no longer qualify as EGCs because their revenue exceeds the relevant threshold or they have become large accelerated filers.

² The 1,862 EGC filers do not include the following:

- (i) 247 companies that no longer qualify as EGCs,
- (ii) 511 companies that ceased to be SEC registrants,
- (iii) 446 companies that did not file audited financial statements with the SEC in the 18 months preceding the measurement date ("inactive EGCs"), and
- (iv) 157 companies that appear to have sold common equity securities on or before December 8, 2011.

- 4 companies no longer qualify as EGCs because five years or more have passed since the end of the fiscal year in which they made their first registered sale of common equity securities.
- Approximately 99% of EGC filers were audited by accounting firms that also audited issuers that are not EGC filers, including 40% of EGC filers that were audited by firms that provided audit reports for more than 100 issuers and were required to be inspected on an annual basis by the PCAOB.

The data presented in this white paper, both as of the most recent measurement date and prior measurement dates, reflect a new step in the methodology compared to previously published white papers. See “Methodology, New Step to Identify Five-Year Cut-Off” for additional details on the nature and reasons for the new step, and Appendices E and F for a presentation of its quantitative impact on the historical number of EGCs and trends in the data.

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I. BACKGROUND & METHODOLOGY

Background

Title I of the Jumpstart Our Business Startups Act ("JOBS Act") focuses on reducing regulatory burdens on EGCs in order to facilitate capital raising through public markets.³ As relevant to this white paper, the JOBS Act generally provides that new PCAOB standards will not apply to the audits of EGCs unless the SEC determines that applying such additional requirements is necessary or appropriate in the public interest, after considering the protection of investors, and whether the action will promote efficiency, competition, and capital formation.⁴ To implement this provision, upon adoption of a rule subject to this determination, the PCAOB recommends to the SEC whether the rule should apply to audits of EGCs, and submits information and analysis in its adopting release to assist the SEC in making a determination. This white paper provides general data about EGCs to inform the analysis contained in PCAOB rulemaking releases regarding the impact of applying new standards to the audits of EGCs.

PCAOB staff anticipates updating the white paper semiannually, based on the most recent data available as of May 15 and November 15 in each year. Unless the context requires otherwise, references in this white paper to "the measurement date" mean the most recent measurement date, May 15, 2017.

Generally, a company qualifies as an EGC if it had annual revenues in its most recently completed fiscal year that were less than a specified threshold and had not sold common equity securities on or before December 8, 2011, pursuant to an effective registration statement under the Securities Act of 1933 ("Securities Act").⁵ The annual revenue threshold was initially set at \$1.0 billion and is required to be indexed for inflation every five years to reflect the change in the

³ Pub. L. No. 112-106 (April 5, 2012). See Section 103(a)(3)(C) of the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley Act"), 15 U.S.C. 7213(a)(3), as added by Section 104 of the JOBS Act.

⁴ See Section 103(a)(3)(C) of the Sarbanes-Oxley Act of 2002, as added by Section 104 of the JOBS Act, which provides:

Any rules of the Board requiring mandatory audit firm rotation or a supplement to the auditor's report in which the auditor would be required to provide additional information about the audit and the financial statements (auditor discussion and analysis) shall not apply to an audit of an emerging growth company, as defined in section 3 of the Securities Exchange Act of 1934. Any additional rules adopted by the Board after [April 5, 2012] shall not apply to an audit of an emerging growth company, unless the Commission determines that the application of such additional requirements is necessary or appropriate in the public interest, after considering the protection of investors, and whether the action will promote efficiency, competition, and capital formation.

⁵ See Section 3(a)(80) of the Securities Exchange Act of 1934 ("Exchange Act") and Section 101(d) of the JOBS Act.

Consumer Price Index. Effective April 12, 2017, the threshold was adjusted to \$1.07 billion.⁶ EGC data as of any measurement date reflects the revenue threshold in effect on that date.

A company retains its EGC status until the earliest of:

- (i) the last day of the first fiscal year in which the company's annual gross revenues exceed the revenue threshold;
- (ii) the date on which the company is deemed to be a "large accelerated filer" under the Exchange Act (generally, an issuer with a public float of \$700 million or more that has been subject to Exchange Act periodic reporting requirements for at least one year and has filed at least one annual report);
- (iii) the date on which the company has issued more than \$1 billion in non-convertible debt during the prior three year period; or
- (iv) the last day of the fiscal year after the fifth anniversary of the company's first sale of common equity securities under an effective Securities Act registration statement.

Methodology

As a starting point for identifying the companies considered EGCs for purposes of this paper, PCAOB staff used commercial vendor data about companies that, as of the most recent measurement date, self-identified as EGCs in at least one SEC filing since 2012.⁷

New Step to Identify Five-Year Cut-Off

As of the May 15, 2017 measurement date, a new step was added to the methodology: identifying EGCs whose most recent fiscal year end was after the fifth anniversary of their first sale of common equity securities pursuant to an effective registration statement (the "five-year cut-off"). To accomplish this, PCAOB staff (1) determined the last day of the company's fiscal year and (2) estimated the date of its first such sale of common equity securities.⁸ Using these two data points, PCAOB staff identified the EGCs whose most recent fiscal year end was after the fifth anniversary of the estimated date of first sale. This step was not required for previous

⁶ See SEC Release 33-10332, *Inflation Adjustments and Other Technical Amendments Under Titles I and III of the JOBS Act* (Mar. 31, 2017).

⁷ SEC filings used to determine the population of companies that self-identified as an EGC include all Securities Act registration statements, Regulation A offering statements where a concurrent Exchange Act registration is filed, Exchange Act registration statements, and Exchange Act periodic reports. Not all companies that are EGCs identify as EGCs in all SEC filings. Companies whose financial statements may be, but are not required to be, audited under PCAOB standards are excluded from this analysis.

⁸ Because data on the date of first sale of common equity securities is not readily available, PCAOB staff used as a proxy for this analysis, the date of the first Notice of Effectiveness relating to a Securities Act registration statement for an offering of common equity securities or, if earlier, the filing date of a registration statement on Form S-8 relating to common equity securities. Use of these proxies may understate the population of EGCs presented in this paper if the first sale of common equity securities does not occur during the same fiscal year as the proxy event.

measurement dates because under the statutory definition of an EGC (specifically, the requirement that the first sale of common equity securities under an effective registration statement occur after December 8, 2011), the five-year cut-off could not occur before December 9, 2016.

In applying the new step, PCAOB staff identified and excluded from the EGC population 157 companies. These companies have identified themselves as EGCs since the first measurement date in June 2012, but because they had a Notice of Effectiveness or filed a Form S-8 (indicating a first sale of common equity securities) on or before December 8, 2011, they were excluded as EGCs for purposes of this paper. The impact of these exclusions on the number of EGCs at prior measurement dates is presented in Appendix E.

For comparison purposes, Appendix F presents certain trend charts and data before excluding the 157 companies from the EGC population. Applying the new step to the EGC population generally has no impact on any of the trend analysis presented in the white paper, except for the proportion of companies that filed periodic reports with the SEC presented in Figure 3. Specifically, there was a 3 percentage point decrease (from 31% to 28%) in the proportion of companies that filed periodic reports at the June 2012 measurement date.

Analysis as of Measurement Date

The analysis, as of the most recent measurement date, excludes the 157 companies identified above, and therefore, does not include companies that did a registered common equity offering on or before December 8, 2011. From the remaining population, we excluded companies that had identified themselves as EGCs and subsequently no longer qualified as EGCs, as follows:

- 511 companies that (i) terminated their Exchange Act registration, (ii) had their Exchange Act registration revoked, or (iii) withdrew their registration statement before effectiveness, and, in each case, did not subsequently file audited financial statements with the SEC;
- 243 companies identified in a later SEC filing as no longer qualifying as EGCs because (i) they reported \$1 billion or more in annual revenues prior to April 12, 2017, or \$1.07 billion or more in annual revenues thereafter; or (ii) they identified themselves in a periodic filing as a "large accelerated filer;"
- 4 companies that no longer qualified as EGCs because the five-year cut-off occurred prior to the measurement date.

Using this methodology, the PCAOB staff identified 1,862 companies that have identified themselves as EGCs in at least one SEC filing since 2012 and have filed audited financial statements with the SEC in the 18 months preceding the measurement date ("EGC filers"). An additional 446 companies had previously identified themselves as EGCs but did not file audited financial statements with the SEC in the 18 months preceding the measurement date ("inactive EGCs").

The financial information presented is derived from the most recent annual financial statements filed with the SEC as of the measurement date. This data is obtained using commercial vendor data, supplemented with manually collected data from SEC filings, when necessary.

The white paper describes characteristics of EGC filers and inactive EGCs separately. The analysis focuses primarily on EGC filers, for which information is more current and reflects a more recent experience of an audit conducted under PCAOB standards. Because available information regarding inactive EGCs is potentially stale, the analysis of these is more limited.

The number of EGC filers and inactive EGCs is presented in Section II. Sections III through VII address EGC filers. Appendix A provides additional information about the population of EGC filers, while Appendix B provides additional information about inactive EGCs. Appendix C provides information about companies that are no longer EGC filers because of annual revenue that exceeded the specified threshold or large accelerated filer status. Appendix D provides information about companies that are no longer EGC filers (or inactive EGCs) because they are no longer SEC registrants. Appendix E presents the impact on the number of EGCs (at all measurement dates) of excluding companies that appear to have sold common equity securities on or before December 8, 2011. Appendix F presents trend charts and data that do not take into account the exclusion of these companies.

In various cross sectional analyses in this document, the population of EGC filers is further divided between companies that have at least one class of common equity securities listed on a U.S. national securities exchange ("exchange-listed" EGC filers)⁹ and those that do not ("non-listed" EGC filers).¹⁰ PCAOB staff identified 758 exchange-listed EGC filers and 1,104 non-listed EGC filers as of May 15, 2017.

To compare the exchange-listed EGC filer population with the broader public equity market, the analysis below also presents a benchmark derived from commercial vendor data on other exchange-listed companies. The benchmark population is limited to exchange-listed companies that are not investment companies¹¹ and that have filed audited financial statements with the SEC in the 18 months preceding the most recent measurement date. From a total population of 4,780 exchange-listed companies, the 758 exchange-listed EGC filers are excluded to allow for comparison of companies that are EGCs to those that are not. Using this methodology, PCAOB staff identified 4,022 companies in the benchmark population ("other exchange-listed companies"). These other exchange-listed companies tend to be larger and generally have a longer reporting history than both exchange-listed EGC filers and non-listed EGC filers; these attributes may also correlate with other characteristics described in this paper.

⁹ The PCAOB staff obtained exchange-listed company information as of the measurement date derived from Standard & Poor's Xpressfeed data on all active issue types of "common-ordinary," "units with a common share component," and "depository receipts" where the exchange is a U.S. national securities exchange with available market capitalization data. As of May 15, 2017, EGC filers had primary listings of common equity securities on the following U.S. national securities exchanges: the New York Stock Exchange LLC, Nasdaq Stock Market LLC, NYSE MKT LLC, and NYSE Arca, Inc.

¹⁰ Non-listed EGC filers include companies whose securities are traded over-the-counter or have no public market.

¹¹ Registered investment companies (other than business development companies) do not qualify as emerging growth companies. See SEC Division of Corporation Finance, *Jumpstart Our Business Startups Act, FAQs of Generally Applicable Questions on Title I of the JOBS Act* (Dec. 21, 2015, revised), Q. 20.

The paper does not present a similar benchmark population or data on market capitalization for non-listed EGC filers. Market data may not be reliable or even regularly available with respect to issuers whose securities are quoted on the over-the-counter market or are otherwise illiquid. In addition, issuers whose only publicly-traded securities are debt securities do not have equity market capitalizations. These inherent limitations of available data limit our ability to make useful comparisons among non-listed EGC filers.

The above methodology is applied as of each measurement date. This paper focuses on data as of the most recent measurement date but also provides time series data about the population of EGCs as of previous measurement dates.

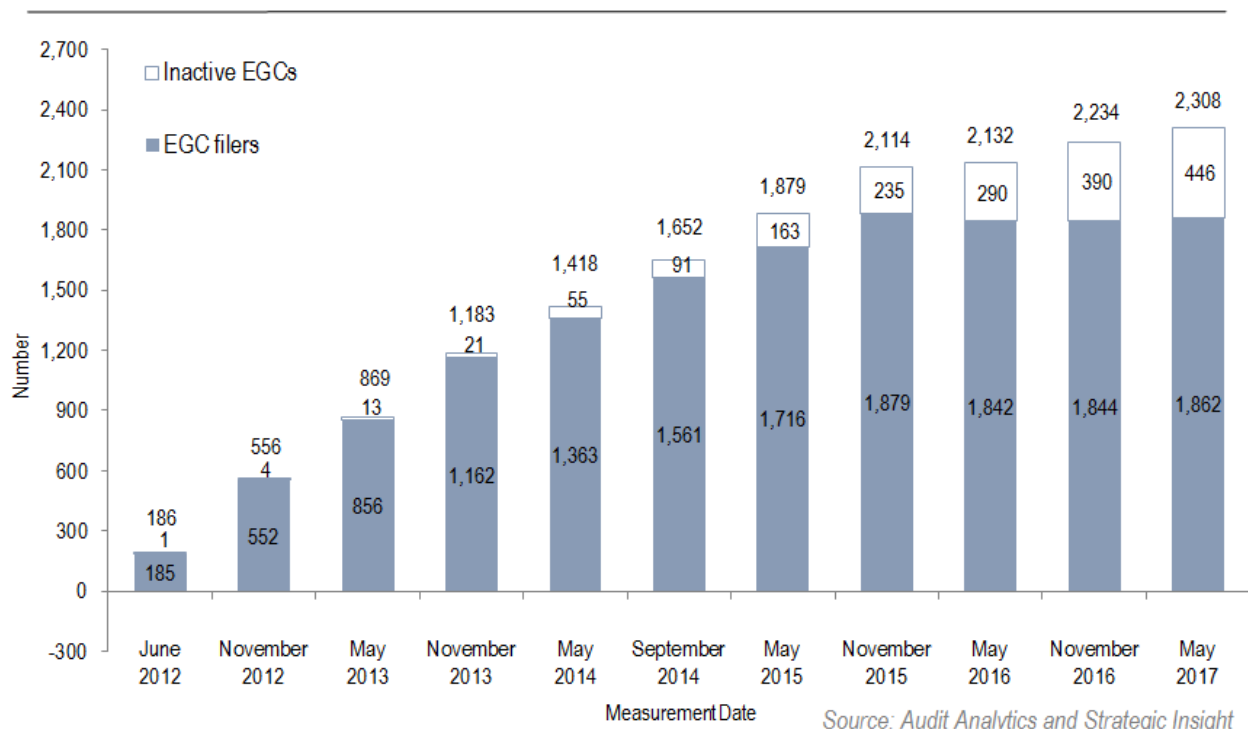
As previously indicated, the EGC filer and inactive EGC populations are derived using data from a commercial vendor based on companies' self-identification as EGCs in filings with the SEC. Self-identification data may understate or overstate these populations if companies fail to self-identify or self-identify erroneously. In addition, the populations will be overstated if there are companies that no longer qualify as EGCs but are not excluded from the population of EGCs identified by the third-party vendor (for example, because of a lack of known information about a change in status). Accordingly, the population of companies that meet the statutory definition of "emerging growth company" as of a specific measurement date may be larger or smaller than the population analyzed in this white paper.

Each percentage in this document is rounded to the nearest percentage point and, for some Figures and Tables, the total may not sum to 100% due to rounding.

II. NUMBER OF EGC FILERS AND INACTIVE EGCS

Figure 1 depicts the number of EGC filers and inactive EGCs at specific measurement dates used by PCAOB staff to analyze the populations between June 2012 and May 2017. The sum of EGC filers and inactive EGCs, as of each measurement date, is also presented.

Figure 1: Number of EGC filers and inactive EGCs



Changes in the populations of EGCs depicted above are affected by EGCs entering the population and EGCs leaving the population. From April 5, 2012 through May 15, 2017, there were 243 companies that no longer qualify as EGCs because of their annual revenue, or large accelerated filer status. Further information on the industries of these companies is included in Appendix C.¹² Another four companies no longer qualify due to the five-year cut-off. Additionally, there were 511 companies that previously identified as EGCs but then ceased to be SEC registrants. Specifically, these 511 companies (i) terminated their Exchange Act registration, (ii) had their Exchange Act registration revoked, or (iii) withdrew their registration statement before effectiveness, and, in each case, did not subsequently file audited financial statements with the SEC. Further information on the industries of these companies is included in Appendix D.

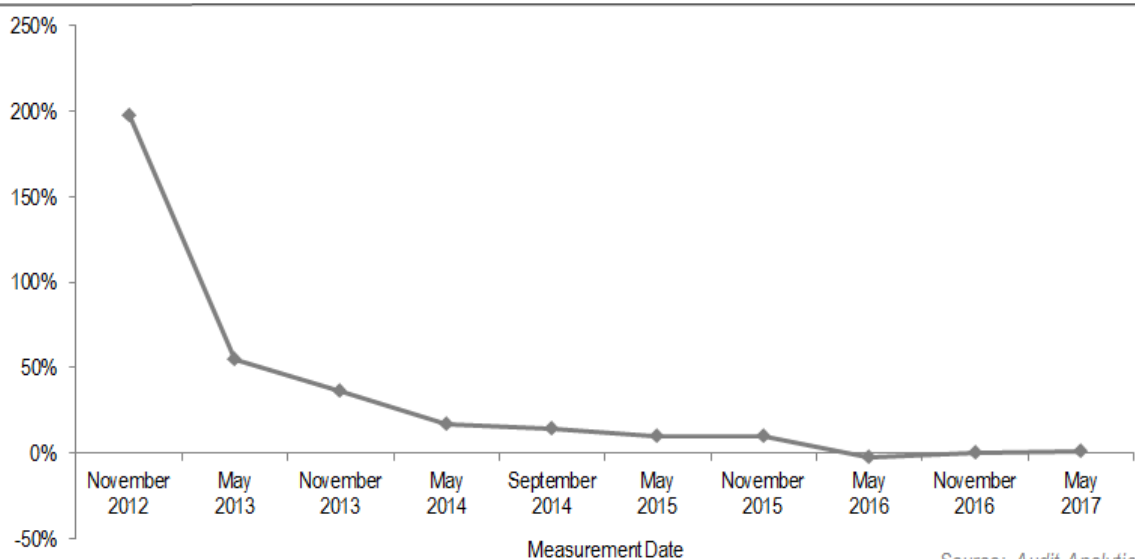
¹² PCAOB staff observed that the overwhelming majority of SEC registrants that no longer qualify as EGCs did so because their annual revenue exceeded the specified threshold, or because they became a large accelerated filer, and not because they issued more than \$1 billion in non-convertible debt.

The number of EGC filers changed from 1,844 as of November 15, 2016 to 1,862 as of May 15, 2017. Between November 15, 2016 and May 15, 2017, 231 companies became EGC filers¹³ and 213 ceased to be EGC filers. The 213 companies include:

- 39 companies that no longer qualify as EGCs because of their annual revenue, or large accelerated filer status;
- 4 companies that no longer qualify as EGCs because of the five-year cut-off;
- 78 companies that previously identified as EGCs but then ceased to be SEC registrants;
- 91 companies that became inactive EGCs; and
- 1 other company that was no longer an EGC filer.¹⁴

The trend in the rates of change between successive measurement dates is depicted in Figure 2.

Figure 2: Rate of change in the number of EGC filers between each successive measurement date



Source: Audit Analytics

As of May 15, 2017, there were 446 inactive EGCs, compared to 390 as of November 15, 2016.

The discussion in sections III through VII and Appendix A focuses primarily on EGC filers.

¹³ See Table A.7 in Appendix A for information on form types used to identify the 231 new EGC filers.

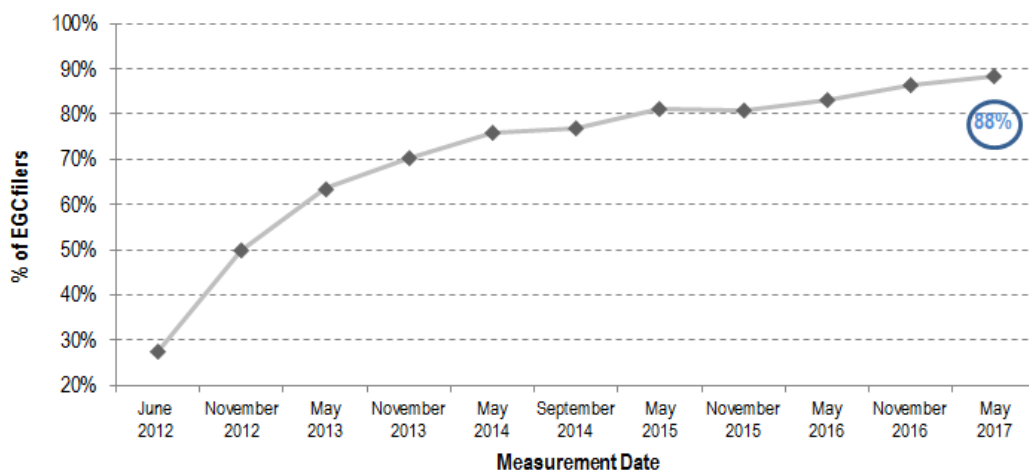
¹⁴ Companies that are no longer EGC filers for other reasons include, for example, companies that identified themselves as EGCs in an SEC filing but then eliminated that disclosure in a subsequent amended SEC filing.

III. SECURITIES REGISTRATION AND EQUITY OFFERINGS BY EGC FILERS

Periodic Reporting

The population of EGC filers includes both (i) EGCs that have filed periodic reports with the SEC and (ii) EGCs that have filed registration statements but have not yet filed periodic reports. As shown in Figure 3, the percentage of EGC filers that have filed periodic reports has been increasing.¹⁵ As of May 15, 2017, approximately 88% of the 1,862 EGC filers have filed periodic reports. The remaining 12% (or 217) have filed audited financial statements in registration statements but have not yet filed periodic reports.

Figure 3: Percentage of EGC filers that have filed periodic reports



Source: Strategic Insight and Audit Analytics

Table 1: First year of periodic reporting as of May 15, 2017

Year of First Periodic Reporting	Number of EGC Filers	%
2017	105	
2016	304	
2015	384	
2014	328	
2013	238	
2012	144	
2012 or later	1503	81%
2011 or prior	142	7%
EGC filers that have filed periodic reports	1645	88%
EGC filers that have not yet filed periodic reports	217	12%
Total EGC filers	1862	100%

Source: Strategic Insight and Audit Analytics

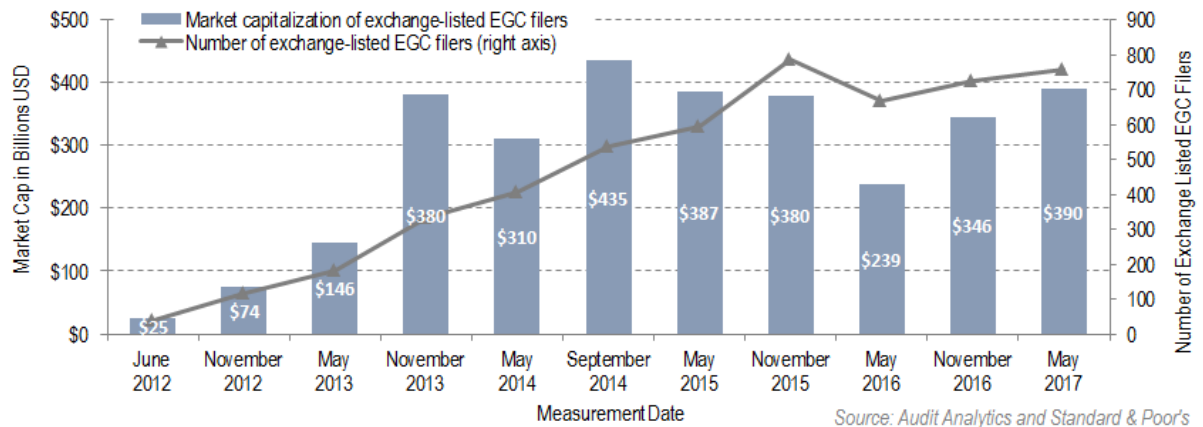
As of May 15, 2017, 81% of EGC filers had filed their first periodic report in 2012 or later. (See Table 1)

¹⁵ For the purpose of identifying EGCs that filed periodic reports as noted in Figure 3, PCAOB staff used commercial vendor data to identify companies that filed the following SEC Form submission types: 10-K, 10-Q, 20-F, and 40-F.

Exchange-Listed EGC Filers

Approximately 41%, or 758, of the 1,862 EGC filers are exchange-listed. These 758 EGC filers represent 16% of all exchange-listed companies. As Figure 4 shows, total market capitalization for exchange-listed EGC filers has fluctuated with changes in the population of exchange-listed EGC filers and changes in their market value. All references to market capitalization represent global market capitalization in the case of companies that are listed on exchanges in multiple countries.

Figure 4: Market capitalization and number of exchange-listed EGC filers



As of May 15, 2017, the 758 exchange-listed EGC filers had \$390 billion in market capitalization. These exchange-listed EGC filers represented 1% of the market capitalization of all exchange-listed companies. The market capitalization of exchange-listed EGC filers increased from \$346 billion at November 15, 2016 to \$390 billion at May 15, 2017.

Of the 231 companies that became EGC filers between November 15, 2016 and May 15, 2017, 60 were exchange-listed and accounted for approximately 19% of the total market capitalization of exchange-listed EGC filers.

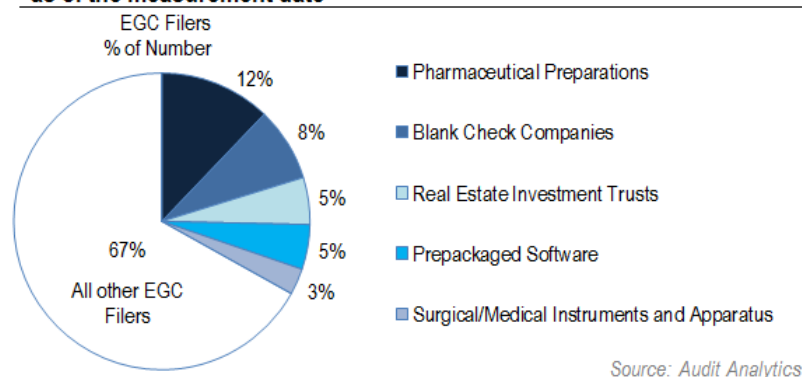
Additional information on the number of EGC filers and exchange-listed companies by filer status under SEC rules (e.g., accelerated filer and large accelerated filer) is included in Table A.1 in Appendix A.

IV. INDUSTRY AND FINANCIAL CHARACTERISTICS OF EGC FILERS

Industry

EGCs operate in many industries. Overall, the five most common Standard Industrial Classification ("SIC") codes reported for EGC filers as of the measurement date are: (i) pharmaceutical preparations; (ii) blank check companies;¹⁶ (iii) real estate investment trusts; (iv) prepackaged software; and (v) surgical/medical instruments and apparatus. The proportion of EGC filers reporting the five most common SIC codes is summarized in Figure 5. Sixty-seven percent of EGC filers did not report being in these top five industries, including 64% of EGC filers that reported other SIC codes and 3% that did not report a SIC code in their SEC filings.

Figure 5: Top five industries, by number, reported by EGC filers as of the measurement date



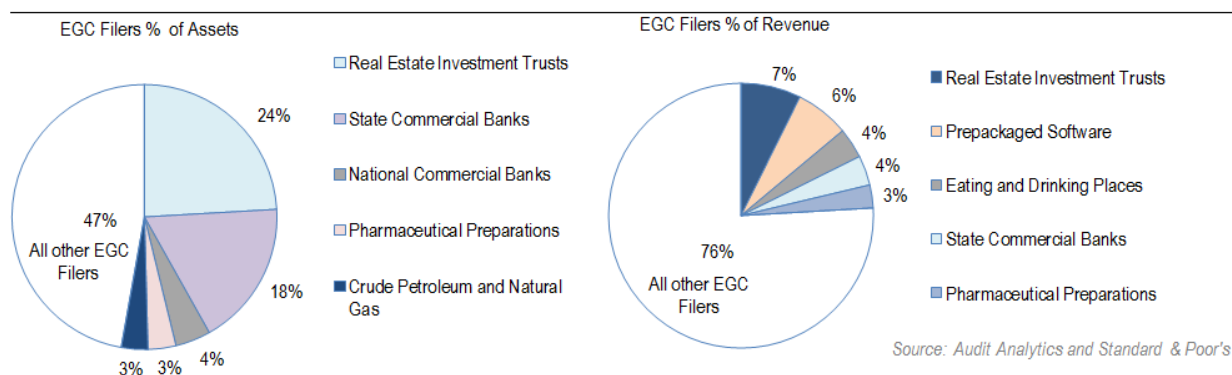
See Table A.2 in Appendix A for more detailed industry data on exchange-listed EGC filers, non-listed EGC filers, and other exchange-listed companies. Exchange-listed EGC filers are more concentrated in their top five industries than other exchange-listed companies. Larger proportions of exchange-listed EGC filers, as compared to non-listed EGC filers and other exchange-listed companies, are concentrated in SIC codes related to health and life sciences, including: (i) pharmaceutical preparations and (ii) surgical/medical instruments and apparatus.

The five SIC codes with the highest total assets as a percentage of the total assets for the EGC filer population as of the measurement date are: (i) real estate investment trusts; (ii) state commercial banks; (iii) national commercial banks; (iv) pharmaceutical preparations; and (v) crude petroleum and natural gas. Total assets of EGC filers reporting these five SIC codes represent approximately 52% of the total assets of EGC filers. Figure 6 provides a summary of this information as well as an analogous summary by revenue. See Tables A.3 and

¹⁶ The classification of "blank check company" generally means a development stage company that has no specific business plan or purpose or has indicated that its business plan is to engage in a merger or acquisition with an unidentified company or companies, or other entity or person. See Securities Act Rule 419, 17 CFR 230.419.

A.4 in Appendix A for more detailed industry data for EGC filers, exchange-listed EGC filers, non-listed EGC filers, and other exchange-listed companies.

Figure 6: Top five industries, by assets and revenue, reported by EGC filers as of the measurement date

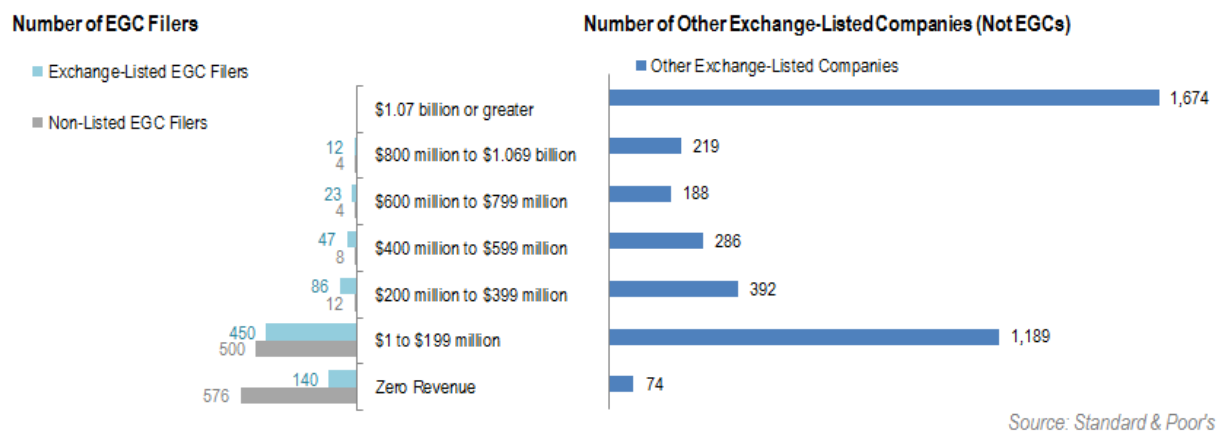


Assets and Revenue

The assets reported by EGC filers ranged from zero to approximately \$32.4 billion. The average assets were approximately \$282 million, while half of EGC filers reported assets of less than \$8.3 million.

The annual revenue reported by EGC filers ranged from zero to approximately \$1.05 billion. The average revenue was approximately \$63.8 million, while half of EGC filers reported revenue of less than \$0.2 million. The distribution of revenue among EGC filers and exchange-listed companies is shown in Figure 7.

Figure 7: Distribution of revenue reported by EGC filers and exchange-listed companies



Additional information summarizing the distribution of revenue and assets reported by EGC filers, exchange-listed EGC filers, non-listed EGC filers, and other exchange-listed companies is presented in Tables A.5 and A.6 in Appendix A.

Internal Control over Financial Reporting

EGC management is generally required to report on the effectiveness of internal control over financial reporting ("ICFR") starting with the second annual report filed by the company, although auditor attestation is not required.¹⁷ Among the 1,862 EGC filers, 1,355 provided a management report on ICFR in their most recent annual filing. Of those companies that provided a management report on ICFR, approximately 46% reported material weaknesses. Non-listed EGC filers reported material weaknesses at higher rates (70%) than exchange-listed EGC filers (13%). Table 2 shows that other exchange-listed companies reported material weaknesses at even lower rates (7%) than the exchange-listed EGC filers.

Table 2: Material weakness in ICFR

	(1) All EGC Filers	(2) Non-listed EGC Filers	(3) Exchange- Listed EGC Filers	(4) Other Exchange Listed (Not EGCs)
# of companies	1,862	1,104	758	4,022
# with management reports on ICFR	1,355	791	564	3,957
# with material weakness reported by management	628	556	72	285
% of ICFR reports with material weakness	46%	70%	13%	7%

Source: Audit Analytics

While auditor attestation on the effectiveness of ICFR is not required for EGCs, 40 EGC filers, or 2% of EGC filers, voluntarily provided an audit report on ICFR. The audit report on ICFR for 4 EGC filers disclosed material weaknesses, and 3 of them were exchange-listed EGC filers. Of the 40 EGC filers, 36 reported assets larger than the median assets of EGC filers, and 30 were exchange-listed. Further, 15 of these 40 EGC filers were audited by firms required to be inspected on an annual basis by the PCAOB.

¹⁷ See Instruction 1 to Item 308(a) of Regulation S-K. EGCs that have not yet filed at least one annual report are not required to provide a management report on ICFR. EGCs are exempt from the requirement for auditor attestation of ICFR. See Section 404(b) of the Sarbanes-Oxley Act, as amended by Section 103 of the JOBS Act.

V. SHELL COMPANIES AND LIMITED OPERATIONS AMONG EGC FILERS

A total of 735 EGC filers reported zero revenue, self-identified as shell companies in periodic filings, or both.¹⁸ Table 3 and Table 4 show that these two attributes are less common among exchange-listed EGC filers as compared to non-listed EGC filers. The tables also show that these attributes are even less common among other exchange-listed companies.

Table 3 below presents data on the proportion of companies that reported zero revenue in their most recent annual audited financial statements included in SEC filings, which include Securities Act registration statements, Exchange Act registration statements, and Exchange Act periodic reports.

Table 3: Reporting of zero revenue

	(1) All EGC Filers	(2) Non-listed EGC Filers	(3) Exchange- Listed EGC Filers	(4) Other Exchange- Listed Filers (Not EGCs)
# of companies	1,862	1,104	758	4,022
# reporting zero revenue	716	576	140	74
% reporting zero revenue	38%	52%	18%	2%

Source: Audit Analytics

Table 4 presents shell company disclosure by companies that have filed periodic reports, some of which also reported zero revenue.

Table 4: Shell company disclosure in periodic reports

	(1) All EGC Filers	(2) Non-listed EGC Filers	(3) Exchange- Listed EGC Filers	(4) Other Exchange- Listed Filers (Not EGCs)
# of companies that filed periodic reports	1,645	922	723	4,018
# with shell company disclosure in periodic reports	242	210	32	2
% with shell company disclosure in periodic reports	15%	23%	4%	0%

Source: Audit Analytics

¹⁸ Generally, a company is a shell company if it has no or nominal operations and at least one of the following attributes: (i) no or nominal assets; (ii) assets consisting solely of cash and cash equivalents; or (iii) assets consisting of any amount of cash and cash equivalents and nominal other assets. See Exchange Act Rule 12b-2, 17 C.F.R. 240.12b-2. Blank check companies (discussed in Section IV) would generally be considered shell companies until they acquire an operating business or more than nominal assets. See SEC Release 33-8407, *Use of Form S-8 and Form 8-K by Shell Companies* (Apr. 15, 2004) at n. 20.

EGC Filers That Reported Zero Revenue Three Years Ago: Where Are They Now?

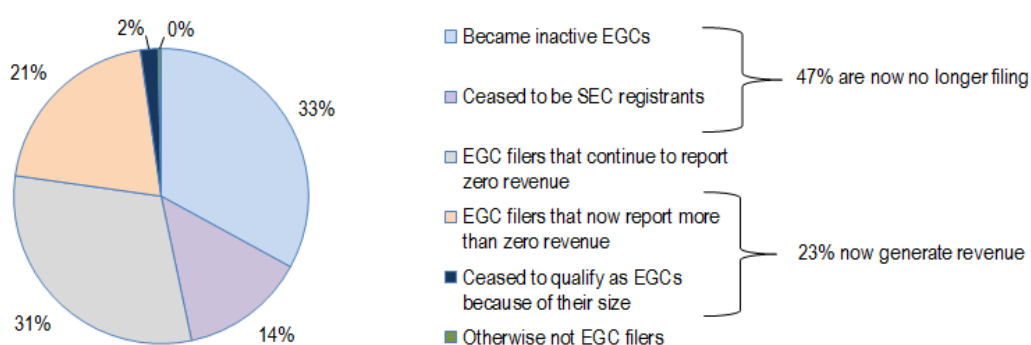
As shown in Table 3, 38% of EGC filers reported zero revenue as of May 15, 2017. The population of EGC filers reporting zero revenue has changed over the last three years. Specifically, the percentage of EGC filers reporting zero revenue decreased from 45% at May 15, 2014 to 38% at May 15, 2017. (See Figure A.1 in Appendix A.) The following analysis explores the extent to which the declining trend in reporting zero revenue reflects EGC filers that began to generate revenue and EGC filers that left the EGC population.

Specifically, we analyzed the 619 EGC filers reporting zero revenue at May 15, 2014 and categorized them based on their most recent reporting three years later. As of May 15, 2017, these 619 companies can be categorized as follows:

- 204 (33%) became inactive EGCs (and are therefore no longer EGC filers),
- 85 (14%) ceased to be SEC registrants (and are therefore no longer EGC filers),
- 189 (31%) are EGC filers that continue to report zero revenue,
- 127 (21%) are EGC filers that now report more than zero revenue,
- 12 (2%) no longer qualify as EGCs because of their annual revenue or large accelerated filer status, and
- 2 (0.3%) other companies that were no longer EGC filers.¹⁹

This analysis indicates that 289 (47%) of the 619 EGC filers that reported zero revenue at May 15, 2014 were not filing with the SEC as of three years later, including 204 (33%) that went inactive and 85 (14%) that ceased to be SEC registrants. On the other hand, 139 (23%) of the 619 began reporting more than zero revenue, including 12 (2%) that no longer qualify as EGCs because of their size. Figure 8 illustrates these findings.

Figure 8: Classification, as of May 15, 2017, of the 619 EGC filers that reported zero revenue at May 15, 2014



Source: Audit Analytics and Standard & Poor's

¹⁹ Companies that are no longer EGCs for other reasons include, for example, companies that identified themselves as an EGC in an SEC filing but eliminated that disclosure in a subsequent amended SEC filing.

VI. GOING CONCERN PARAGRAPHS IN AUDIT REPORTS OF EGC FILERS

For 907 EGC filers (49% of the population), the most recent audit report included an explanatory paragraph expressing substantial doubt about the company's ability to continue as a going concern ("going concern paragraph"). Non-listed EGC filers received an audit report with a going concern paragraph at a substantially higher rate (73%) than exchange-listed EGC filers (13%). In addition, EGC filers received an audit report with a going concern paragraph (49%) at a substantially higher rate than other exchange-listed companies (4%).

Table 5: Rate of going concern paragraphs

SIC industry description (code)	(1) All EGC Filers	(2) Non-listed EGC Filers	(3) Exchange- Listed EGC Filers	(4) Other Exchange Listed (Not EGCs)
# Companies	1,862	1,104	758	4,022
# with going concern paragraphs	907	809	98	163
% with going concern paragraphs	49%	73%	13%	4%

Source: Audit Analytics

The data in Table 6 shows that 57% of the EGC filers with going concern paragraphs in their auditor's report reported zero revenue. Only 13% of other exchange-listed companies with going concern paragraphs reported zero revenue.

Table 6: Going concern paragraphs and revenue information

	(1) All EGC Filers	(2) Non-listed EGC Filers	(3) Exchange- Listed EGC Filers	(4) Other Exchange Listed (Not EGCs)
# with zero revenue with going concern paragraphs	515 (57%)	482 (60%)	33 (34%)	22 (13%)
# with revenue >0 with going concern paragraphs	392 (43%)	327 (40%)	65 (66%)	141 (87%)
# of companies with going concern paragraphs	907 (100%)	809 (100%)	98 (100%)	163 (100%)

Source: Audit Analytics

VII. AUDITORS OF EGC FILERS

The 1,862 EGC filers were audited by 269 registered public accounting firms. Approximately 99% of EGC filers were audited by accounting firms that also audit issuers that are not EGC filers.

Approximately 40% of the 1,862 EGC filers were audited by firms required to be inspected on an annual basis by the PCAOB.²⁰ The remaining 60% were audited by firms required to be inspected at least once in every three years.²¹

Approximately 14% of EGC filers were audited by non-U.S. firms, including 6% that were audited by affiliates of annually inspected firms.

²⁰ These are firms that have issued auditor's reports for more than 100 issuer audit clients in a given year and therefore are required to be inspected on an annual basis by the PCAOB.

²¹ These are firms that have issued auditor's reports for 100 or fewer issuer audit clients in a given year and therefore are required to be inspected at least once every three years by the PCAOB.

Appendix A: Additional Information on EGC Filers

This appendix includes tables with more detailed information on attributes discussed in the paper.

Figure A.1 Percent of EGC filers reporting zero revenue as of various measurement dates

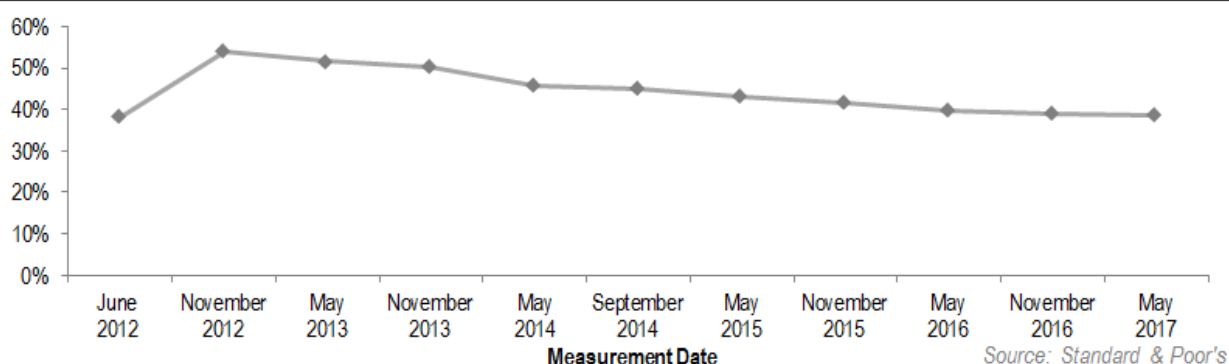


Table A.1 Filer status from periodic reports²²

	(1) All EGC Filers	(2) Non-listed EGC Filers	(3) Exchange- Listed EGC Filers	(4) Other Exchange Listed (Not EGCs)
Large accelerated filer	0	0	0	2,098
Accelerated filer	362	16	346	1,109
Non-accelerated filers	1,283	906	377	810
Total companies that filed periodic reports	1,645	922	723	4,017
Companies that did not file periodic reports	217	182	35	5
Total companies	1,862	1,104	758	4,022

Source: Audit Analytics

²² This data is derived from periodic reports with check boxes to indicate filer status, primarily Form 10-K, Form 10-Q, and Form 20-F. In general, "large accelerated filer" means an issuer with a public float of \$700 million or more that has been subject to Exchange Act periodic reporting requirements for at least one year and has filed at least one annual report and "accelerated filer" means an issuer with a public float of \$75 million or more, but less than \$700 million, that has been subject to Exchange Act periodic reporting requirements for at least one year and has filed at least one annual report. See Exchange Act Rule 12b-2, 17 CFR 240.12b-2. The subset of companies summarized in Table A.1 as "non-accelerated filers" are those that filed periodic reports and did not identify themselves as "large accelerated filers" or "accelerated filers."

Table A.2 Top five industries reported by EGC filers and exchange-listed companies by number

(Numbers of only the top five in each noted population are displayed)

SIC industry description (code)	(1) All EGC Filers	(2) Non-listed EGC Filers	(3) Exchange- Listed EGC Filers	(4) Other Exchange Listed (Not EGCs)
Pharmaceutical Preparations (2834)	226 (12%)	57 (5%)	169 (22%)	215 (5%)
Blank Check Companies (6770)	150 (8%)	119 (11%)	31 (4%)	
Real Estate Investment Trusts (6798)	95 (5%)	66 (6%)		186 (5%)
Prepackaged Software (7372)	91 (5%)	50 (5%)	41 (5%)	
Surgical/Medical Instruments and Apparatus (3841)	53 (3%)		31 (4%)	
Management Consulting Services (8742)		37 (3%)		
State Commercial Banks (6022)			32 (4%)	170 (4%)
Crude Petroleum and Natural Gas (1311)				123 (3%)
National Commercial Banks (6021)				100 (2%)
Total in Top 5 (for each column presented)	615 (33%)	329 (30%)	304 (40%)	794 (19%)
Not in Top 5	1,247 (67%)	775 (70%)	454 (60%)	3,228 (81%)
Total Companies	1,862 (100%)	1,104 (100%)	758 (100%)	4,022 (100%)

Source: Audit Analytics

Table A.3 Top five industries reported by EGC filers and exchange-listed companies by % of assets

(Amounts for only the top five in each noted population are displayed)

SIC industry description (code)	(1) All EGC Filers	(2) Non-listed EGC Filers	(3) Exchange- Listed EGC Filers	(4) Other Exchange Listed (Not EGCs)
Real Estate Investment Trusts (6798)	24%	61%	14%	
State Commercial Banks (6022)	18%	7%	21%	6%
National Commercial Banks (6021)	4%		5%	18%
Pharmaceutical Preparations (2834)	3%		4%	
Crude Petroleum and Natural Gas (1311)	3%		4%	
Finance Services (6199)		5%		
Equipment Rental and Leasing, NEC (7359)		4%		
Computer processing and data preparation (7374)		2%		
Commercial Banks, NEC (6029)				20%
Life Insurance (6311)				6%
Security Brokers, Dealers, and Flotation Companies (6211)				4%
Total in Top 5	52%	79%	48%	54%
Not in Top 5	48%	21%	52%	46%
Total Companies	100%	100%	100%	100%

Source: Audit Analytics and Standard & Poor's

Table A.4 Top five industries reported by EGC filers and exchange-listed companies by % of revenue

(Amounts for only the top five in each noted population are displayed)

SIC industry description (code)	(1) All EGC Filers	(2) Non-listed EGC Filers	(3) Exchange- Listed EGC Filers	(4) Other Exchange Listed (Not EGCs)
Real Estate Investment Trusts (6798)	7%	25%	4%	
Prepackaged Software (7372)	7%		8%	
Eating and Drinking Places (5812)	4%		4%	
State Commercial Banks (6022)	4%		4%	
Pharmaceutical Preparations (2834)	3%		3%	
Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (5172)		5%		
Computer Integrated Systems Design (7373)		5%		
Oil and Gas Field Services, NEC (1389)		4%		
Radiotelephone Communications (4812)		4%		
Petroleum Refining (2911)				6%
Crude Petroleum and Natural Gas (1311)				5%
Motor Vehicles and Passenger Car Bodies (3711)				4%
Telephone Communications, Except Radiotelephone (4813)				4%
Variety Stores (5331)				4%
Total in Top 5	25%	43%	23%	23%
Not in Top 5	75%	57%	77%	77%
Total Companies	100%	100%	100%	100%

Source: Audit Analytics and Standard & Poor's

Table A.5 Reported revenue (Millions USD)

	(1) All EGC Filers	(2) Non-listed EGC Filers	(3) Exchange- Listed EGC Filers	(4) Other Exchange Listed (Not EGCs)
Minimum	0.0	0.0	0.0	0.0
Maximum	1,050.8	1,011.7	1,050.8	482,154.0
Average	63.8	18.1	130.5	5,054.4
Median	0.2	0.0	43	671.6

Source: Standard & Poor's

Table A.6 Reported assets (Millions USD)

	(1) All EGC Filers	(2) Non-listed EGC Filers	(3) Exchange- Listed EGC Filers	(4) Other Exchange Listed (Not EGCs)
Minimum	0.0	0.0	0.0	0.0
Maximum	32,398.4	32,398.4	19,661.8	2,602,475.5
Average	282.4	103.1	543.5	19,943.1
Median	8.3	0.1	171.8	1,483.0

*Source: Standard & Poor's***Table A.7 SEC filing types used to determine newly identified EGC filers**

Filing Type	Number of EGC Filers
Securities Act Registration Statements	164
Exchange Act Registration Statements	30
Exchange Act Periodic/Current Reports	37
Other	0
Total	231

Source: Audit Analytics

Appendix B: Inactive EGCs

The information presented below about inactive EGCs²³ is the most recent available information through May 15, 2017.

Approximately 21% of the 446 inactive EGCs are blank check companies, according to the SIC code reported in the companies' most recent SEC filings. This is the most common SIC code reported among the inactive companies; the next most common SIC code (3.6%) is prepackaged software (the remaining SIC codes each represent 3.4 % or less).

Approximately 80% of the 446 inactive EGCs had an explanatory paragraph included in the last audit report stating that there is substantial doubt about the company's ability to continue as a going concern.

Approximately 18% of the 446 inactive EGCs were audited by firms required to be inspected on an annual basis by the PCAOB and the remaining 82% were audited by firms required to be inspected at least once in every three years.

Approximately 7% of the inactive EGCs were audited by non-U.S. firms, including 2% that were audited by non-U.S. firms that are affiliates of annually inspected firms.

²³ Inactive EGCs discussed in this white paper are those companies that had previously identified themselves as EGCs in at least one SEC filing since 2012 but have not filed audited financial statements with the SEC in the 18 months ended May 15, 2017. The 446 inactive EGCs do not include the 511 companies that ceased to be SEC registrants as described in Appendix D

Appendix C: Companies that are no longer EGC filers because of their annual revenue or large accelerated filer status

From April 5, 2012 through May 15, 2017 there were 243 companies that no longer qualify as EGCs because of annual revenue in excess of the stated threshold, or because of large accelerated filer status. The five most common industries by SIC code for these companies were:

- (i) pharmaceutical preparations (14%);
- (ii) prepackaged software (8%);
- (iii) real estate investment trusts (8%);
- (iv) computer processing and data preparation (6%); and
- (v) biological products (3%)
crude petroleum and natural gas (3%);
natural gas transmission (3%);
services-computer programming, data processing, etc. (3%).

Forty-eight percent of these 243 companies reported operating in these industries.

Appendix D: Companies that are no longer EGC filers because they are no longer SEC registrants

From April 5, 2012 through May 15, 2017, there were 511 companies that previously identified as EGCs but ceased to be SEC registrants and therefore were no longer EGC filers or inactive EGCs. Specifically, these companies (i) terminated their Exchange Act registration, (ii) had their Exchange Act registration revoked, or (iii) withdrew their registration statement before effectiveness, and, in each case, did not subsequently file audited financial statements with the SEC. The five most common industries by SIC codes for these companies were:

- (i) blank check companies (12%);
- (ii) pharmaceutical preparations (9%);
- (iii) prepackaged software (6%);
- (iv) metal mining (5%); and
- (v) crude petroleum and natural gas (4%).

Thirty-six percent of these companies reported operating in these industries.

Appendix E: Number of EGC Filers and Inactive EGCs for all measurement dates before and after the application of the new step

Table E.1 depicts the impact of applying the new step to the methodology for all companies that self-identified as EGCs since the first measurement date in June 2012 and appear to have made a first registered sale of common equity securities on or before December 8, 2011.

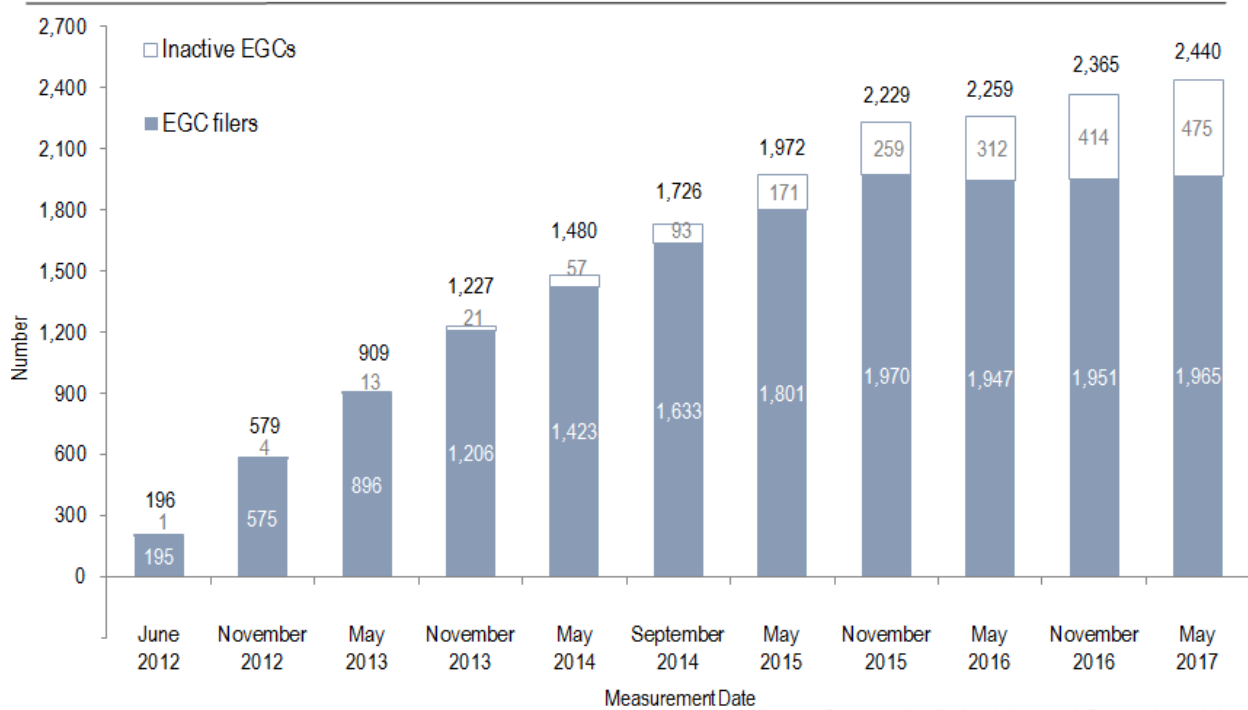
Table E.1

Measurement Date	Number of EGCs identified before application of the new step		Number of EGCs identified after application of the new step	
	EGC Category	# Companies	EGC Category	# Companies
June 2012	EGC filer	195	EGC filer	185
June 2012	Inactive EGC	1	Inactive EGC	1
November 2012	EGC filer	575	EGC filer	552
November 2012	Inactive EGC	4	Inactive EGC	4
May 2013	EGC filer	896	EGC filer	856
May 2013	Inactive EGC	13	Inactive EGC	13
November 2013	EGC filer	1,206	EGC filer	1,162
November 2013	Inactive EGC	21	Inactive EGC	21
May 2014	EGC filer	1,423	EGC filer	1,363
May 2014	Inactive EGC	57	Inactive EGC	55
September 2014	EGC filer	1,633	EGC filer	1,561
September 2014	Inactive EGC	93	Inactive EGC	91
May 2015	EGC filer	1,801	EGC filer	1,716
May 2015	Inactive EGC	171	Inactive EGC	163
November 2015	EGC filer	1,970	EGC filer	1,879
November 2015	Inactive EGC	259	Inactive EGC	235
May 2016	EGC filer	1,947	EGC filer	1,842
May 2016	Inactive EGC	312	Inactive EGC	290
November 2016	EGC filer	1,951	EGC filer	1,844
November 2016	Inactive EGC	414	Inactive EGC	390
May 2017	EGC filer	1,965	EGC filer	1,862
May 2017	Inactive EGC	475	Inactive EGC	446

Source: Audit Analytics and Strategic Insight

Appendix F: Trend charts and data before taking into account the new step to exclude the 157 companies that appear to have sold common equity securities on or before December 8, 2011

Figure F.1 Number of EGC filers and inactive EGCs



Source: Audit Analytics and Strategic Insight

Figure F.1 above corresponds to Figure 1 in the white paper (see page 10)

Figure F.2 Rate of change in the number of EGC filers between each successive measurement date

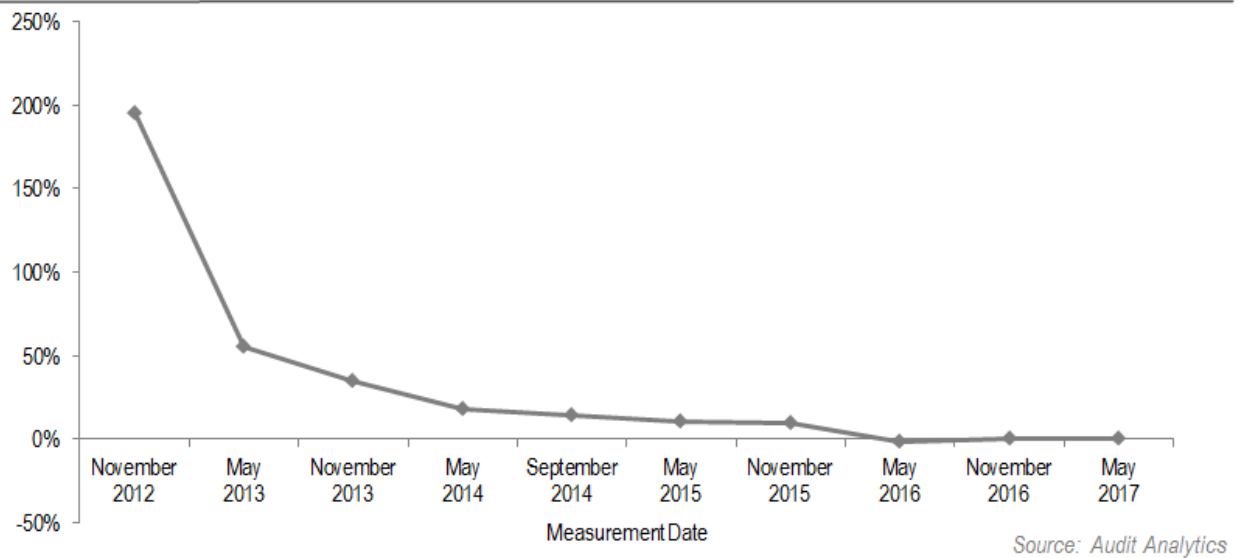
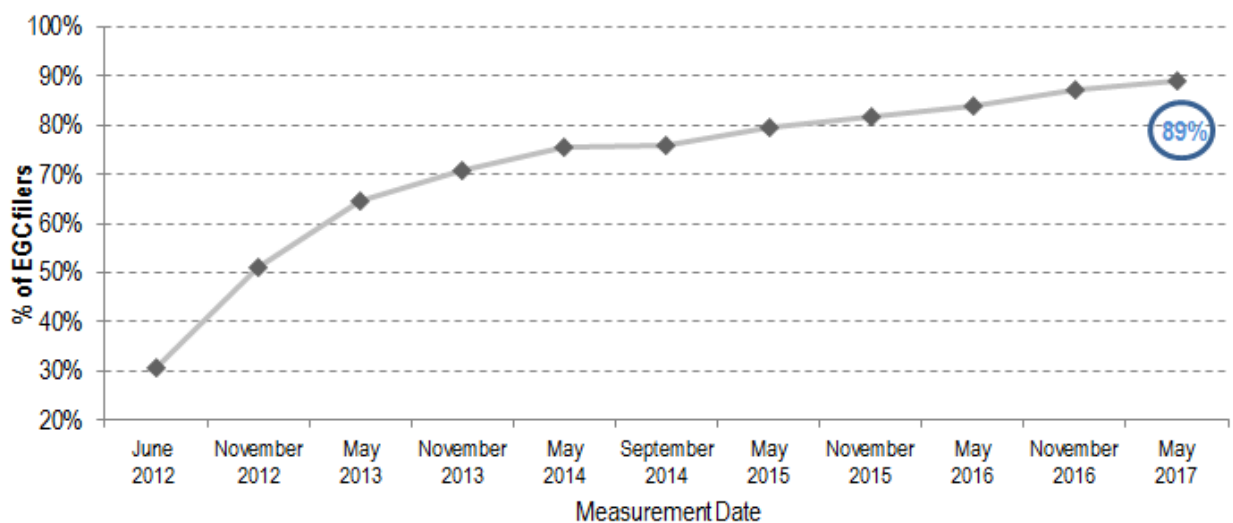


Figure F.2 above corresponds to Figure 2 in the white paper (see page 11).

Figure F.3 Percentage of EGC filers that have filed periodic reports



Source: Strategic Insight and Audit Analytics

Figure F.3 above corresponds to Figure 3 in the white paper (see page 12).

Table F.1 First Year of periodic reporting as of May 15, 2017

Year of First Periodic Reporting	Number of EGC Filers	%
2017	105	
2016	304	
2015	385	
2014	329	
2013	238	
2012	149	
2012 or later	1510	77%
2011 or prior	238	12%
EGC filers that have filed periodic reports	1748	89%
EGC filers that have not yet filed periodic reports	217	11%
Total EGC filers	1965	100%

Source: Strategic Insight and Audit Analytics

Table F1 above corresponds to Table 1 in the white paper (see page 12).

Figure F.4 Market capitalization and number of exchange-listed EGC filers

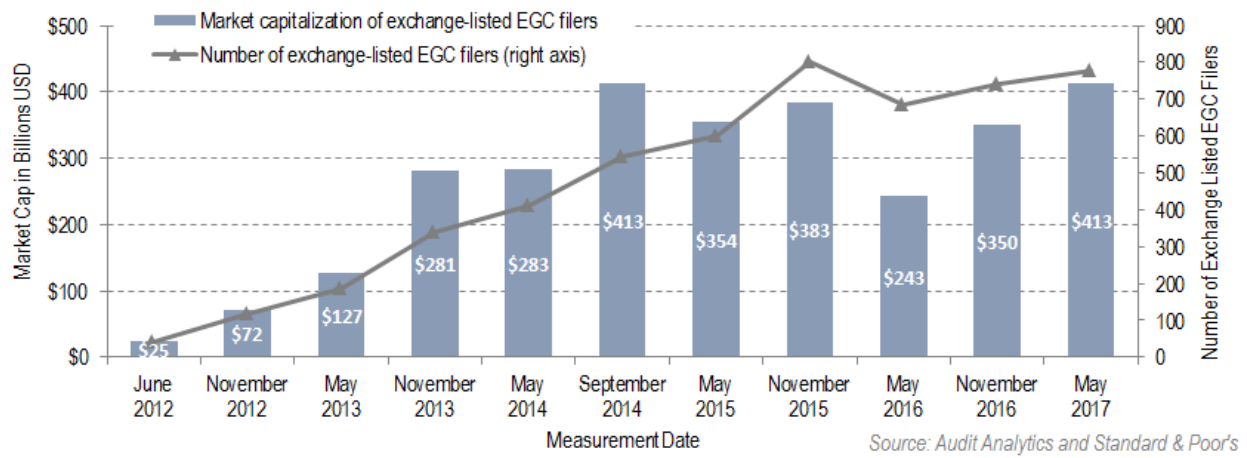


Figure F.4 above corresponds to Figure 4 in the white paper (see page 13).

Figure F.5 Percent of EGC filers reporting zero revenue as of various measurement dates

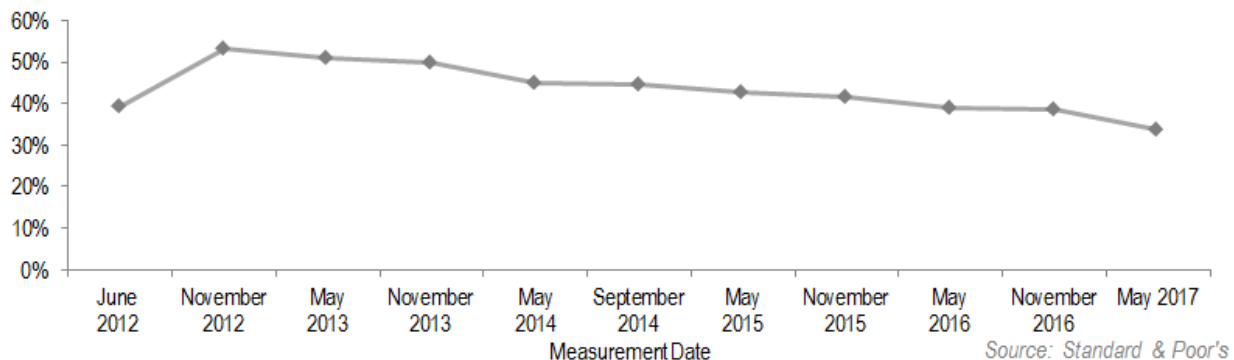


Figure F.5 above corresponds to Figure A.1 in Appendix A of the white paper (see page 21).

EGC Filers That Reported Zero Revenue Three Year Ago: Where Are They Now?

We analyzed the 645 EGC filers that reported zero revenue at May 15, 2014, and categorized them based on their most recent reporting three years later. As of May 15, 2017, these 645 companies can be categorized as follows:

- 212 (33%) became inactive EGCs (and are therefore no longer EGC filers),
- 90 (14%) ceased to be SEC registrants (and are therefore no longer EGC filers),
- 199 (31%) are EGC filers that continue to report zero revenue,
- 129 (20%) are EGC filers that now report more than zero revenue,
- 13 (2%) no longer qualify as EGCs because of their annual revenue or large accelerated filer status, and
- 2 (0.3%) other companies that were no longer EGCs

The analysis in this section corresponds to the analysis in the white paper section with the same title (see page 18)